

# FCC SAR Test Report

APPLICANT : Zebra Technologies Corporation  
EQUIPMENT : Enterprise Mobile  
BRAND NAME : Zebra  
MODEL NAME : EM45A2  
FCC ID : UZ7EM45A2  
STANDARD : FCC 47 CFR Part 2 (2.1093)

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.



Approved by: Si Zhang



**Sporton International Inc. (Kunshan)**

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People's Republic of China**



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[illegible]

## 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Zebra Technologies Corporation, Enterprise Mobile, EM45A2**, are as follows.

| Highest 1g SAR Summary |                |                  |                             |                                 |                                   |                                                          |
|------------------------|----------------|------------------|-----------------------------|---------------------------------|-----------------------------------|----------------------------------------------------------|
| Equipment Class        | Frequency Band |                  | Head<br>(Separation<br>0mm) | Hotspot<br>(Separation<br>10mm) | Body-worn<br>(Separation<br>15mm) | Highest<br>Simultaneous<br>Transmission<br>1g SAR (W/kg) |
|                        |                |                  | 1g SAR (W/kg)               |                                 |                                   |                                                          |
| Licensed               | WCDMA          | WCDMA II         | 1.09                        | 1.03                            | 0.42                              | 1.59                                                     |
|                        |                | WCDMA IV         | 1.09                        | 1.08                            | 0.48                              |                                                          |
|                        |                | WCDMA V          | 1.07                        | 0.87                            | 0.56                              |                                                          |
|                        | LTE            | LTE Band 25/2    | 1.07                        | 1.08                            | 0.57                              |                                                          |
|                        |                | LTE Band 7       | 1.08                        | 1.08                            | 0.62                              |                                                          |
|                        |                | LTE Band 12/17   | 1.07                        | 0.68                            | 0.36                              |                                                          |
|                        |                | LTE Band 13      | 1.09                        | 0.75                            | 0.35                              |                                                          |
|                        |                | LTE Band 14      | 1.06                        | 0.89                            | 0.40                              |                                                          |
|                        |                | LTE Band 26/5    | 1.07                        | 1.03                            | 0.47                              |                                                          |
|                        |                | LTE Band 30      | 1.06                        | 1.05                            | 0.26                              |                                                          |
|                        |                | LTE Band 66/4    | 1.08                        | 1.09                            | 0.62                              |                                                          |
|                        |                | LTE Band 71      | 1.06                        | 0.57                            | 0.28                              |                                                          |
|                        |                | LTE Band 41/38   | 1.07                        | 1.09                            | 0.36                              |                                                          |
|                        |                | LTE Band 48      | 1.09                        | 0.92                            | 0.56                              |                                                          |
|                        | 5G NR          | FR1 n7           | 1.09                        | 1.08                            | 0.58                              |                                                          |
|                        |                | FR1 n12          | 1.05                        | 0.86                            | 0.36                              |                                                          |
|                        |                | FR1 n13          | 1.07                        | 0.92                            | 0.36                              |                                                          |
|                        |                | FR1 n14          | 1.03                        | 0.92                            | 0.43                              |                                                          |
|                        |                | FR1 n25/2        | 1.05                        | 1.09                            | 0.46                              |                                                          |
|                        |                | FR1 n26/5        | 1.08                        | 1.08                            | 0.50                              |                                                          |
|                        |                | FR1 n30          | 1.08                        | 1.04                            | 0.26                              |                                                          |
|                        |                | FR1 n66          | 1.07                        | 1.08                            | 0.55                              |                                                          |
|                        |                | FR1 n71          | 1.09                        | 0.73                            | 0.32                              |                                                          |
|                        |                | FR1 n41/38       | 1.10                        | 1.10                            | 0.48                              |                                                          |
|                        |                | FR1 n48          | 1.08                        | 1.08                            | 0.50                              |                                                          |
|                        |                | FR1 n77/78       | 1.08                        | 1.09                            | 0.61                              |                                                          |
| DSS                    | RFID           | RFID             |                             | 0.28                            | 0.14                              | 1.47                                                     |
| DTS                    | WLAN           | 2.4GHz WLAN      | 1.10                        | 1.08                            | 0.43                              | 1.58                                                     |
| NII                    |                | 5GHz WLAN        | <b>1.20</b>                 | <b>1.17</b>                     | <b>1.15</b>                       | 1.59                                                     |
| DSS                    | Bluetooth      | 2.4GHz Bluetooth | 0.11                        | <0.10                           | <0.10                             | 1.59                                                     |

| Highest 10g SAR Summary |                |                |                                                     |                                                     |
|-------------------------|----------------|----------------|-----------------------------------------------------|-----------------------------------------------------|
| Equipment Class         | Frequency Band |                | Product Specific 10g SAR (W/kg)<br>(Separation 0mm) | Highest Simultaneous Transmission<br>10g SAR (W/kg) |
| Licensed                | WCDMA          | WCDMA II       | 2.68                                                | 3.99                                                |
|                         |                | WCDMA IV       | 2.41                                                |                                                     |
|                         | LTE            | LTE Band 25/2  | 2.79                                                |                                                     |
|                         |                | LTE Band 7     | 2.93                                                |                                                     |
|                         |                | LTE Band 30    | 3.06                                                |                                                     |
|                         |                | LTE Band 66/4  | 2.88                                                |                                                     |
|                         |                | LTE Band 41/38 | 3.07                                                |                                                     |
|                         |                | FR1            | FR1 n7                                              |                                                     |
|                         | FR1 n25/2      |                | 3.05                                                |                                                     |
|                         | FR1 n30        |                | 2.99                                                |                                                     |
|                         | FR1 n66        |                | 2.82                                                |                                                     |
|                         | FR1 n41/38     |                | 3.08                                                |                                                     |
|                         | FR1 n48        |                | 2.63                                                |                                                     |
|                         | FR1 n77/78     | 2.81           |                                                     |                                                     |
| DSS                     | RFID           | RFID           | 0.55                                                | 3.46                                                |
| DTS                     | WLAN           | 2.4GHz WLAN    | 2.83                                                | 3.57                                                |
| NII                     |                | 5GHz WLAN      | 2.75                                                | 3.99                                                |
| Date of Testing:        |                |                | 2024/7/6 ~ 2024/8/23                                |                                                     |

**Remark:**

- This device supports LTE B2 / B4 / B5 / B17 / B38 and B25 / B66 / B26 / B12 / B41. Since the supported frequency span for LTE B2 / B4 / B5 / B17 / B38 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B12 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B12 / B41.
- This device supports 5GNR n2/n5/n38/n78 and n25/n26/n41/n77. Since the supported frequency span for 5GNR n2/n5/n38/n78 falls completely within the supports frequency span for n25/n26/n41/n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for n25/n26/n41/n77.

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

## 2. Administration Data

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

| Testing Laboratory |                                                                                                                                                |                     |                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------|
| Test Firm          | Sporton International Inc. (Kunshan)                                                                                                           |                     |                                |
| Test Site Location | No. 1098, Pengxi North Road, Kunshan Economic Development Zone<br>Jiangsu Province 215300 People's Republic of China<br>TEL : +86-512-57900158 |                     |                                |
| Test Site No.      | Sporton Site No.                                                                                                                               | FCC Designation No. | FCC Test Firm Registration No. |
|                    | SAR02-KS<br>SAR03-KS<br>SAR07-KS                                                                                                               | CN1257              | 314309                         |

| Applicant    |                                              |
|--------------|----------------------------------------------|
| Company Name | Zebra Technologies Corporation               |
| Address      | 3 Overlook Point, Lincolnshire, IL 60069 USA |

| Manufacturer |                                              |
|--------------|----------------------------------------------|
| Company Name | Zebra Technologies Corporation               |
| Address      | 3 Overlook Point, Lincolnshire, IL 60069 USA |

## 3. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01



## 4. Equipment Under Test (EUT) Information

### 4.1 General Information

| Product Feature & Specification         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment Name                          | Enterprise Mobile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Brand Name                              | Zebra                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Model Name                              | EM45A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| FCC ID                                  | UZ7EM45A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| IMEI Code                               | IMEI1: 352991990035176<br>IMEI2: 352991990035390                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Wireless Technology and Frequency Range | WCDMA Band II: 1850 MHz ~ 1910 MHz<br>WCDMA Band IV: 1710 MHz ~ 1755 MHz<br>WCDMA Band V: 824 MHz ~ 849 MHz<br>LTE Band 2: 1850 MHz ~ 1910 MHz<br>LTE Band 4: 1710 MHz ~ 1755 MHz<br>LTE Band 5: 824 MHz ~ 849 MHz<br>LTE Band 7: 2500 MHz ~ 2570 MHz<br>LTE Band 12: 699 MHz ~ 716 MHz<br>LTE Band 13: 777 MHz ~ 787 MHz<br>LTE Band 14: 788 MHz ~ 798 MHz<br>LTE Band 17: 704 MHz ~ 716 MHz<br>LTE Band 25: 1850 MHz ~ 1915 MHz<br>LTE Band 26: 814 MHz ~ 849 MHz<br>LTE Band 30: 2305 MHz ~ 2315 MHz<br>LTE Band 38: 2570 MHz ~ 2620 MHz<br>LTE Band 41: 2496 MHz ~ 2690 MHz<br>LTE Band 48: 3550 MHz ~ 3700 MHz<br>LTE Band 66: 1710 MHz ~ 1780 MHz<br>LTE Band 71: 663 MHz ~ 698 MHz<br>5G NR n2 : 1850 MHz ~ 1910 MHz<br>5G NR n5 : 824 MHz ~ 849 MHz<br>5G NR n7 : 2500 MHz ~ 2570 MHz<br>5G NR n12 : 699 MHz ~ 716 MHz<br>5G NR n13 : 777 MHz ~ 787 MHz<br>5G NR n14 : 788 MHz ~ 798 MHz<br>5G NR n25 : 1850 MHz ~ 1915 MHz<br>5G NR n26 : 814 MHz ~ 849 MHz<br>5G NR n30 : 2305 MHz ~ 2315 MHz<br>5G NR n38 : 2570 MHz ~ 2620 MHz<br>5G NR n41 : 2496 MHz ~ 2690 MHz<br>5G NR n48 : 3550 MHz ~ 3700 MHz<br>5G NR n66 : 1710 MHz ~ 1780 MHz<br>5G NR n71 : 663 MHz ~ 698 MHz<br>5G NR n77: 3450 MHz ~ 3980 MHz<br>5G NR n78: 3450 MHz ~ 3800 MHz<br>WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz<br>WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz<br>WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz<br>WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz<br>WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz<br>WLAN 6GHz U-NII 5: 5925 MHz ~ 6425 MHz<br>WLAN 6GHz U-NII 6: 6425 MHz ~ 6525 MHz<br>WLAN 6GHz U-NII 7: 6525 MHz ~ 6875 MHz<br>WLAN 6GHz U-NII 8: 6875 MHz ~ 7125 MHz<br>Bluetooth: 2402 MHz ~ 2480 MHz<br>NFC : 13.56 MHz<br>RFID : 902.75 MHz ~ 927.25 MHz |
| Mode                                    | RMC/AMR 12.2Kbps<br>HSDPA<br>HSUPA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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| <b>HW Version</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | EV2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>SW Version</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 13-32-08.00-TG-U06-STD-ATH-04                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>MFD</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 08AUG24                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>EUT Stage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Identical Prototype                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Remark:</b> <ol style="list-style-type: none"> <li>1. This device supports VoIP in WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.</li> <li>2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.</li> <li>3. This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz WLAN supports WiFi Direct (GC only). WLAN 6GHz has no hotspot function.</li> <li>4. This device supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active).</li> <li>5. The device implements receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.</li> <li>6. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head body-worn, hotspot and extremity exposure condition.</li> <li>7. The device support P-light sensor detection and the power verification include in appendix G, more information refer to operational description.</li> <li>8. This device supports HPUE for LTE Band 41 with class 2 level, HPUE power has been measured separately. For HPUE power is higher than power class 3 but with lower duty cycle, the maximum average power for class 2 and class 3 is almost the same, so we chose power class 3 full SAR testing and power class 2 verify the worst case of power class 3 SAR.</li> <li>9. This device supports HPUE mode for 5GNR n41/n77 (Part 270&amp;27Q)/n78 (Part 270&amp;27Q), since HPUE mode is with higher power, so power class 2 was chosen to perform full SAR testing and power class 2 SAR can represent power class 3 SAR.</li> <li>10. Part 96 for 5GNR n77/n78 is not supports HPUE mode.</li> <li>11. For 5G NR bands test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.</li> <li>12. SAR testing for RFID was performed using FTM (Factory Test Mode).</li> <li>13. The device support DBS (Dual Band Simultaneous) function, when the device 2.4GHz and 5GHz or 6GHz transmit at the same time the device will limit different output power for simultaneous transmission compliance.</li> <li>14. This device has one EM45 Protective Case that does not contain metal components and any electronic circuitry, it has no effect on RF exposure and does not require evaluation for SAR.</li> <li>15. This device has NFC function and the NFC SAR report will be separately submitted.</li> <li>16. SAR and Power density test report for WLAN 6GHz U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth always chose higher SAR of WLAN5GHz U-NII-1/2A/2C/3 and WLAN 6GHz U-NII-5/6/7/8.</li> <li>17. This device supports 5GNR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.</li> </ol> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



**<5G NR>**

| Mode | Band | Duplex | SCS(KHz) | Bandwidths(BW)                      |
|------|------|--------|----------|-------------------------------------|
| NSA  | n2   | FDD    | 15       | 5, 10, 15, 20                       |
|      | n5   | FDD    | 15       | 5, 10, 15, 20                       |
|      | n7   | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40           |
|      | n12  | FDD    | 15       | 5, 10, 15                           |
|      | n25  | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40           |
|      | n66  | FDD    | 15       | 5, 10, 15, 20, 30, 40               |
|      | n71  | FDD    | 15       | 5, 10, 15, 20                       |
|      | n38  | TDD    | 30       | 20, 30, 40                          |
|      | n41  | TDD    | 30       | 20, 30, 40, 50, 60, 70, 80, 90, 100 |
|      | n48  | TDD    | 30       | 10, 20, 40                          |
|      | n77  | TDD    | 30       | 20, 30, 40, 50, 60, 70, 80, 90, 100 |
|      | n78  | TDD    | 30       | 20, 30, 40, 50, 60, 70, 80, 90, 100 |
| SA   | n2   | FDD    | 15       | 5, 10, 15, 20                       |
|      | n5   | FDD    | 15       | 5, 10, 15, 20                       |
|      | n7   | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40           |
|      | n12  | FDD    | 15       | 5, 10, 15                           |
|      | n13  | FDD    | 15       | 5, 10                               |
|      | n14  | FDD    | 15       | 5, 10                               |
|      | n25  | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40           |
|      | n26  | FDD    | 15       | 5, 10, 15, 20                       |
|      | n30  | FDD    | 15       | 5, 10                               |
|      | n66  | FDD    | 15       | 5, 10, 15, 20, 30, 40               |
|      | n71  | FDD    | 15       | 5, 10, 15, 20                       |
|      | n38  | TDD    | 30       | 20, 30, 40                          |
|      | n41  | TDD    | 30       | 20, 30, 40, 50, 60, 70, 80, 90, 100 |
|      | n48  | TDD    | 30       | 10, 20, 40                          |
|      | n77  | TDD    | 30       | 20, 30, 40, 50, 60, 70, 80, 90, 100 |
|      | n78  | TDD    | 30       | 20, 30, 40, 50, 60, 70, 80, 90, 100 |

| Specification of Accessory               |            |       |             |                    |
|------------------------------------------|------------|-------|-------------|--------------------|
| AC Adapter 1<br>(Type C Wall Charger 1)  | Brand Name | Zebra | Model       | SAWA-102-22520A    |
|                                          |            |       | Part Number | PWR-WUA5V45W1US    |
| AC Adapter 2<br>(Type A Wall Charger 2)  | Brand Name | Zebra | Model       | SAWA-65-20005A     |
|                                          |            |       | Part Number | PWR-WUA5V12W0US    |
| Battery 1                                | Brand Name | Zebra | Model       | BT-000501          |
|                                          |            |       | Part Number | BT-000501-2000     |
| Earphone 1<br>(Wired headset USB-C)      | Brand Name | Zebra | Part Number | HDST-USBC-PTT1-01  |
| Earphone 2<br>(Rugged Bluetooth Headset) | Brand Name | Zebra | Part Number | HS3100-OTH         |
| Earphone 3<br>(3.5mm PTT Headset)        | Brand Name | Zebra | Part Number | HDST-35MM-PTT1-02  |
| Earphone 4<br>(Rugged Headset)           | Brand Name | Zebra | Part Number | HS2100-OTH         |
| 3.5mm to 3.5mm audio connector           | Brand Name | Zebra | Part Number | CBL-HS2100-3MS1-01 |
| Type C-Audio Cable<br>(Type C to 3.5mm)  | Brand Name | Zebra | Part Number | ADP-USBC-35MM1-01  |
| USB Cable 1<br>(USB-C to C Cable)        | Brand Name | Zebra | Part Number | CBL-EC5X-USBC3A-01 |
| USB Cable 2<br>(USB-A to C Cable)        | Brand Name | Zebra | Part Number | CBL-TC5X-USBC2A-01 |
| EM45 Protective Case                     | Brand Name | Zebra | Part Number | SG-EM45EXO1-01     |

## 4.2 General LTE SAR Test and Reporting Considerations

| Summarized necessary items addressed in KDB 941225 D05 v02r05           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------|--------|--------|--------|----------|--|--|------------|---------------------------------------------------------------|--|--|--|--|--|----------|---------|---------|-------|--------|--------|--------|------|-----|-----|-----|------|------|------|-----|--------|-----|-----|-----|------|------|------|-----|--------|-----|-----|-----|------|------|------|-----|--------|-----|-----|-----|------|------|------|-----|--------|-----|-----|-----|------|------|------|-----|---------|-----|--|--|--|--|--|-----|
| FCC ID                                                                  | UZ7EM45A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| Equipment Name                                                          | Enterprise Mobile                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| Operating Frequency Range of each LTE transmission band                 | LTE Band 2: 1850 MHz ~ 1910 MHz<br>LTE Band 4: 1710 MHz ~ 1755 MHz<br>LTE Band 5: 824 MHz ~ 849 MHz<br>LTE Band 7: 2500 MHz ~ 2570 MHz<br>LTE Band 12: 699 MHz ~ 716 MHz<br>LTE Band 13: 777 MHz ~ 787 MHz<br>LTE Band 14: 788 MHz ~ 798 MHz<br>LTE Band 17: 704 MHz ~ 716 MHz<br>LTE Band 25: 1850 MHz ~ 1915 MHz<br>LTE Band 26: 814 MHz ~ 849 MHz<br>LTE Band 30: 2305 MHz ~ 2315 MHz<br>LTE Band 38: 2570 MHz ~ 2620 MHz<br>LTE Band 41: 2496 MHz ~ 2690 MHz<br>LTE Band 48: 3550 MHz ~ 3700 MHz<br>LTE Band 66: 1710 MHz ~ 1780 MHz<br>LTE Band 71: 663 MHz ~ 698 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| Channel Bandwidth                                                       | LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz<br>LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz<br>LTE Band 13: 5MHz, 10MHz<br>LTE Band 14: 5MHz, 10MHz<br>LTE Band 17: 5MHz, 10MHz<br>LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz<br>LTE Band 30: 5MHz, 10MHz<br>LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz                                                                                                                                                                                                                                                                                                                                                                                  |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| uplink modulations used                                                 | QPSK / 16QAM / 64QAM / 256QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| LTE Voice / Data requirements                                           | Voice and Data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| LTE Release Version                                                     | R15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| CA Support                                                              | Supported, Uplink and Downlink                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| LTE MPR permanently built-in by design                                  | <table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N<sub>RB</sub>)</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>&gt; 5</td><td>&gt; 4</td><td>&gt; 8</td><td>&gt; 12</td><td>&gt; 16</td><td>&gt; 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>&gt; 5</td><td>&gt; 4</td><td>&gt; 8</td><td>&gt; 12</td><td>&gt; 16</td><td>&gt; 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>&gt; 5</td><td>&gt; 4</td><td>&gt; 8</td><td>&gt; 12</td><td>&gt; 16</td><td>&gt; 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table> | Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3 |       |        |        |        |          |  |  | Modulation | Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> ) |  |  |  |  |  | MPR (dB) | 1.4 MHz | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | QPSK | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 1 | 16 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | ≤ 1 | 16 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 2 | 64 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | ≤ 2 | 64 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 3 | 256 QAM | ≥ 1 |  |  |  |  |  | ≤ 5 |
| Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| Modulation                                                              | Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |       |        |        |        | MPR (dB) |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
|                                                                         | 1.4 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3.0 MHz                                                                 | 5 MHz | 10 MHz | 15 MHz | 20 MHz |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| QPSK                                                                    | > 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | > 4                                                                     | > 8   | > 12   | > 16   | > 18   | ≤ 1      |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| 16 QAM                                                                  | ≤ 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≤ 4                                                                     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 1      |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| 16 QAM                                                                  | > 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | > 4                                                                     | > 8   | > 12   | > 16   | > 18   | ≤ 2      |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| 64 QAM                                                                  | ≤ 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≤ 4                                                                     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 2      |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| 64 QAM                                                                  | > 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | > 4                                                                     | > 8   | > 12   | > 16   | > 18   | ≤ 3      |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| 256 QAM                                                                 | ≥ 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                         |       |        |        |        | ≤ 5      |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| LTE A-MPR                                                               | In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| Spectrum plots for RB configuration                                     | A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| Power reduction applied to satisfy SAR compliance                       | Yes, when operating in receiver/hotspot detect mechanism, head/body -worn /hotspot/extremity will trigger reduced power for some bands applied to satisfy SAR compliance, the detail please referred to section 13.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| LTE Carrier Aggregation Combinations                                    | Intra-Band possible combinations and the detail power verification please referred to section 13.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |
| LTE Carrier Aggregation Additional Information                          | 1. This device supports LTE Carrier Aggregation (CA) in the uplink for intra-band and inter-band with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per FCC Guidance.<br>2. This device supports maximum of 4 carriers in the downlink and 2 carriers in the uplink.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                         |       |        |        |        |          |  |  |            |                                                               |  |  |  |  |  |          |         |         |       |        |        |        |      |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |        |     |     |     |      |      |      |     |         |     |  |  |  |  |  |     |



| Transmission (H, M, L) channel numbers and frequencies in each LTE band |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|-------------------------------------------------------------------------|-------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| LTE Band 2                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 18607             | 1850.7      | 18615            | 1851.5      | 18625            | 1852.5      | 18650            | 1855        | 18675            | 1857.5      | 18700            | 1860        |
| M                                                                       | 18900             | 1880        | 18900            | 1880        | 18900            | 1880        | 18900            | 1880        | 18900            | 1880        | 18900            | 1880        |
| H                                                                       | 19193             | 1909.3      | 19185            | 1908.5      | 19175            | 1907.5      | 19150            | 1905        | 19125            | 1902.5      | 19100            | 1900        |
| LTE Band 4                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 19957             | 1710.7      | 19965            | 1711.5      | 19975            | 1712.5      | 20000            | 1715        | 20025            | 1717.5      | 20050            | 1720        |
| M                                                                       | 20175             | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      |
| H                                                                       | 20393             | 1754.3      | 20385            | 1753.5      | 20375            | 1752.5      | 20350            | 1750        | 20325            | 1747.5      | 20300            | 1745        |
| LTE Band 5                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             |                  |             |                  |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 20407             | 824.7       | 20415            | 825.5       | 20425            | 826.5       | 20450            | 829         |                  |             |                  |             |
| M                                                                       | 20525             | 836.5       | 20525            | 836.5       | 20525            | 836.5       | 20525            | 836.5       | 20525            | 836.5       |                  |             |
| H                                                                       | 20643             | 848.3       | 20635            | 847.5       | 20625            | 846.5       | 20600            | 844         |                  |             |                  |             |
| LTE Band 7                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |                  |             |                  |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 20775             | 2502.5      | 20800            | 2505        | 20825            | 2507.5      | 20850            | 2510        |                  |             |                  |             |
| M                                                                       | 21100             | 2535        | 21100            | 2535        | 21100            | 2535        | 21100            | 2535        |                  |             |                  |             |
| H                                                                       | 21425             | 2567.5      | 21400            | 2565        | 21375            | 2562.5      | 21350            | 2560        |                  |             |                  |             |
| LTE Band 12                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             |                  |             |                  |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 23017             | 699.7       | 23025            | 700.5       | 23035            | 701.5       | 23060            | 704         |                  |             |                  |             |
| M                                                                       | 23095             | 707.5       | 23095            | 707.5       | 23095            | 707.5       | 23095            | 707.5       |                  |             |                  |             |
| H                                                                       | 23173             | 715.3       | 23165            | 714.5       | 23155            | 713.5       | 23130            | 711         |                  |             |                  |             |
| LTE Band 13                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 5 MHz   |             |                  |             | Bandwidth 10 MHz |             |                  |             |                  |             |                  |             |
|                                                                         | Channel #         |             | Freq.(MHz)       |             | Channel #        |             | Freq.(MHz)       |             |                  |             |                  |             |
| L                                                                       | 23205             |             | 779.5            |             | 23230            |             | 782              |             |                  |             |                  |             |
| M                                                                       | 23230             |             | 782              |             |                  |             |                  |             |                  |             |                  |             |
| H                                                                       | 23255             |             | 784.5            |             |                  |             |                  |             |                  |             |                  |             |
| LTE Band 14                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 5 MHz   |             |                  |             | Bandwidth 10 MHz |             |                  |             |                  |             |                  |             |
|                                                                         | Channel #         |             | Channel #        |             | Channel #        |             | Freq.(MHz)       |             |                  |             |                  |             |
| L                                                                       | 23305             |             | 790.5            |             | 23330            |             | 793              |             |                  |             |                  |             |
| M                                                                       | 23330             |             | 793              |             |                  |             |                  |             |                  |             |                  |             |
| H                                                                       | 23355             |             | 795.5            |             |                  |             |                  |             |                  |             |                  |             |
| LTE Band 17                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 5 MHz   |             |                  |             | Bandwidth 10 MHz |             |                  |             |                  |             |                  |             |
|                                                                         | Channel #         |             | Freq.(MHz)       |             | Channel #        |             | Freq. (MHz)      |             |                  |             |                  |             |
| L                                                                       | 23755             |             | 706.5            |             | 23780            |             | 709              |             |                  |             |                  |             |
| M                                                                       | 23790             |             | 710              |             | 23790            |             | 710              |             |                  |             |                  |             |
| H                                                                       | 23825             |             | 713.5            |             | 23800            |             | 711              |             |                  |             |                  |             |
| LTE Band 25                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 26047             | 1850.7      | 26055            | 1851.5      | 26065            | 1852.5      | 26090            | 1855        | 26115            | 1857.5      | 26140            | 1860        |
| M                                                                       | 26340             | 1880        | 26340            | 1880        | 26340            | 1880        | 26340            | 1880        | 26340            | 1880        | 26340            | 1880        |
| H                                                                       | 26683             | 1914.3      | 26675            | 1913.5      | 26665            | 1912.5      | 26640            | 1910        | 26615            | 1907.5      | 26590            | 1905        |
| LTE Band 26                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             |                  |             |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L                                                                       | 26697             | 814.7       | 26705            | 815.5       | 26715            | 816.5       | 26740            | 819         | 26765            | 821.5       |                  |             |
| M                                                                       | 26865             | 831.5       | 26865            | 831.5       | 26865            | 831.5       | 26865            | 831.5       | 26865            | 831.5       |                  |             |
| H                                                                       | 27033             | 848.3       | 27025            | 847.5       | 27015            | 846.5       | 26990            | 844         | 26965            | 841.5       |                  |             |



| LTE Band 30 |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|-------------|-------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
|             | Bandwidth 5 MHz   |             |                  |             | Bandwidth 10 MHz |             |                  |             |                  |             |                  |             |
|             | Channel #         |             | Freq.(MHz)       |             | Channel #        |             | Freq.(MHz)       |             |                  |             |                  |             |
| L           | 27685             |             | 2307.5           |             | 27710            |             | 2310             |             |                  |             |                  |             |
| M           | 27710             |             | 2310             |             |                  |             |                  |             |                  |             |                  |             |
| H           | 27735             |             | 2312.5           |             |                  |             |                  |             |                  |             |                  |             |
| LTE Band 38 |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |                  |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |                  |             |                  |             |
| L           | 37775             | 2572.5      | 37800            | 2575        | 37825            | 2577.5      | 37850            | 2580        |                  |             |                  |             |
| M           | 38000             | 2595        | 38000            | 2595        | 38000            | 2595        | 38000            | 2595        |                  |             |                  |             |
| H           | 38225             | 2617.5      | 38200            | 2615        | 38175            | 2612.5      | 38150            | 2610        |                  |             |                  |             |
| LTE Band 41 |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |                  |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |                  |             |                  |             |
| L           | 39675             | 2498.5      | 39700            | 2501        | 39725            | 2503.5      | 39750            | 2506        |                  |             |                  |             |
| LM          | 40148             | 2545.8      | 40160            | 2547        | 40173            | 2548.3      | 40185            | 2549.5      |                  |             |                  |             |
| M           | 40620             | 2593        | 40620            | 2593        | 40620            | 2593        | 40620            | 2593        |                  |             |                  |             |
| HM          | 41093             | 2640.3      | 41080            | 2639        | 41068            | 2637.8      | 41055            | 2636.5      |                  |             |                  |             |
| H           | 41565             | 2687.5      | 41540            | 2685        | 41515            | 2682.5      | 41490            | 2680        |                  |             |                  |             |
| LTE Band 66 |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|             | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L           | 131979            | 1710.7      | 131987           | 1711.5      | 131997           | 1712.5      | 132022           | 1715        | 132047           | 1717.5      | 132072           | 1720        |
| M           | 132322            | 1745        | 132322           | 1745        | 132322           | 1745        | 132322           | 1745        | 132322           | 1745        | 132322           | 1745        |
| H           | 132665            | 1779.3      | 132657           | 1778.5      | 132647           | 1777.5      | 132622           | 1775        | 132597           | 1772.5      | 132572           | 1770        |
| LTE Band 71 |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |                  |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |                  |             |
| L           | 133147            | 665.5       | 133172           | 668         | 133197           | 670.5       | 133222           | 673         |                  |             |                  |             |
| M           | 133247            | 675.5       | 133272           | 678         | 133297           | 680.5       | 133322           | 683         |                  |             |                  |             |
| H           | 133447            | 695.5       | 133422           | 693         | 133397           | 690.5       | 133372           | 688         |                  |             |                  |             |
| LTE Band 48 |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |                  |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |                  |             |
| L           | 55265             | 3552.5      | 55290            | 3555        | 55315            | 3557.5      | 55340            | 3560        |                  |             |                  |             |
| LM          | 55810             | 3607        | 55815            | 3607.5      | 55820            | 3608        | 55830            | 3609        |                  |             |                  |             |
| MH          | 56170             | 3643        | 56165            | 3642.5      | 56160            | 3642        | 56150            | 3641        |                  |             |                  |             |
| H           | 56715             | 3697.5      | 56690            | 3695        | 56665            | 3692.5      | 56640            | 3690        |                  |             |                  |             |

**<For LTE Overlap Bands Description>**
**1) LTE Bands BW**

| Band        | 1.4 MHz | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz |
|-------------|---------|-------|-------|--------|--------|--------|
| LTE Band 4  | Yes     | Yes   | Yes   | Yes    | Yes    | Yes    |
| LTE Band 66 | Yes     | Yes   | Yes   | Yes    | Yes    | Yes    |
| LTE Band 12 | Yes     | Yes   | Yes   | Yes    |        |        |
| LTE Band 17 |         |       | Yes   | Yes    |        |        |
| LTE Band 5  | Yes     | Yes   | Yes   | Yes    |        |        |
| LTE Band 26 | Yes     | Yes   | Yes   | Yes    | Yes    |        |
| LTE Band 38 |         |       | Yes   | Yes    | Yes    | Yes    |
| LTE Band 41 |         |       | Yes   | Yes    | Yes    | Yes    |
| LTE Band 25 | Yes     | Yes   | Yes   | Yes    | Yes    | Yes    |
| LTE Band 2  | Yes     | Yes   | Yes   | Yes    | Yes    | Yes    |

**2) LTE Bands tune up:**

| Band            | Antenna | Head<br>DSI 2<br>Tune-up Limit | Hotspot<br>DSI 1<br>RFID OFF<br>Tune-up Limit | Hotspot<br>DSI 4<br>RFID ON<br>Tune-up Limit | Bodyworn<br>Extremity<br>DSI 0<br>RFID OFF<br>Tune-up Limit | Bodyworn<br>Extremity<br>DSI 5<br>RFID ON<br>Tune-up Limit | Default<br>Tune-up Limit |
|-----------------|---------|--------------------------------|-----------------------------------------------|----------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------|--------------------------|
| LTE Band 66(4)  | Ant 2   | 18.90                          | 22.10                                         | 20.60                                        | 23.60                                                       | 22.10                                                      | 25.00                    |
| LTE Band 66(4)  | Ant 5   | 25.00                          | 23.00                                         | 21.50                                        | 25.00                                                       | 23.50                                                      | 25.00                    |
| LTE Band 12(17) | Ant 0   | 22.70                          | 25.00                                         | 25.00                                        | 25.00                                                       | 25.00                                                      | 25.00                    |
| LTE Band 12(17) | Ant 1   |                                |                                               | 24.00                                        |                                                             | 24.00                                                      | 24.00                    |
| LTE Band 26(5)  | Ant 0   | 22.40                          | 25.00                                         | 23.60                                        | 25.00                                                       | 24.50                                                      | 25.00                    |
| LTE Band 26(5)  | Ant 1   |                                |                                               | 23.60                                        |                                                             | 24.00                                                      | 24.00                    |
| LTE Band 41(38) | Ant 3   | 18.70                          | 21.30                                         | 19.80                                        | 22.80                                                       | 20.80                                                      | 24.00                    |
| LTE Band 25(2)  | Ant 2   | 19.60                          | 21.70                                         | 20.20                                        | 23.20                                                       | 21.70                                                      | 25.00                    |

### 4.3 General 5G NR SAR Test and Reporting Considerations

| 5G NR Information                                         |                                                                                                 |  |  |  |  |  |  |  |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| Operating Frequency Range of each 5G NR transmission band | 5G NR n2 : 1850 MHz ~ 1910 MHz                                                                  |  |  |  |  |  |  |  |
|                                                           | 5G NR n5 : 824 MHz ~ 849 MHz                                                                    |  |  |  |  |  |  |  |
|                                                           | 5G NR n7 : 2500 MHz ~ 2570 MHz                                                                  |  |  |  |  |  |  |  |
|                                                           | 5G NR n12 : 699 MHz ~ 716 MHz                                                                   |  |  |  |  |  |  |  |
|                                                           | 5G NR n13 : 777 MHz ~ 787 MHz                                                                   |  |  |  |  |  |  |  |
|                                                           | 5G NR n14 : 788 MHz ~ 798 MHz                                                                   |  |  |  |  |  |  |  |
|                                                           | 5G NR n25 : 1850 MHz ~ 1915 MHz                                                                 |  |  |  |  |  |  |  |
|                                                           | 5G NR n26 : 814 MHz ~ 849 MHz                                                                   |  |  |  |  |  |  |  |
|                                                           | 5G NR n30 : 2305 MHz ~ 2315 MHz                                                                 |  |  |  |  |  |  |  |
|                                                           | 5G NR n38 : 2570 MHz ~ 2620 MHz                                                                 |  |  |  |  |  |  |  |
|                                                           | 5G NR n41 : 2496 MHz ~ 2690 MHz                                                                 |  |  |  |  |  |  |  |
|                                                           | 5G NR n48 : 3550 MHz ~ 3700 MHz                                                                 |  |  |  |  |  |  |  |
|                                                           | 5G NR n66 : 1710 MHz ~ 1780 MHz                                                                 |  |  |  |  |  |  |  |
|                                                           | 5G NR n71 : 663 MHz ~ 698 MHz                                                                   |  |  |  |  |  |  |  |
|                                                           | 5G NR n77: 3450MHz ~ 3980 MHz                                                                   |  |  |  |  |  |  |  |
| 5G NR n78: 3450MHz ~ 3800 MHz                             |                                                                                                 |  |  |  |  |  |  |  |
| Channel Bandwidth                                         | The detail please refers to section 4.1 5GNR FR1 bands table.                                   |  |  |  |  |  |  |  |
| SCS                                                       | FDD: SCS15KHz, TDD: SCS30KHz                                                                    |  |  |  |  |  |  |  |
| uplink modulations used                                   | DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM<br>CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM |  |  |  |  |  |  |  |
| A-MPR (Additional MPR) disabled for SAR Testing?          | Yes                                                                                             |  |  |  |  |  |  |  |
| LTE Anchor Bands for n2                                   | LTE B5/12/13/14/66/71                                                                           |  |  |  |  |  |  |  |
| LTE Anchor Bands for n5                                   | LTE B2/48/66                                                                                    |  |  |  |  |  |  |  |
| LTE Anchor Bands for n7                                   | LTE B2/5/12/13/66                                                                               |  |  |  |  |  |  |  |
| LTE Anchor Bands for n12                                  | LTE B2/66                                                                                       |  |  |  |  |  |  |  |
| LTE Anchor Bands for n25                                  | LTE B12/48/66                                                                                   |  |  |  |  |  |  |  |
| LTE Anchor Bands for n38                                  | LTE B2/4/5/12/66/71                                                                             |  |  |  |  |  |  |  |
| LTE Anchor Bands for n41                                  | LTE B2/4/12/25/26/66                                                                            |  |  |  |  |  |  |  |
| LTE Anchor Bands for n48                                  | LTE B2/5/13/66                                                                                  |  |  |  |  |  |  |  |
| LTE Anchor Bands for n66                                  | LTE B2/5/7/12/13/14/66/71                                                                       |  |  |  |  |  |  |  |
| LTE Anchor Bands for n71                                  | LTE B2/7/66                                                                                     |  |  |  |  |  |  |  |
| LTE Anchor Bands for n77                                  | LTE B2/5/7/12/13/14/66                                                                          |  |  |  |  |  |  |  |
| LTE Anchor Bands for n78                                  | LTE B2/4/5/7/12/13/38/66/71                                                                     |  |  |  |  |  |  |  |

| Transmission (H, M, L) channel numbers and frequencies in each 5G NR band |                |             |                 |             |                 |             |                 |             |
|---------------------------------------------------------------------------|----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| NR Band 2                                                                 |                |             |                 |             |                 |             |                 |             |
|                                                                           | Bandwidth 5MHz |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             |
|                                                                           | Ch. #          | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |
| L                                                                         | 370500         | 1852.5      | 371000          | 1855        | 371500          | 1857.5      | 372000          | 1860        |
| M                                                                         | 376000         | 1880        | 376000          | 1880        | 376000          | 1880        | 376000          | 1880        |
| H                                                                         | 381500         | 1907.5      | 381000          | 1905        | 380500          | 1902.5      | 380000          | 1900        |

| NR Band 5 |                |             |                 |             |                 |             |                 |             |
|-----------|----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
|           | Bandwidth 5MHz |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             |
|           | Ch. #          | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |
| L         | 165300         | 826.5       | 165800          | 829         | 166300          | 831.5       | 166800          | 834         |
| M         | 167300         | 836.5       | 167300          | 836.5       | 167300          | 836.5       | 167300          | 836.5       |
| H         | 169300         | 846.5       | 168800          | 844         | 168300          | 841.5       | 167800          | 839         |

| NR Band 7 |                |             |                 |             |                 |             |                 |             |                 |             |                 |             |                 |             |
|-----------|----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
|           | Bandwidth 5MHz |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             | Bandwidth 25MHz |             | Bandwidth 30MHz |             | Bandwidth 40MHz |             |
|           | Ch. #          | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |
| L         | 500500         | 2502.5      | 501000          | 2505        | 501500          | 2507.5      | 502000          | 2510        | 502500          | 2512.5      | 503000          | 2515        | 504000          | 2520        |
| M         | 507000         | 2535        | 507000          | 2535        | 507000          | 2535        | 507000          | 2535        | 507000          | 2535        | 507000          | 2535        | 507000          | 2535        |
| H         | 513500         | 2567.5      | 513000          | 2565        | 512500          | 2562.5      | 512000          | 2560        | 511500          | 2557.5      | 511000          | 2555        | 510000          | 2550        |

| NR Band 12 |                |             |                 |             |                 |             |
|------------|----------------|-------------|-----------------|-------------|-----------------|-------------|
|            | Bandwidth 5MHz |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             |
|            | Ch. #          | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |
| L          | 140300         | 701.5       | 140800          | 704         | 141300          | 706.5       |
| M          | 141500         | 707.5       | 141500          | 707.5       | 141500          | 707.5       |
| H          | 142700         | 713.5       | 142200          | 711         | 141700          | 708.5       |



| NR Band 13     |        |             |                 |             |  |
|----------------|--------|-------------|-----------------|-------------|--|
| Bandwidth 5MHz |        |             | Bandwidth 10MHz |             |  |
|                | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L              | 155900 | 779.5       | 156400          | 782         |  |
| M              | 156400 | 782         |                 |             |  |
| H              | 156900 | 784.5       |                 |             |  |

| NR Band 14     |        |             |                 |             |  |
|----------------|--------|-------------|-----------------|-------------|--|
| Bandwidth 5MHz |        |             | Bandwidth 10MHz |             |  |
|                | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L              | 158100 | 790.5       | 158600          | 793         |  |
| M              | 158600 | 793         |                 |             |  |
| H              | 159100 | 795.5       |                 |             |  |

| NR Band 25     |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |
|----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
| Bandwidth 5MHz |        | Bandwidth 10MHz |        | Bandwidth 15MHz |        | Bandwidth 20MHz |        | Bandwidth 25MHz |        | Bandwidth 30MHz |        | Bandwidth 40MHz |        |
|                | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  |
| L              | 370500 | 1852.5          | 371000 | 1855            | 371500 | 1857.5          | 372000 | 1860            | 372500 | 1862.5          | 373000 | 1865            | 374000 |
| M              | 376500 | 1882.5          | 376500 | 1882.5          | 376500 | 1882.5          | 376500 | 1882.5          | 376500 | 1882.5          | 376500 | 1882.5          | 376500 |
| H              | 382500 | 1912.5          | 382000 | 1910            | 381500 | 1907.5          | 381000 | 1905            | 380500 | 1902.5          | 380000 | 1900            | 379000 |

| NR Band 26     |        |             |                 |             |                 |             |                 |             |  |
|----------------|--------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|--|
| Bandwidth 5MHz |        |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             |  |
|                | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L              | 163300 | 816.5       | 163800          | 819         | 164300          | 821.5       | 164800          | 824         |  |
| M              | 166300 | 831.5       | 166300          | 831.5       | 166300          | 831.5       | 166300          | 831.5       |  |
| H              | 169300 | 846.5       | 168800          | 844         | 168300          | 841.5       | 167800          | 839         |  |

| NR Band 30     |        |             |                 |             |  |
|----------------|--------|-------------|-----------------|-------------|--|
| Bandwidth 5MHz |        |             | Bandwidth 10MHz |             |  |
|                | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L              | 461500 | 2307.5      | 462000          | 2310        |  |
| M              | 462000 | 2310        |                 |             |  |
| H              | 462500 | 2312.5      |                 |             |  |

| NR Band 66     |        |                 |        |                 |        |                 |        |                 |        |                 |        |
|----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
| Bandwidth 5MHz |        | Bandwidth 10MHz |        | Bandwidth 15MHz |        | Bandwidth 20MHz |        | Bandwidth 30MHz |        | Bandwidth 40MHz |        |
|                | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  |
| L              | 342500 | 1712.5          | 343000 | 1715            | 343500 | 1717.5          | 344000 | 1720            | 345000 | 1725            | 346000 |
| M              | 349000 | 1745            | 349000 | 1745            | 349000 | 1745            | 349000 | 1745            | 349000 | 1745            | 349000 |
| H              | 355500 | 1777.5          | 355000 | 1775            | 354500 | 1772.5          | 354000 | 1770            | 353000 | 1765            | 352000 |

| NR Band 71     |        |             |                 |             |                 |             |                 |             |  |
|----------------|--------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|--|
| Bandwidth 5MHz |        |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             |  |
|                | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L              | 133100 | 665.5       | 133600          | 668         | 134100          | 670.5       | 134600          | 673         |  |
| M              | 136100 | 680.5       | 136100          | 680.5       | 136100          | 680.5       | 136100          | 680.5       |  |
| H              | 139100 | 695.5       | 138600          | 693         | 138100          | 690.5       | 137600          | 688         |  |

| NR Band 38      |        |             |                 |             |                 |             |  |
|-----------------|--------|-------------|-----------------|-------------|-----------------|-------------|--|
| Bandwidth 20MHz |        |             | Bandwidth 30MHz |             | Bandwidth 40MHz |             |  |
|                 | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L               | 516000 | 2580        | 517002          | 2585.01     | 518004          | 2590.02     |  |
| M               | 519000 | 2595        | 519000          | 2595        | 519000          | 2595        |  |
| H               | 522000 | 2610        | 520998          | 2604.99     | 519996          | 2599.98     |  |

| NR Band 41      |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |
|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
| Bandwidth 20MHz |        | Bandwidth 30MHz |        | Bandwidth 40MHz |        | Bandwidth 50MHz |        | Bandwidth 60MHz |        | Bandwidth 70MHz |        | Bandwidth 80MHz |        | Bandwidth 90MHz |        |
|                 | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  | Freq. (MHz)     | Ch. #  |
| L               | 501204 | 2506.02         | 502200 | 2511            | 503202 | 2516.01         | 504204 | 2521.02         | 505200 | 2526            | 500202 | 2501.01         | 507204 | 2536.02         | 508200 |
| M               | 518598 | 2592.99         | 518598 | 2592.99         | 518598 | 2592.99         | 518598 | 2592.99         | 518598 | 2592.99         | 518598 | 2592.99         | 518598 | 2592.99         | 518598 |
| H               | 535998 | 2679.99         | 534996 | 2674.98         | 534000 | 2670            | 532998 | 2664.99         | 531996 | 2659.98         | 537000 | 2685            | 529998 | 2649.99         | 528996 |

| NR Band 48      |        |             |                 |             |                 |             |  |
|-----------------|--------|-------------|-----------------|-------------|-----------------|-------------|--|
| Bandwidth 10MHz |        |             | Bandwidth 20MHz |             | Bandwidth 40MHz |             |  |
|                 | Ch. #  | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |  |
| L               | 637000 | 3555        | 637334          | 3560.01     | 638000          | 3570        |  |
| M               | 641666 | 3624.99     | 641666          | 3624.99     | 641666          | 3624.99     |  |
| H               | 646332 | 3694.98     | 646000          | 3690        | 645332          | 3679.98     |  |



| NR Band 77         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| L 647334           | 3710.01        | 647668             | 3715.02        | 648000             | 3720           | 648334             | 3725.01        | 648668             | 3730.02        | 649000             | 3735           | 649334             | 3740.01        | 649668             | 3745.02        | 650000              | 3750           |
| M 656000           | 3840           | 656000             | 3840.00        | 656000             | 3840           | 656000             | 3840           | 656000             | 3840           | 656000             | 3840           | 656000             | 3840           | 656000             | 3840           | 656000              | 3840           |
| H 664668           | 3970.02        | 664334             | 3965.01        | 664000             | 3960           | 663668             | 3955.02        | 663334             | 3950.01        | 663000             | 3945           | 662668             | 3940.02        | 662334             | 3935.01        | 662000              | 3930           |

| NR Band 78         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| L 647334           | 3710.01        | 647668             | 3715.02        | 648000             | 3720           | 648334             | 3725.01        | 648668             | 3730.02        | 649000             | 3735           | 649334             | 3740.01        | 649668             | 3745.02        |                     |                |
| M 650000           | 3750           | 650000             | 3750.00        | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000              | 3750           |
| H 652668           | 3790.02        | 652334             | 3785.01        | 652000             | 3780           | 651668             | 3775.02        | 651334             | 3770.01        | 651000             | 3765           | 650668             | 3760.02        | 650334             | 3755.01        |                     |                |

For &lt;3450 MHz ~ 3550 MHz &gt;

| NR Band 77         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| L 630668           | 3460.02        | 631000             | 3465           | 631334             | 3470.01        | 631668             | 3475.02        | 632000             | 3480           | 632334             | 3485.01        | 632668             | 3490.02        | 633000             | 3495           |                     |                |
| M 633334           | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334              | 3500.01        |
| H 636000           | 3540           | 635668             | 3535.02        | 635334             | 3530.01        | 635000             | 3525           | 634668             | 3520.02        | 634334             | 3515.01        | 634000             | 3510           | 633668             | 3505.02        |                     |                |

| NR Band 78         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| L 630668           | 3460.02        | 631000             | 3465           | 631334             | 3470.01        | 631668             | 3475.02        | 632000             | 3480           | 632334             | 3485.01        | 632668             | 3490.02        | 633000             | 3495           |                     |                |
| M 633334           | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334             | 3500.01        | 633334              | 3500.01        |
| H 636000           | 3540           | 635668             | 3535.02        | 635334             | 3530.01        | 635000             | 3525           | 634668             | 3520.02        | 634334             | 3515.01        | 634000             | 3510           | 633668             | 3505.02        |                     |                |

For Part96

| NR Band 77         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| L 637334           | 3560.01        | 637668             | 3565.02        | 638000             | 3570           | 638334             | 3575.01        | 638668             | 3580.02        | 639000             | 3585           | 639334             | 3590.01        | 639668             | 3595.02        | 640000              | 3600           |
| M 641666           | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666              | 3624.99        |
| H 646000           | 3690           | 645666             | 3684.99        | 645332             | 3679.98        | 645000             | 3675           | 644666             | 3669.99        | 644332             | 3664.98        | 644000             | 3660           | 643666             | 3654.99        | 643332              | 3649.98        |

| NR Band 78         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| L 637334           | 3560.01        | 637668             | 3565.02        | 638000             | 3570           | 638334             | 3575.01        | 638668             | 3580.02        | 639000             | 3585           | 639334             | 3590.01        | 639668             | 3595.02        | 640000              | 3600           |
| M 641666           | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666             | 3624.99        | 641666              | 3624.99        |
| H 646000           | 3690           | 645666             | 3684.99        | 645332             | 3679.98        | 645000             | 3675           | 644666             | 3669.99        | 644332             | 3664.98        | 644000             | 3660           | 643666             | 3654.99        | 643332              | 3649.98        |



**<For NR Overlap Bands Description>**
**1) NR Bands BW**

| Band    | 5 MHz | 10 MHz | 15 MHz | 20 MHz | 25 MHz | 30 MHz | 35 MHz | 40 MHz | 45 MHz | 50 MHz | 60 MHz | 70 MHz | 80 MHz | 90 MHz | 100 MHz |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| FR1 n5  | Yes   | Yes    | Yes    | Yes    |        |        |        |        |        |        |        |        |        |        |         |
| FR1 n26 | Yes   | Yes    | Yes    | Yes    |        |        |        |        |        |        |        |        |        |        |         |
| FR1 n38 |       |        |        | Yes    |        | Yes    |        | Yes    |        |        |        |        |        |        |         |
| FR1 n41 |       |        |        | Yes    |        | Yes    |        | Yes    |        | Yes    | Yes    | Yes    | Yes    | Yes    | Yes     |
| FR1 n78 |       |        |        | Yes    |        | Yes    |        | Yes    |        | Yes    | Yes    | Yes    | Yes    | Yes    | Yes     |
| FR1 n77 |       |        |        | Yes    |        | Yes    |        | Yes    |        | Yes    | Yes    | Yes    | Yes    | Yes    | Yes     |
| FR1 n2  | Yes   | Yes    | Yes    | Yes    |        |        |        |        |        |        |        |        |        |        |         |
| FR1 n25 | Yes   | Yes    | Yes    | Yes    | Yes    | Yes    |        | Yes    |        |        |        |        |        |        |         |

**2) NR Bands Tune up:**

| Band                            | Antenna | Head<br>DSI 2<br>Tune-up Limit | Hotspot<br>DSI 1<br>RFID OFF<br>Tune-up Limit | Hotspot<br>DSI 4<br>RFID ON<br>Tune-up Limit | Bodyworn<br>Extremity<br>DSI 0<br>RFID OFF<br>Tune-up Limit | Bodyworn<br>Extremity<br>DSI 5<br>RFID ON<br>Tune-up Limit | Default<br>Tune-up Limit |
|---------------------------------|---------|--------------------------------|-----------------------------------------------|----------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------|--------------------------|
| FR1 n25(2)                      | Ant 2   | 19.6                           | 21.7                                          | 20.2                                         | 23.2                                                        | 21.2                                                       | 25                       |
| FR1 n26(5)                      | Ant 0   | 22                             | 25                                            | 23.6                                         | 25                                                          | 23.6                                                       | 25                       |
| FR1 n26(5)                      | Ant 1   |                                |                                               | 23.6                                         |                                                             | 23.6                                                       | 24                       |
| FR1 n41(38)                     | Ant 3   | 17.1                           | 18.9                                          | 17.4                                         | 20.8                                                        | 18.8                                                       | 24                       |
| FR1 n77(78) Part 270&27Q&96 PC3 | Ant 4   | 15.4                           | 23.2                                          | 21.7                                         | 23.2                                                        | 21.7                                                       | 24                       |
| FR1 n77(78) Part 270&27Q PC2    | Ant 4   | 15.4                           | 23.2                                          | 21.7                                         | 23.2                                                        | 21.7                                                       | 27                       |
| FR1 n77(78) Part 270 PC3        | Ant 2   | 16.6                           | 23                                            | 22.1                                         | 23                                                          | 21.6                                                       | 23                       |
| FR1 n77 Part 270 PC2            | Ant 2   | 16.6                           | 23.6                                          | 22.1                                         | 23.6                                                        | 21.6                                                       | 26                       |
| FR1 n78 Part 270 PC2            | Ant 2   | 16.6                           | 23.6                                          | 22.1                                         | 23.6                                                        | 21.6                                                       | 25                       |
| FR1 n77 Part 27Q PC3            | Ant 2   | 16.6                           | 23                                            | 22.1                                         | 23                                                          | 21.6                                                       | 23                       |
| FR1 n78 Part 27Q PC3            | Ant 2   | 16.6                           | 22                                            | 22                                           | 22                                                          | 21.6                                                       | 22                       |
| FR1 n77 Part 27Q PC2            | Ant 2   | 16.6                           | 23.6                                          | 22.1                                         | 23.6                                                        | 21.6                                                       | 25                       |
| FR1 n78 Part 27Q PC2            | Ant 2   | 16.6                           | 23.6                                          | 22.1                                         | 23.6                                                        | 21.6                                                       | 24                       |
| FR1 n77(78) Part 96 PC3         | Ant 2   | 16.6                           | 23                                            | 22.1                                         | 23                                                          | 21.6                                                       | 23                       |
| FR1 n77 Part 270 PC3            | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 24                       |
| FR1 n78 Part 270 PC3            | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 23                       |
| FR1 n77(78) Part 270 PC2        | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 25                       |
| FR1 n77 Part 27Q PC3            | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 23                       |
| FR1 n78 Part 27Q PC3            | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 22                       |
| FR1 n77 Part 27Q PC2            | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 25                       |
| FR1 n78 Part 27Q PC2            | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 24                       |
| FR1 n77(78) Part 96 PC3         | Ant 3   | 17.7                           | 18.9                                          | 17.4                                         | 18.9                                                        | 17.4                                                       | 24                       |
| FR1 n77(78) Part 270&27Q&96 PC3 | Ant 6   | 20.1                           | 20.1                                          | 19.8                                         | 20.1                                                        | 18.1                                                       | 23                       |
| FR1 n77(78) Part 270&27Q PC2    | Ant 6   | 20.1                           | 20.1                                          | 19.8                                         | 20.1                                                        | 18.1                                                       | 26                       |

## 5. Smart Transmit feature for RF Exposure compliance

The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with RF exposure limit over a defined time window, for SAR (transmit frequency  $\leq 6\text{GHz}$ ). To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.

Note that WLAN/BT operations are not enabled with Smart Transmit.

This report describes the procedures for the SAR char generation, and the parameters obtained from SAR characterization (referred to as SAR char, respectively) will be used as input for Smart Transmit. SAR char will be entered via the Embedded File System (EFS) version 16 to enable the Smart Transmit (GEN1) Feature.

### <Terminologies in this report>

|                           |                                                                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>P<sub>limit</sub></b>  | The time-averaged RF power which corresponds to SAR_design_target.                                                                      |
| <b>P<sub>max</sub></b>    | Maximum target power level                                                                                                              |
| <b>SAR_design_target:</b> | The design target for SAR compliance. It should be less than regulatory SAR limit to account for all device design related uncertainty. |
| <b>SAR char</b>           | P <sub>limit</sub> for all the technologies/bands for all applicable DSI                                                                |

### <SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for  $f < 6\text{GHz}$ .

### <SAR design target and uncertainty>

| Item              | Uncertainty dB (k=2) |
|-------------------|----------------------|
| Total uncertainty | 1.0                  |

To account for total uncertainty, SAR\_design\_target should be determined as:

$$SAR_{design\_target} < SAR_{regulatory\_limit} \times 10^{\frac{-total\_uncertainty}{10}}$$



The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR\_design\_target, below the predefined time-averaged power limit, for each characterized technology and band.

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

**<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> in EFS file)>**

| Band             | Antenna | Head<br>DSI 2 | Hotspot<br>DSI 1<br>RFID OFF | Hotspot<br>DSI 4<br>RFID ON | Body-Worn&<br>Extremity<br>DSI 0<br>RFID OFF | Body-Worn&<br>Extremity<br>DSI 5<br>RFID ON | Pmax* |
|------------------|---------|---------------|------------------------------|-----------------------------|----------------------------------------------|---------------------------------------------|-------|
| WCDMA II         | Ant 2   | 18.6          | 20.7                         | 19.2                        | 22.2                                         | 20.7                                        | 24.0  |
| WCDMA IV         | Ant 2   | 18.4          | 21.9                         | 20.4                        | 22.2                                         | 21.2                                        | 24.0  |
| WCDMA V          | Ant 0   | 21.7          | 24.8                         | 23.5                        | 24.8                                         | 23.5                                        | 24.0  |
| WCDMA V          | Ant 1   |               |                              | 23.5                        |                                              | 23.5                                        | 23.0  |
| LTE Band 2       | Ant 5   | 23.4          | 22.2                         | 20.7                        | 23.4                                         | 21.9                                        | 24.0  |
| LTE Band 25(2)   | Ant 2   | 18.6          | 20.7                         | 19.2                        | 22.2                                         | 20.7                                        | 24.0  |
| LTE Band 66(4)   | Ant 2   | 17.9          | 21.1                         | 19.6                        | 22.6                                         | 21.1                                        | 24.0  |
| LTE Band 66(4)   | Ant 5   | 24.0          | 22.0                         | 20.5                        | 24.0                                         | 22.5                                        | 24.0  |
| LTE Band 26(5)   | Ant 0   | 21.4          | 24.0                         | 22.6                        | 24.0                                         | 23.5                                        | 24.0  |
| LTE Band 26(5)   | Ant 1   |               |                              | 22.6                        |                                              | 23.5                                        | 23.0  |
| LTE Band 7       | Ant 3   | 15.9          | 18.4                         | 16.9                        | 19.9                                         | 18.4                                        | 23.0  |
| LTE Band 12(17)  | Ant 0   | 21.7          | 26.0                         | 24.0                        | 26.0                                         | 24.0                                        | 24.0  |
| LTE Band 12(17)  | Ant 1   |               |                              | 24.0                        |                                              | 24.0                                        | 23.0  |
| LTE Band 13      | Ant 0   | 21.4          | 25.6                         | 24.0                        | 25.6                                         | 24.0                                        | 24.0  |
| LTE Band 13      | Ant 1   |               |                              | 24.0                        |                                              | 24.0                                        | 23.0  |
| LTE Band 14      | Ant 0   | 21.4          | 24.9                         | 23.4                        | 24.9                                         | 24.0                                        | 24.0  |
| LTE Band 14      | Ant 1   |               |                              | 23.4                        |                                              | 24.0                                        | 23.0  |
| LTE Band 30      | Ant 3   | 15.2          | 19.4                         | 17.9                        | 19.4                                         | 17.4                                        | 24.0  |
| LTE Band 71      | Ant 0   | 21.9          | 24.7                         | 23.0                        | 24.7                                         | 23.0                                        | 23.0  |
| LTE Band 71      | Ant 1   |               |                              | 23.0                        |                                              | 23.0                                        | 22.5  |
| LTE Band 41(38)  | Ant 3   | 15.7          | 18.3                         | 16.8                        | 19.8                                         | 17.8                                        | 21.0  |
| LTE Band 41 HPUE | Ant 3   | 15.7          | 18.3                         | 16.8                        | 19.8                                         | 17.8                                        | 22.4  |
| LTE Band 48      | Ant 4   | 15.2          | 20.0                         | 19.5                        | 20.0                                         | 19.5                                        | 20.0  |
| FR1 n26(5)       | Ant 0   | 21            | 24.1                         | 22.6                        | 24.1                                         | 22.6                                        | 24.0  |
| FR1 n26(5)       | Ant 1   |               |                              | 22.6                        |                                              | 22.6                                        | 23.0  |
| FR1 n7           | Ant 3   | 16.4          | 17.7                         | 16.2                        | 20.8                                         | 18.8                                        | 23.0  |
| FR1 n12          | Ant 0   | 21.4          | 24.5                         | 23.4                        | 24.5                                         | 23.4                                        | 24.0  |
| FR1 n12          | Ant 1   |               |                              | 23.4                        |                                              | 23.4                                        | 23.0  |
| FR1 n13          | Ant 0   | 21.4          | 24.2                         | 23.4                        | 24.2                                         | 23.4                                        | 24.0  |
| FR1 n13          | Ant 1   |               |                              | 23.4                        |                                              | 23.4                                        | 23.0  |
| FR1 n14          | Ant 0   | 21.4          | 24.2                         | 23.4                        | 24.2                                         | 23.4                                        | 24.0  |
| FR1 n14          | Ant 1   |               |                              | 23.4                        |                                              | 23.4                                        | 23.0  |
| FR1 n25(2)       | Ant 2   | 18.6          | 20.7                         | 19.2                        | 22.2                                         | 20.2                                        | 24.0  |
| FR1 n25          | Ant 5   | 23.4          | 22.7                         | 21.2                        | 23.4                                         | 21.9                                        | 24.0  |
| FR1 n30          | Ant 3   | 15.2          | 19.6                         | 18.6                        | 19.7                                         | 17.7                                        | 24.0  |
| FR1 n66          | Ant 2   | 18.7          | 21.1                         | 19.6                        | 22.6                                         | 21.6                                        | 24.0  |
| FR1 n66          | Ant 5   | 24.0          | 23.2                         | 21.5                        | 24.0                                         | 23.0                                        | 24.0  |
| FR1 n71          | Ant 0   | 21.4          | 24.7                         | 23.4                        | 24.7                                         | 23.0                                        | 23.0  |
| FR1 n71          | Ant 1   |               |                              | 23.4                        |                                              | 23.0                                        | 23.0  |
| FR1 n41(38)      | Ant 3   | 16.1          | 17.9                         | 16.4                        | 19.8                                         | 17.8                                        | 23.0  |
| FR1 n41 HPUE     | Ant 3   | 16.1          | 17.9                         | 16.4                        | 19.8                                         | 17.8                                        | 26.0  |
| FR1 n41          | Ant 0   | 16.3          | 21.0                         | 19.5                        | 21.0                                         | 19.5                                        | 23.0  |
| FR1 n41 HPUE     | Ant 0   | 16.3          | 21.0                         | 19.5                        | 21.0                                         | 19.5                                        | 25.0  |
| FR1 n41          | Ant 5   | 19.4          | 20.4                         | 18.9                        | 19.4                                         | 17.4                                        | 22.0  |
| FR1 n41 HPUE     | Ant 5   | 19.4          | 20.4                         | 18.9                        | 19.4                                         | 17.4                                        | 24.0  |
| FR1 n41          | Ant 6   | 19.3          | 19.1                         | 17.3                        | 19.3                                         | 17.3                                        | 22.0  |



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|                                 |       |      |      |      |      |      |      |
|---------------------------------|-------|------|------|------|------|------|------|
| FR1 n41 HPUE                    | Ant 6 | 19.3 | 19.1 | 17.3 | 19.3 | 17.3 | 24.0 |
| FR1 n48                         | Ant 4 | 14.9 | 21.3 | 19.8 | 21.3 | 19.8 | 22.0 |
| FR1 n77(78) Part 27O&27Q&96 PC3 | Ant 4 | 14.4 | 22.2 | 20.7 | 22.2 | 20.7 | 23.0 |
| FR1 n77(78) Part 27O&27Q PC2    | Ant 4 | 14.4 | 22.2 | 20.7 | 22.2 | 20.7 | 26.0 |
| FR1 n77(78) Part 27O PC3        | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 22.0 |
| FR1 n77 Part 27O PC2            | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 25.0 |
| FR1 n78 Part 27O PC2            | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 24.0 |
| FR1 n77 Part 27Q PC3            | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 22.0 |
| FR1 n78 Part 27Q PC3            | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 21.0 |
| FR1 n77 Part 27Q PC2            | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 24.0 |
| FR1 n78 Part 27Q PC2            | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 23.0 |
| FR1 n77(78) Part 96 PC3         | Ant 2 | 15.6 | 22.6 | 21.1 | 22.6 | 20.6 | 22.0 |
| FR1 n77 Part 27O PC3            | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 23.0 |
| FR1 n78 Part 27O PC3            | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 22.0 |
| FR1 n77(78) Part 27O PC2        | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 24.0 |
| FR1 n77 Part 27Q PC3            | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 22.0 |
| FR1 n78 Part 27Q PC3            | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 21.0 |
| FR1 n77 Part 27Q PC2            | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 24.0 |
| FR1 n78 Part 27Q PC2            | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 23.0 |
| FR1 n77(78) Part 96 PC3         | Ant 3 | 16.7 | 17.9 | 16.4 | 17.9 | 16.4 | 23.0 |
| FR1 n77(78) Part 27O&27Q&96 PC3 | Ant 6 | 19.1 | 20.3 | 18.8 | 19.1 | 17.1 | 22.0 |
| FR1 n77(78) Part 27O&27Q PC2    | Ant 6 | 19.1 | 20.3 | 18.8 | 19.1 | 17.1 | 25.0 |

## Note:

- 1) \*P<sub>max</sub> is used for RF tune up procedure. The maximum allowed output power is equal to P<sub>max</sub> + 1.0 dB device uncertainty.
- 2) All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., LTE TDD & NR TDD).
- 3) The max allowed output power is the Plimit + 1.0 dB device uncertainty, and if Plimit is higher than P<sub>max</sub>, the device output power will be P<sub>max</sub> instead.
- 4) When P-light sensor is used to detect the user who take the device close to head, or during the voice call is established and audio is actively routed through the earpiece receiver (earpiece is ON) while P-light sensor be detected Phone close to Head, therefore RFID is turned off. When the RFID is turned off, then WWAN ant1 cannot be transmitted. When the RFID is active, then WWAN ant1 can be transmitted.

## 6. RF Exposure Limits

### 6.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

### 6.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

**Limits for Occupational/Controlled Exposure (W/kg)**

| Whole-Body | Partial-Body | Hands, Wrists, Feet and Ankles |
|------------|--------------|--------------------------------|
| 0.4        | 8.0          | 20.0                           |

**Limits for General Population/Uncontrolled Exposure (W/kg)**

| Whole-Body | Partial-Body | Hands, Wrists, Feet and Ankles |
|------------|--------------|--------------------------------|
| 0.08       | 1.6          | 4.0                            |

Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

## **7. Specific Absorption Rate (SAR)**

### **7.1 Introduction**

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

### **7.2 SAR Definition**

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\text{SAR} = \frac{d}{dt} \left( \frac{dW}{dm} \right) = \frac{d}{dt} \left( \frac{dW}{\rho dv} \right)$$

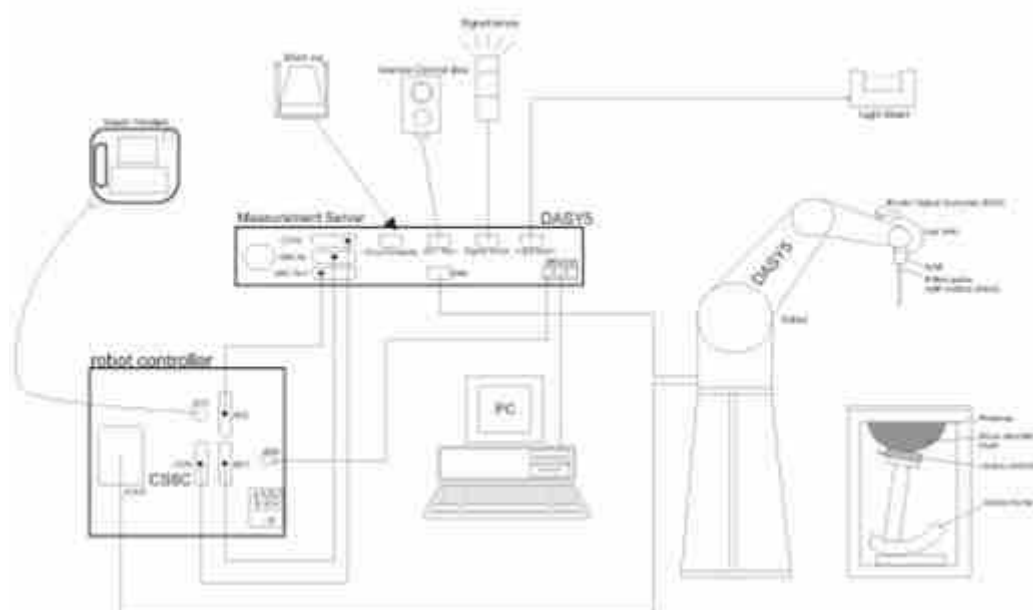
SAR is expressed in units of Watts per kilogram (W/kg)

$$\text{SAR} = \frac{\sigma |E|^2}{\rho}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

## 8. System Description and Setup

**The DASY5 system used for performing compliance tests consists of the following items:**



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win10 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

## 8.1 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG). The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

### <EX3DV4 Probe>

|                      |                                                                                                                                                           |                                                                                    |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Construction</b>  | Symmetric design with triangular core<br>Built-in shielding against static charges<br>PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |  |
| <b>Frequency</b>     | 4 MHz – 10 GHz;<br>Linearity: $\pm 0.2$ dB (30 MHz – 10 GHz)                                                                                              |                                                                                    |
| <b>Directivity</b>   | $\pm 0.3$ dB in TSL (rotation around probe axis)<br>$\pm 0.5$ dB in TSL (rotation normal to probe axis)                                                   |                                                                                    |
| <b>Dynamic Range</b> | 10 $\mu$ W/g – >100 mW/g<br>Linearity: $\pm 0.2$ dB (noise: typically <1 $\mu$ W/g)                                                                       |                                                                                    |
| <b>Dimensions</b>    | Overall length: 337 mm (tip: 20 mm)<br>Tip diameter: 2.5 mm (body: 12 mm)<br>Typical distance from probe tip to dipole centers: 1 mm                      |                                                                                    |

## 8.2 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



**Photo of DAE**



### 8.3 Phantom

#### <SAM Twin Phantom>

|                          |                                                         |                                                                                    |
|--------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Shell Thickness</b>   | 2 ± 0.2 mm;<br>Center ear point: 6 ± 0.2 mm             |  |
| <b>Filling Volume</b>    | Approx. 25 liters                                       |                                                                                    |
| <b>Dimensions</b>        | Length: 1000 mm; Width: 500 mm; Height: adjustable feet |                                                                                    |
| <b>Measurement Areas</b> | Left Hand, Right Hand, Flat Phantom                     |                                                                                    |

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

#### <ELI Phantom>

|                        |                                                  |                                                                                     |
|------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Shell Thickness</b> | 2 ± 0.2 mm (sagging: <1%)                        |  |
| <b>Filling Volume</b>  | Approx. 30 liters                                |                                                                                     |
| <b>Dimensions</b>      | Major ellipse axis: 600 mm<br>Minor axis: 400 mm |                                                                                     |

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices or for evaluating transmitters operating at low frequencies. ELI is fully compatible with standard and all known tissue simulating liquids.

## 8.4 Device Holder

### <Mounting Device for Hand-Held Transmitter>

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). And upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

### <Mounting Device for Laptops and other Body-Worn Transmitters>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.



Mounting Device for Laptops

## 9. Measurement Procedures

The measurement procedures are as follows:

### <Conducted power measurement>

- (a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- (b) Read the WWAN RF power level from the base station simulator.
- (c) For WLAN/BT power measurement, use engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band
- (d) Connect EUT RF port through RF cable to the power meter, and measure WLAN/BT output power

### <SAR measurement>

- (a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
- (b) Place the EUT in the positions as Appendix D demonstrates.
- (c) Set scan area, grid size and other setting on the DASY software.
- (d) Measure SAR results for the highest power channel on each testing position.
- (e) Find out the largest SAR result on these testing positions of each band
- (f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

### 9.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

## 9.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

## 9.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

|                                                                                                        | $\leq 3$ GHz                                                                                                                                                                                                                                                           | $> 3$ GHz                                              |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface | $5 \pm 1$ mm                                                                                                                                                                                                                                                           | $\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm     |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location              | $30^\circ \pm 1^\circ$                                                                                                                                                                                                                                                 | $20^\circ \pm 1^\circ$                                 |
| Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$                 | $\leq 2$ GHz: $\leq 15$ mm<br>$2 - 3$ GHz: $\leq 12$ mm                                                                                                                                                                                                                | $3 - 4$ GHz: $\leq 12$ mm<br>$4 - 6$ GHz: $\leq 10$ mm |
|                                                                                                        | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device. |                                                        |

## 9.4 Zoom Scan

Zoom scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

|                                                                                                                                                                                                                                                                                                             |                                           |                                                                                             | $\leq 3$ GHz                                          | $> 3$ GHz                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------|
| Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$                                                                                                                                                                                                                      |                                           |                                                                                             | $\leq 2$ GHz: $\leq 8$ mm<br>2 – 3 GHz: $\leq 5$ mm * | 3 – 4 GHz: $\leq 5$ mm*<br>4 – 6 GHz: $\leq 4$ mm*                            |
| Maximum zoom scan spatial resolution, normal to phantom surface                                                                                                                                                                                                                                             | uniform grid: $\Delta z_{\text{Zoom}}(n)$ |                                                                                             | $\leq 5$ mm                                           | 3 – 4 GHz: $\leq 4$ mm<br>4 – 5 GHz: $\leq 3$ mm<br>5 – 6 GHz: $\leq 2$ mm    |
|                                                                                                                                                                                                                                                                                                             | graded grid                               | $\Delta z_{\text{Zoom}}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface | $\leq 4$ mm                                           | 3 – 4 GHz: $\leq 3$ mm<br>4 – 5 GHz: $\leq 2.5$ mm<br>5 – 6 GHz: $\leq 2$ mm  |
|                                                                                                                                                                                                                                                                                                             |                                           | $\Delta z_{\text{Zoom}}(n>1)$ : between subsequent points                                   | $\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$          |                                                                               |
| Minimum zoom scan volume                                                                                                                                                                                                                                                                                    | x, y, z                                   |                                                                                             | $\geq 30$ mm                                          | 3 – 4 GHz: $\geq 28$ mm<br>4 – 5 GHz: $\geq 25$ mm<br>5 – 6 GHz: $\geq 22$ mm |
| Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.                                                                                                                                                           |                                           |                                                                                             |                                                       |                                                                               |
| * When zoom scan is required and the <u>reported</u> SAR from the <u>area scan based 1-g SAR estimation</u> procedures of KDB 447498 is $\leq 1.4$ W/kg, $\leq 8$ mm, $\leq 7$ mm and $\leq 5$ mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz. |                                           |                                                                                             |                                                       |                                                                               |

## 9.5 Volume Scan Procedures

The volume scan is used to assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

## 9.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

## 10. Test Equipment List

| Manufacturer    | Name of Equipment             | Type/Model  | Serial Number | Calibration |            |
|-----------------|-------------------------------|-------------|---------------|-------------|------------|
|                 |                               |             |               | Last Cal.   | Due Date   |
| SPEAG           | 750MHz System Validation Kit  | D750V3      | 1087          | 2022/2/24   | 2025/2/21  |
| SPEAG           | 835MHz System Validation Kit  | D835V2      | 4d091         | 2022/8/19   | 2025/8/18  |
| SPEAG           | 900MHz System Validation Kit  | D900V2      | 1d186         | 2022/2/3    | 2025/2/1   |
| SPEAG           | 1750MHz System Validation Kit | D1750V2     | 1090          | 2022/2/24   | 2025/2/22  |
| SPEAG           | 1900MHz System Validation Kit | D1900V2     | 5d118         | 2022/3/30   | 2025/3/28  |
| SPEAG           | 2300MHz System Validation Kit | D2300V2     | 1055          | 2023/8/21   | 2024/8/20  |
| SPEAG           | 2450MHz System Validation Kit | D2450V2     | 1095          | 2024/2/8    | 2025/2/7   |
| SPEAG           | 2600MHz System Validation Kit | D2600V2     | 1112          | 2023/12/18  | 2024/12/17 |
| SPEAG           | 3500MHz System Validation Kit | D3500V2     | 1037          | 2023/11/20  | 2024/11/19 |
| SPEAG           | 3700MHz System Validation Kit | D3700V2     | 1008          | 2023/11/20  | 2024/11/19 |
| SPEAG           | 3900MHz System Validation Kit | D3900V2     | 1048          | 2023/3/9    | 2026/3/8   |
| SPEAG           | 5000MHz System Validation Kit | D5GHzV2     | 1113          | 2022/9/23   | 2025/9/22  |
| SPEAG           | Data Acquisition Electronics  | DAE4        | 1650          | 2023/9/13   | 2024/9/12  |
| SPEAG           | Dosimetric E-Field Probe      | EX3DV4      | 3857          | 2024/1/22   | 2025/1/21  |
| SPEAG           | SAM Twin Phantom              | SAM Twin    | TP-1842       | NCR         | NCR        |
| SPEAG           | SAM Twin Phantom              | SAM Twin    | TP-1697       | NCR         | NCR        |
| SPEAG           | Phone Positioner              | N/A         | N/A           | NCR         | NCR        |
| Anritsu         | Radio Communication Analyzer  | MT8821C     | 6262306175    | 2024/7/4    | 2025/7/3   |
| Agilent         | ENA Series Network Analyzer   | E5071C      | MY46112129    | 2024/7/4    | 2025/7/3   |
| SPEAG           | Dielectric Probe Kit          | DAK-3.5     | 1071          | 2024/2/19   | 2025/2/18  |
| Anritsu         | Vector Signal Generator       | MG3710A     | 6201682672    | 2024/1/2    | 2025/1/1   |
| Rohde & Schwarz | Power Meter                   | NRVD        | 102081        | 2024/7/4    | 2025/7/3   |
| Rohde & Schwarz | Power Sensor                  | NRV-Z5      | 100538        | 2024/7/4    | 2025/7/3   |
| Rohde & Schwarz | Power Sensor                  | NRV-Z5      | 100539        | 2024/7/4    | 2025/7/3   |
| R&S             | BLUETOOTH TESTER              | CBT         | 101246        | 2024/7/4    | 2025/7/3   |
| Rohde & Schwarz | Spectrum Analyzer             | FSV7        | 101631        | 2023/10/11  | 2024/10/10 |
| BONN            | POWER AMPLIFIER               | BLMA 0830-3 | 087193A       | Note 1      |            |
| BONN            | POWER AMPLIFIER               | BLMA 2060-2 | 087193B       | Note 1      |            |
| TES             | DIGITAC THERMOMETER           | TYPE-K      | 220305411     | Note 1      |            |
| SPEAG           | Device Holder                 | N/A         | N/A           | Note 1      |            |
| ARRA            | Power Divider                 | A3200-2     | N/A           | Note 1      |            |
| Agilent         | Dual Directional Coupler      | 778D        | 20500         | Note 1      |            |
| Agilent         | Dual Directional Coupler      | 11691D      | MY48151020    | Note 1      |            |
| Weinschel       | Attenuator 1                  | 3M-10       | N/A           | Note 1      |            |
| Weinschel       | Attenuator 2                  | 3M-20       | N/A           | Note 1      |            |

**Note:**

- Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check.
- Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
- The justification data of dipole can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.



## 11. System Verification

### 11.1 Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 11.1. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 11.2.



**Fig 11.1 Photo of Liquid Height for Head SAR**



**Fig 11.2 Photo of Liquid Height for Body SAR**

### 11.2 Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

| Frequency (MHz)  | Water (%) | Sugar (%) | Cellulose (%) | Salt (%) | Preventol (%) | DGBE (%) | Conductivity ( $\sigma$ ) | Permittivity ( $\epsilon_r$ ) |
|------------------|-----------|-----------|---------------|----------|---------------|----------|---------------------------|-------------------------------|
| For Head         |           |           |               |          |               |          |                           |                               |
| 750              | 41.1      | 57.0      | 0.2           | 1.4      | 0.2           | 0        | 0.89                      | 41.9                          |
| 835              | 40.3      | 57.9      | 0.2           | 1.4      | 0.2           | 0        | 0.90                      | 41.5                          |
| 1800, 1900, 2000 | 55.2      | 0         | 0             | 0.3      | 0             | 44.5     | 1.40                      | 40.0                          |
| 2450             | 55.0      | 0         | 0             | 0        | 0             | 45.0     | 1.80                      | 39.2                          |
| 2600             | 54.8      | 0         | 0             | 0.1      | 0             | 45.1     | 1.96                      | 39.0                          |

Simulating Liquid for 5GHz, Manufactured by SPEAG

| Ingredients        | (% by weight) |
|--------------------|---------------|
| Water              | 64~78%        |
| Mineral oil        | 11~18%        |
| Emulsifiers        | 9~15%         |
| Additives and Salt | 2~3%          |

**<Tissue Dielectric Parameter Check Results>**

| Frequency (MHz) | Tissue Type | Liquid Temp. (°C) | Conductivity (σ) | Permittivity (ε <sub>r</sub> ) | Conductivity Target (σ) | Permittivity Target (ε <sub>r</sub> ) | Delta (σ) (%) | Delta (ε <sub>r</sub> ) (%) | Limit (%) | Date      |
|-----------------|-------------|-------------------|------------------|--------------------------------|-------------------------|---------------------------------------|---------------|-----------------------------|-----------|-----------|
| 750             | Head        | 22.6              | 0.900            | 41.192                         | 0.89                    | 41.90                                 | 1.12          | -1.69                       | ±5        | 2024/8/16 |
| 835             | Head        | 22.9              | 0.902            | 41.240                         | 0.90                    | 41.50                                 | 0.22          | -0.63                       | ±5        | 2024/8/17 |
| 1750            | Head        | 22.8              | 1.409            | 40.669                         | 1.37                    | 40.10                                 | 2.85          | 1.42                        | ±5        | 2024/7/6  |
| 1900            | Head        | 22.6              | 1.397            | 39.035                         | 1.40                    | 40.00                                 | -0.21         | -2.41                       | ±5        | 2024/7/7  |
| 2300            | Head        | 22.8              | 1.715            | 38.769                         | 1.67                    | 39.50                                 | 2.69          | -1.85                       | ±5        | 2024/7/8  |
| 2600            | Head        | 22.7              | 1.926            | 38.230                         | 1.96                    | 39.00                                 | -1.73         | -1.97                       | ±5        | 2024/7/9  |
| 3500            | Head        | 22.9              | 2.784            | 38.912                         | 2.91                    | 37.90                                 | -4.33         | 2.67                        | ±5        | 2024/7/10 |
| 3700            | Head        | 22.6              | 2.988            | 38.360                         | 3.12                    | 37.70                                 | -4.23         | 1.75                        | ±5        | 2024/7/11 |
| 3900            | Head        | 22.7              | 3.171            | 38.038                         | 3.32                    | 37.50                                 | -4.49         | 1.43                        | ±5        | 2024/7/12 |
| 750             | Head        | 22.6              | 0.888            | 42.260                         | 0.89                    | 41.90                                 | -0.22         | 0.86                        | ±5        | 2024/8/18 |
| 835             | Head        | 22.6              | 0.912            | 41.936                         | 0.90                    | 41.50                                 | 1.33          | 1.05                        | ±5        | 2024/8/17 |
| 1750            | Head        | 22.5              | 1.317            | 40.225                         | 1.37                    | 40.10                                 | -3.87         | 0.31                        | ±5        | 2024/7/14 |
| 1900            | Head        | 22.8              | 1.407            | 40.199                         | 1.40                    | 40.00                                 | 0.50          | 0.50                        | ±5        | 2024/7/15 |
| 2300            | Head        | 22.9              | 1.622            | 38.516                         | 1.67                    | 39.50                                 | -2.87         | -2.49                       | ±5        | 2024/7/16 |
| 2600            | Head        | 22.8              | 2.030            | 40.355                         | 1.96                    | 39.00                                 | 3.57          | 3.47                        | ±5        | 2024/7/17 |
| 3500            | Head        | 22.7              | 2.813            | 38.735                         | 2.91                    | 37.90                                 | -3.33         | 2.20                        | ±5        | 2024/7/18 |
| 3700            | Head        | 22.9              | 2.991            | 38.382                         | 3.12                    | 37.70                                 | -4.13         | 1.81                        | ±5        | 2024/7/19 |
| 3900            | Head        | 22.8              | 3.175            | 38.058                         | 3.32                    | 37.50                                 | -4.37         | 1.49                        | ±5        | 2024/7/20 |
| 2450            | Head        | 22.8              | 1.744            | 39.267                         | 1.80                    | 39.20                                 | -3.11         | 0.17                        | ±5        | 2024/7/21 |
| 5250            | Head        | 22.7              | 4.573            | 35.720                         | 4.71                    | 35.90                                 | -2.91         | -0.50                       | ±5        | 2024/8/20 |
| 5600            | Head        | 22.8              | 4.997            | 35.371                         | 5.07                    | 35.50                                 | -1.44         | -0.36                       | ±5        | 2024/8/21 |
| 5750            | Head        | 22.9              | 5.105            | 34.869                         | 5.22                    | 35.40                                 | -2.20         | -1.50                       | ±5        | 2024/8/22 |
| 900             | Head        | 22.7              | 0.929            | 42.108                         | 0.97                    | 41.50                                 | -4.23         | 1.47                        | ±5        | 2024/8/23 |



### 11.3 System Performance Check Results

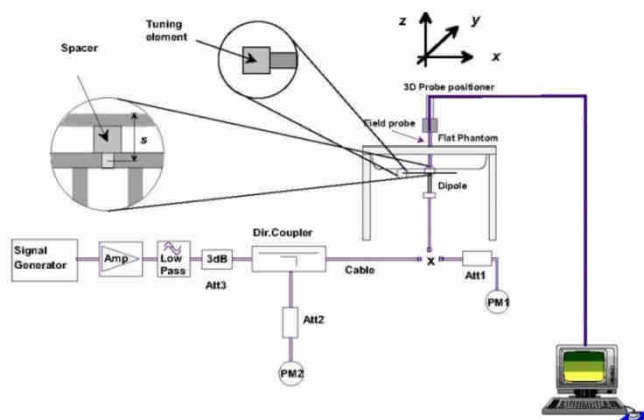
Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

#### <1g SAR>

| Date      | Frequency (MHz) | Tissue Type | Input Power (mW) | Dipole S/N | Probe S/N | DAE S/N | Measured 1g SAR (W/kg) | Targeted 1g SAR (W/kg) | Normalized 1g SAR (W/kg) | Deviation (%) |
|-----------|-----------------|-------------|------------------|------------|-----------|---------|------------------------|------------------------|--------------------------|---------------|
| 2024/8/16 | 750             | Head        | 50               | 1087       | 3857      | 1650    | 0.436                  | 8.58                   | 8.72                     | 1.63          |
| 2024/8/17 | 835             | Head        | 50               | 4d091      | 3857      | 1650    | 0.461                  | 9.45                   | 9.22                     | -2.43         |
| 2024/7/6  | 1750            | Head        | 50               | 1090       | 3857      | 1650    | 1.910                  | 37.00                  | 38.2                     | 3.24          |
| 2024/7/7  | 1900            | Head        | 50               | 5d118      | 3857      | 1650    | 2.020                  | 39.30                  | 40.4                     | 2.80          |
| 2024/7/8  | 2300            | Head        | 50               | 1055       | 3857      | 1650    | 2.530                  | 48.40                  | 50.6                     | 4.55          |
| 2024/7/9  | 2600            | Head        | 50               | 1112       | 3857      | 1650    | 2.630                  | 55.10                  | 52.6                     | -4.54         |
| 2024/7/10 | 3500            | Head        | 50               | 1037       | 3857      | 1650    | 3.030                  | 65.40                  | 60.6                     | -7.34         |
| 2024/7/11 | 3700            | Head        | 50               | 1008       | 3857      | 1650    | 3.110                  | 67.20                  | 62.2                     | -7.44         |
| 2024/7/12 | 3900            | Head        | 50               | 1048       | 3857      | 1650    | 3.270                  | 69.10                  | 65.4                     | -5.35         |
| 2024/8/18 | 750             | Head        | 50               | 1087       | 3857      | 1650    | 0.419                  | 8.58                   | 8.38                     | -2.33         |
| 2024/8/19 | 835             | Head        | 50               | 4d091      | 3857      | 1650    | 0.477                  | 9.45                   | 9.54                     | 0.95          |
| 2024/7/14 | 1750            | Head        | 50               | 1090       | 3857      | 1650    | 1.760                  | 37.00                  | 35.2                     | -4.86         |
| 2024/7/15 | 1900            | Head        | 50               | 5d118      | 3857      | 1650    | 1.810                  | 39.30                  | 36.2                     | -7.89         |
| 2024/7/16 | 2300            | Head        | 50               | 1055       | 3857      | 1650    | 2.390                  | 48.40                  | 47.8                     | -1.24         |
| 2024/7/17 | 2600            | Head        | 50               | 1112       | 3857      | 1650    | 2.690                  | 55.10                  | 53.8                     | -2.36         |
| 2024/7/18 | 3500            | Head        | 50               | 1037       | 3857      | 1650    | 3.120                  | 65.40                  | 62.4                     | -4.59         |
| 2024/7/19 | 3700            | Head        | 50               | 1008       | 3857      | 1650    | 3.350                  | 67.20                  | 67                       | -0.30         |
| 2024/7/20 | 3900            | Head        | 50               | 1048       | 3857      | 1650    | 3.650                  | 69.10                  | 73                       | 5.64          |
| 2024/7/21 | 2450            | Head        | 50               | 1095       | 3857      | 1650    | 2.670                  | 52.60                  | 53.4                     | 1.52          |
| 2024/8/20 | 5250            | Head        | 50               | 1113       | 3857      | 1650    | 4.170                  | 81.50                  | 83.4                     | 2.33          |
| 2024/8/21 | 5600            | Head        | 50               | 1113       | 3857      | 1650    | 4.420                  | 82.60                  | 88.4                     | 7.02          |
| 2024/8/22 | 5750            | Head        | 50               | 1113       | 3857      | 1650    | 4.080                  | 80.80                  | 81.6                     | 0.99          |
| 2024/8/23 | 900             | Head        | 50               | 1d186      | 3857      | 1650    | 0.508                  | 10.90                  | 10.16                    | -6.79         |

**<10g SAR>**

| Date      | Frequency (MHz) | Tissue Type | Input Power (mW) | Dipole S/N | Probe S/N | DAE S/N | Measured 10g SAR (W/kg) | Targeted 10g SAR (W/kg) | Normalized 10g SAR (W/kg) | Deviation (%) |
|-----------|-----------------|-------------|------------------|------------|-----------|---------|-------------------------|-------------------------|---------------------------|---------------|
| 2024/8/16 | 750             | Head        | 50               | 1087       | 3857      | 1650    | 0.293                   | 5.65                    | 5.86                      | 3.72          |
| 2024/8/17 | 835             | Head        | 50               | 4d091      | 3857      | 1650    | 0.307                   | 6.22                    | 6.14                      | -1.29         |
| 2024/7/6  | 1750            | Head        | 50               | 1090       | 3857      | 1650    | 0.998                   | 19.50                   | 19.96                     | 2.36          |
| 2024/7/7  | 1900            | Head        | 50               | 5d118      | 3857      | 1650    | 1.070                   | 20.40                   | 21.4                      | 4.90          |
| 2024/7/8  | 2300            | Head        | 50               | 1055       | 3857      | 1650    | 1.270                   | 23.70                   | 25.4                      | 7.17          |
| 2024/7/9  | 2600            | Head        | 50               | 1112       | 3857      | 1650    | 1.200                   | 24.80                   | 24                        | -3.23         |
| 2024/7/10 | 3500            | Head        | 50               | 1037       | 3857      | 1650    | 1.180                   | 24.70                   | 23.6                      | -4.45         |
| 2024/7/11 | 3700            | Head        | 50               | 1008       | 3857      | 1650    | 1.130                   | 24.40                   | 22.6                      | -7.38         |
| 2024/7/12 | 3900            | Head        | 50               | 1048       | 3857      | 1650    | 1.150                   | 24.10                   | 23                        | -4.56         |
| 2024/8/18 | 750             | Head        | 50               | 1087       | 3857      | 1650    | 0.295                   | 5.65                    | 5.9                       | 4.42          |
| 2024/8/19 | 835             | Head        | 50               | 4d091      | 3857      | 1650    | 0.313                   | 6.22                    | 6.26                      | 0.64          |
| 2024/7/14 | 1750            | Head        | 50               | 1090       | 3857      | 1650    | 0.975                   | 19.50                   | 19.5                      | 0.00          |
| 2024/7/15 | 1900            | Head        | 50               | 5d118      | 3857      | 1650    | 0.958                   | 20.40                   | 19.16                     | -6.08         |
| 2024/7/16 | 2300            | Head        | 50               | 1055       | 3857      | 1650    | 1.160                   | 23.70                   | 23.2                      | -2.11         |
| 2024/7/17 | 2600            | Head        | 50               | 1112       | 3857      | 1650    | 1.240                   | 24.80                   | 24.8                      | 0.00          |
| 2024/7/18 | 3500            | Head        | 50               | 1037       | 3857      | 1650    | 1.200                   | 24.70                   | 24                        | -2.83         |
| 2024/7/19 | 3700            | Head        | 50               | 1008       | 3857      | 1650    | 1.240                   | 24.40                   | 24.8                      | 1.64          |
| 2024/7/20 | 3900            | Head        | 50               | 1048       | 3857      | 1650    | 1.230                   | 24.10                   | 24.6                      | 2.07          |
| 2024/7/21 | 2450            | Head        | 50               | 1095       | 3857      | 1650    | 1.260                   | 24.70                   | 25.2                      | 2.02          |
| 2024/8/20 | 5250            | Head        | 50               | 1113       | 3857      | 1650    | 1.220                   | 23.30                   | 24.4                      | 4.72          |
| 2024/8/21 | 5600            | Head        | 50               | 1113       | 3857      | 1650    | 1.200                   | 23.70                   | 24                        | 1.27          |
| 2024/8/22 | 5750            | Head        | 50               | 1113       | 3857      | 1650    | 1.180                   | 23.00                   | 23.6                      | 2.61          |
| 2024/8/23 | 900             | Head        | 50               | 1d186      | 3857      | 1650    | 0.330                   | 7.02                    | 6.6                       | -5.98         |


**Fig 11.3.1 System Performance Check Setup**

**Fig 11.3.2 Setup Photo**

## 12. RF Exposure Positions

### 12.1 Ear and handset reference point

Figure 12.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled "M," the left ear reference point (ERP) is marked "LE," and the right ERP is marked "RE." Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 12.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 12.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 12.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

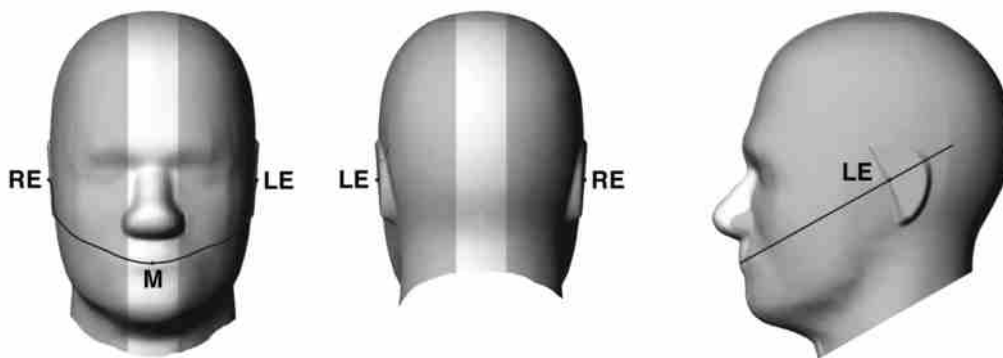


Fig 12.1.1 Front, back, and side views of SAM twin phantom

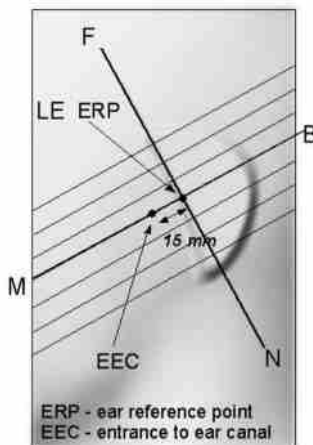


Fig 12.1.2 Close-up side view of phantom showing the ear region.

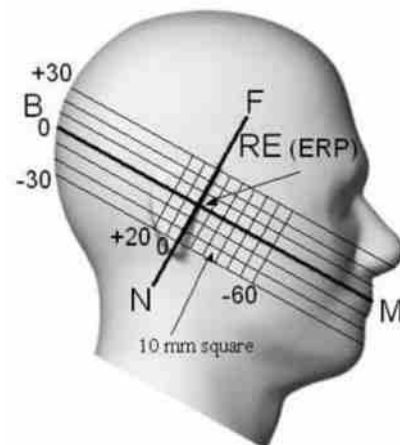
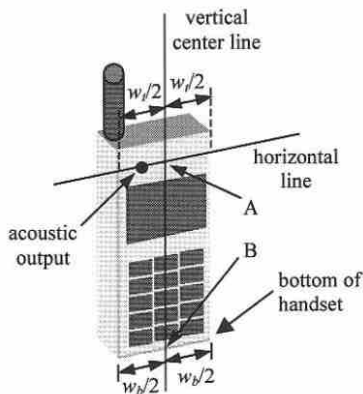


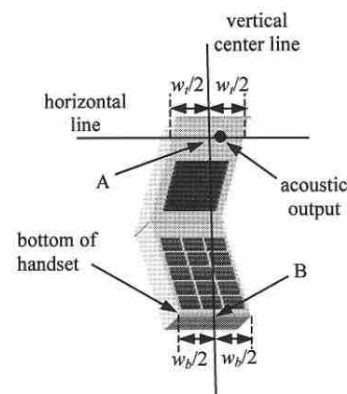
Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

## 12.2 Definition of the cheek position

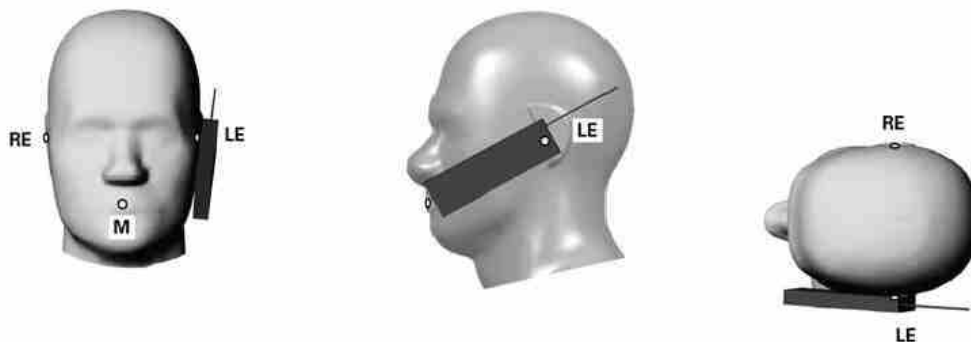
1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width  $w_t$  of the handset at the level of the acoustic output (point A in Figure 12.2.1 and Figure 12.2.2), and the midpoint of the width  $w_b$  of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 12.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the handset. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 12.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 12.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 12.2.3. The actual rotation angles should be documented in the test report.



**Fig 12.2.1 Handset vertical and horizontal reference lines—“fixed case”**



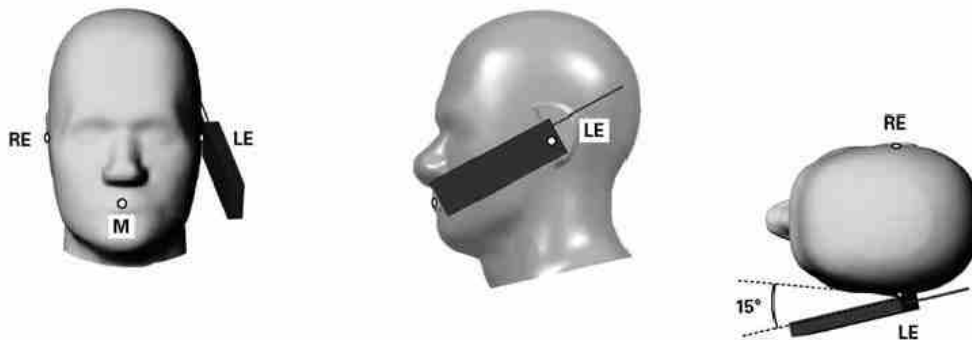
**Fig 12.2.2 Handset vertical and horizontal reference lines—“clam-shell case”**



**Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.**

### 12.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 12.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

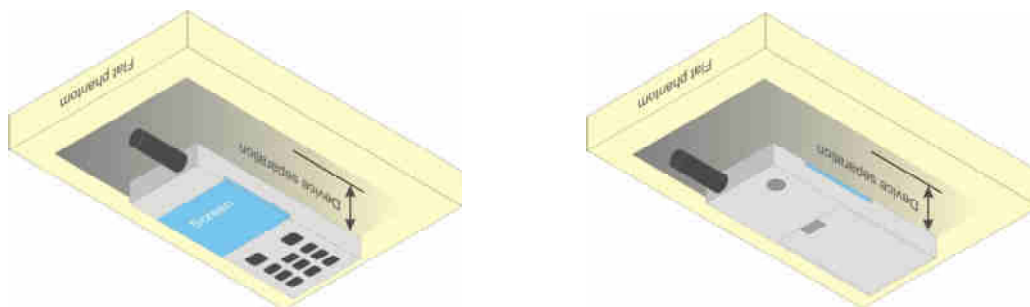


**Fig 12.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.**

## 12.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 11.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is  $> 1.2 \text{ W/kg}$ , the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.



**Fig 12.4 Body Worn Position**

## 12.5 Product Specific 10g SAR Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, According to KDB648474 D04v01r03, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.<sup>6</sup> The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

## 12.6 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets ( $L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$ ) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 publication procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.



### 13. Conducted RF Output Power (Unit: dBm)

The detailed conducted power table can refer to Appendix E.

#### 13.1 DL/UL Carrier Aggregation

##### <LTE Carrier Aggregation>

###### General Note:

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. The gray color table is covered by other combinations and no need to verify power.
4. All permutations exist, no restrictions on Pcell & Scell combinations but Only LTE Band 29A is limited to Scell.

| 2CC Downlink Carrier Aggregation |             |          |                                 | 3CC Downlink Carrier Aggregation |               |          |                                 | 4CC Downlink Carrier Aggregation |                   |          |                                 |
|----------------------------------|-------------|----------|---------------------------------|----------------------------------|---------------|----------|---------------------------------|----------------------------------|-------------------|----------|---------------------------------|
| Number                           | Combination | 4X4 MIMO | Covered by Measurement Superset | Number                           | Combination   | 4X4 MIMO | Covered by Measurement Superset | Number                           | Combination       | 4X4 MIMO | Covered by Measurement Superset |
| 1                                | CA_2C       | 2A       | 3CC-29                          | 1                                | CA_41D        | 41A      | 4CC-41                          | 1                                | CA_48E            | 48A      |                                 |
| 2                                | CA_5B       |          | 3CC-19                          | 2                                | CA_48D        | 48A      | 4CC-14                          | 2                                | CA_41E            | 41A      |                                 |
| 3                                | CA_7B       | 7A       |                                 | 3                                | CA_66D        | 66A      | 4CC-16                          | 3                                | CA_48C-48C        | 48A      |                                 |
| 4                                | CA_7C       | 7A       | 3CC-21                          | 4                                | CA_41A-41C    | 41A      |                                 | 4                                | CA_2A-2A-4A-4A    | 2A 4A    |                                 |
| 5                                | CA_12B      |          | 3CC-59                          | 5                                | CA_48A-48C    | 48A      | 4CC-10                          | 5                                | CA_2A-2A-12A-12A  | 2A       |                                 |
| 6                                | CA_38C      | 38A      |                                 | 6                                | CA_66A-66B    | 66A      | 4CC-12                          | 6                                | CA_2A-2A-12B      | 2A       |                                 |
| 7                                | CA_41C      | 41A      | 3CC-4                           | 7                                | CA_66A-66C    | 66A      | 4CC-13                          | 7                                | CA_2A-2A-66A-66A  | 2A 66A   |                                 |
| 8                                | CA_48C      | 48A      | 3CC-5                           | 8                                | CA_2A-2A-4A   | 2A 4A    | 4CC-4                           | 8                                | CA_2A-2A-66B      | 2A 66A   |                                 |
| 9                                | CA_66B      | 66A      | 3CC-6                           | 9                                | CA_2A-2A-5A   | 2A       | 4CC-49                          | 9                                | CA_2A-2A-66C      | 2A 66A   |                                 |
| 10                               | CA_66C      | 66A      | 3CC-7                           | 10                               | CA_2A-2A-7A   | 2A 7A    | 4CC-54                          | 10                               | CA_2A-48A-48C     | 2A 48A   |                                 |
| 11                               | CA_2A-2A    | 2A       | 3CC-8                           | 11                               | CA_2A-2A-12A  | 2A       | 4CC-5                           | 11                               | CA_2A-66A-66A-66A | 2A 66A   |                                 |
| 12                               | CA_4A-4A    | 4A       | 3CC-34                          | 12                               | CA_2A-2A-13A  | 2A       | 4CC-58                          | 12                               | CA_2A-66A-66B     | 2A 66A   |                                 |
| 13                               | CA_5A-5A    |          | 3CC-25                          | 13                               | CA_2A-2A-14A  | 2A       | 4CC-59                          | 13                               | CA_2A-66A-66C     | 2A 66A   |                                 |
| 14                               | CA_7A-7A    | 7A       | 3CC-20                          | 14                               | CA_2A-2A-29A  | 2A       | 4CC-61                          | 14                               | CA_48A-48D        | 48A      |                                 |
| 15                               | CA_12A-12A  |          | 3CC-44                          | 15                               | CA_2A-2A-30A  | 2A 30A   | 4CC-52                          | 15                               | CA_2A-48D         | 2A 48A   |                                 |
| 16                               | CA_25A-25A  | 25A      | 3CC-66                          | 16                               | CA_2A-2A-66A  | 2A 66A   | 4CC-7                           | 16                               | CA_2A-66D         | 2A 66A   |                                 |
| 17                               | CA_48A-48A  | 48A      | 3CC-24                          | 17                               | CA_2A-2A-71A  | 2A       | 4CC-51                          | 17                               | CA_4A-4A-5B       | 4A       |                                 |
| 18                               | CA_66A-66A  | 66A      | 3CC-26                          | 18                               | CA_2A-4A-4A   | 2A 4A    | 4CC-4                           | 18                               | CA_4A-4A-12A-12A  | 4A       |                                 |
| 19                               | CA_2A-4A    | 2A 4A    | 3CC-18                          | 19                               | CA_2A-5B      | 2A       | 4CC-20                          | 19                               | CA_4A-4A-12B      | 4A       |                                 |
| 20                               | CA_2A-5A    | 2A       | 3CC-9                           | 20                               | CA_2A-7A-7A   | 2A 7A    | 4CC-104                         | 20                               | CA_2A-4A-5B       | 2A 4A    |                                 |
| 21                               | CA_2A-7A    | 2A       | 3CC-10                          | 21                               | CA_2A-7C      | 2A 7A    | 4CC-67                          | 21                               | CA_2A-66C-71A     | 2A 66A   |                                 |
| 22                               | CA_2A-12A   | 2A       | 3CC-11                          | 22                               | CA_2A-12A-12A | 2A       | 4CC-5                           | 22                               | CA_2C-5A-30A      | 2A 30A   |                                 |
| 23                               | CA_2A-13A   | 2A       | 3CC-12                          | 23                               | CA_2A-12B     | 2A       | 4CC-6                           | 23                               | CA_2C-12A-30A     | 2A 30A   |                                 |
| 24                               | CA_2A-14A   | 2A       | 3CC-13                          | 24                               | CA_2A-48A-48A | 2A 48A   |                                 | 24                               | CA_2C-29A-30A     | 2A 30A   |                                 |
| 25                               | CA_2A-17A   | 2A       |                                 | 25                               | CA_2A-48C     | 2A 48A   | 4CC-98                          | 25                               | CA_5A-5A-66A-66A  | 66A      |                                 |
| 26                               | CA_2A-29A   | 2A       | 3CC-14                          | 26                               | CA_2A-66A-66A | 2A 66A   | 4CC-7                           | 26                               | CA_5A-5A-66B      | 66A      |                                 |
| 27                               | CA_2A-30A   | 2A 30A   | 3CC-15                          | 27                               | CA_2A-66B     | 2A 66A   | 4CC-8                           | 27                               | CA_5A-5A-66C      | 66A      |                                 |
| 28                               | CA_2A-48A   | 2A 48A   | 3CC-24                          | 28                               | CA_2A-66C     | 2A 66A   | 4CC-9                           | 28                               | CA_5A-66A-66C     | 66A      |                                 |
| 29                               | CA_2A-66A   | 2A 66A   | 3CC-16                          | 29                               | CA_2C-5A      | 2A       | 4CC-22                          | 29                               | CA_5A-66A-66B     | 66A      |                                 |
| 30                               | CA_2A-71A   | 2A       | 3CC-17                          | 30                               | CA_2C-12A     | 2A       | 4CC-23                          | 30                               | CA_5A-66D         | 66A      |                                 |
| 31                               | CA_4A-5A    | 4A       | 3CC-34                          | 31                               | CA_2C-29A     | 2A       | 4CC-24                          | 31                               | CA_5B-66A-66A     | 66A      |                                 |
| 32                               | CA_4A-7A    | 4A 7A    | 3CC-35                          | 32                               | CA_2C-30A     | 2A 30A   | 4CC-24                          | 32                               | CA_5B-66B         | 66A      |                                 |
| 33                               | CA_4A-12A   | 4A       | 3CC-36                          | 33                               | CA_2C-66A     | 2A 66A   | 4CC-107                         | 33                               | CA_5B-66C         | 66A      |                                 |





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|    |            |         |         |    |                |           |         |    |                    |            |  |
|----|------------|---------|---------|----|----------------|-----------|---------|----|--------------------|------------|--|
| 34 | CA_4A-13A  | 4A      | 3CC-37  | 34 | CA_4A-4A-5A    | 4A        | 4CC-64  | 34 | CA_7C-66A-66A      | 7A 66A     |  |
| 35 | CA_4A-17A  | 4A      |         | 35 | CA_4A-4A-7A    | 4A 7A     |         | 35 | CA_12B-66A-66A     | 66A        |  |
| 36 | CA_4A-29A  | 4A      | 3CC-102 | 36 | CA_4A-4A-12A   | 4A        | 4CC-65  | 36 | CA_13A-48A-48C     | 48A        |  |
| 37 | CA_4A-30A  | 4A 30A  | 3CC-39  | 37 | CA_4A-4A-13A   | 4A        |         | 37 | CA_13A-48D         | 48A        |  |
| 38 | CA_4A-71A  | 4A      | 3CC-40  | 38 | CA_4A-4A-29A   | 4A        | 4CC-86  | 38 | CA_13A-66A-66B     | 66A        |  |
| 39 | CA_5A-7A   | 7A      | 3CC-48  | 39 | CA_4A-4A-30A   | 4A 30A    | 4CC-86  | 39 | CA_13A-66A-66C     | 66A        |  |
| 40 | CA_5A-25A  | 25A     |         | 40 | CA_4A-4A-71A   | 4A        |         | 40 | CA_13A-66D         | 66A        |  |
| 41 | CA_5A-30A  | 30A     | 3CC-103 | 41 | CA_4A-5B       | 4A        | 4CC-17  | 41 | CA_25A-41D         | 41A        |  |
| 42 | CA_5A-38A  | 38A     |         | 42 | CA_4A-7A-7A    | 4A 7A     |         | 42 | CA_48A-48A-66A-66A | 48A 66A    |  |
| 43 | CA_5A-41A  | 41A     |         | 43 | CA_4A-7C       | 4A 7A     | 4CC-67  | 43 | CA_48A-48A-66B     | 48A 66A    |  |
| 44 | CA_5A-48A  | 48A     | 3CC-111 | 44 | CA_4A-12A-12A  | 4A        | 4CC-18  | 44 | CA_48A-48A-66C     | 48A 66A    |  |
| 45 | CA_5A-66A  | 66A     | 3CC-49  | 45 | CA_4A-12B      | 4A        | 4CC-19  | 45 | CA_48A-48C-66A     | 48A 66A    |  |
| 46 | CA_7A-12A  | 7A      | 3CC-104 | 46 | CA_4A-48C      | 4A 48A    |         | 46 | CA_48C-66B         | 48A 66A    |  |
| 47 | CA_7A-26A  | 7A      |         | 47 | CA_5A-5A-66A   | 66A       | 4CC-25  | 47 | CA_48C-66C         | 48A 66A    |  |
| 48 | CA_12A-25A | 25A     |         | 48 | CA_5A-7A-7A    | 7A        |         | 48 | CA_48D-66A         | 48A 66A    |  |
| 49 | CA_12A-30A | 30A     | 3CC-105 | 49 | CA_5A-66A-66A  | 66A       | 4CC-25  | 49 | CA_2A-2A-4A-5A     | 2A 4A      |  |
| 50 | CA_12A-66A | 66A     | 3CC-75  | 50 | CA_5A-66B      | 66A       | 4CC-26  | 50 | CA_2A-2A-4A-12A    | 2A 4A      |  |
| 51 | CA_13A-48A | 48A     | 3CC-60  | 51 | CA_5A-66C      | 66A       | 4CC-28  | 51 | CA_2A-2A-4A-71A    | 2A 4A      |  |
| 52 | CA_13A-66A | 66A     | 3CC-62  | 52 | CA_5B-30A      | 30A       | 4CC-72  | 52 | CA_2A-2A-5A-30A    | 2A 30A     |  |
| 53 | CA_14A-30A | 30A     | 3CC-107 | 53 | CA_5B-66A      | 66A       | 4CC-73  | 53 | CA_2A-2A-5A-66A    | 2A 66A     |  |
| 54 | CA_14A-66A | 66A     | 3CC-107 | 54 | CA_7A-7A-26A   | 7A        |         | 54 | CA_2A-2A-7A-12A    | 2A 7A      |  |
| 55 | CA_25A-26A | 25A     | 3CC-66  | 55 | CA_7A-12B      | 7A        | 4CC-90  | 55 | CA_2A-2A-7A-66A    | 2A 7A 66A  |  |
| 56 | CA_29A-30A | 30A     | 3CC-94  | 56 | CA_7A-66A-66A  | 7A 66A    | 4CC-112 | 56 | CA_2A-2A-12A-30A   | 2A 30A     |  |
| 57 | CA_29A-66A | 66A     | 3CC-67  | 57 | CA_7C-66A      | 7A        | 4CC-113 | 57 | CA_2A-2A-12A-66A   | 2A 66A     |  |
| 58 | CA_30A-66A | 30A 66A | 3CC-68  | 58 | CA_12A-66C     | 66A       | 4CC-76  | 58 | CA_2A-2A-13A-66A   | 2A 66A     |  |
| 59 | CA_48A-66A | 48A 66A | 3CC-69  | 59 | CA_12B-66A     | 66A       | 4CC-90  | 59 | CA_2A-2A-14A-30A   | 2A 30A     |  |
| 60 | CA_48A-71A | 48A     | 3CC-70  | 60 | CA_13A-48A-48A | 48A       |         | 60 | CA_2A-2A-14A-66A   | 2A 66A     |  |
| 61 | CA_4A-48A  | 4A 48A  |         | 61 | CA_13A-48C     | 48A       | 4CC-98  | 61 | CA_2A-2A-29A-30A   | 2A 30A     |  |
| 62 | CA_7A-13A  | 7A      | 3CC-113 | 62 | CA_13A-66A-66A | 66A       | 4CC-78  | 62 | CA_2A-2A-30A-66A   | 2A 30A 66A |  |
| 63 | CA_7A-29A  | 7A      | 3CC-122 | 63 | CA_13A-66B     | 66A       | 4CC-79  | 63 | CA_2A-2A-66A-71A   | 2A 66A     |  |
| 64 | CA_7A-66A  | 7A 66A  | 3CC-88  | 64 | CA_13A-66C     | 66A       | 4CC-80  | 64 | CA_2A-4A-4A-5A     | 2A 4A      |  |
| 65 | CA_66A-71A | 66A     | 3CC-76  | 65 | CA_14A-66A-66A | 66A       | 4CC-93  | 65 | CA_2A-4A-4A-12A    | 2A 4A      |  |
|    |            |         |         | 66 | CA_25A-25A-26A | 25A       |         | 66 | CA_2A-4A-7A-7A     | 2A 4A 7A   |  |
|    |            |         |         | 67 | CA_29A-66A-66A | 66A       |         | 67 | CA_2A-4A-7C        | 2A 4A 7A   |  |
|    |            |         |         | 68 | CA_30A-66A-66A | 30A 66A   | 4CC-91  | 68 | CA_2A-4A-12B       | 2A 4A      |  |
|    |            |         |         | 69 | CA_48A-48A-66A | 48A 66A   | 4CC-100 | 69 | CA_2A-5A-66A-66A   | 2A 66A     |  |
|    |            |         |         | 70 | CA_48A-48A-71A | 48A       |         | 70 | CA_2A-5A-66B       | 2A 66A     |  |
|    |            |         |         | 71 | CA_48A-66B     | 48A 66A   | 4CC-43  | 71 | CA_2A-5A-66C       | 2A 66A     |  |
|    |            |         |         | 72 | CA_48A-66C     | 48A 66A   | 4CC-44  | 72 | CA_2A-5B-30A       | 2A 30A     |  |
|    |            |         |         | 73 | CA_48C-66A     | 48A 66A   | 4CC-45  | 73 | CA_2A-5B-66A       | 2A 66A     |  |
|    |            |         |         | 74 | CA_48C-71A     | 48A       |         | 74 | CA_2A-7A-12B       | 2A 7A      |  |
|    |            |         |         | 75 | CA_12A-66A-66A | 66A       | 4CC-75  | 75 | CA_2A-12A-66A-66A  | 2A 66A     |  |
|    |            |         |         | 76 | CA_66A-66A-71A | 66A       | 4CC-83  | 76 | CA_2A-12A-66C      | 2A 66A     |  |
|    |            |         |         | 77 | CA_66C-71A     | 66A       | 4CC-21  | 77 | CA_2A-12B-66A      | 2A 66A     |  |
|    |            |         |         | 78 | CA_2A-4A-5A    | 2A 4A     | 4CC-64  | 78 | CA_2A-13A-66A-66A  | 2A 66A     |  |
|    |            |         |         | 79 | CA_2A-4A-7A    | 2A 4A     | 4CC-66  | 79 | CA_2A-13A-66B      | 2A 66A     |  |
|    |            |         |         | 80 | CA_2A-4A-12A   | 2A 4A     | 4CC-65  | 80 | CA_2A-13A-66C      | 2A 66A     |  |
|    |            |         |         | 81 | CA_2A-4A-13A   | 2A 4A     |         | 81 | CA_2A-14A-66A-66A  | 2A 66A     |  |
|    |            |         |         | 82 | CA_2A-4A-29A   | 2A 4A     |         | 82 | CA_2A-30A-66A-66A  | 2A 30A 66A |  |
|    |            |         |         | 83 | CA_2A-4A-30A   | 2A 4A 30A |         | 83 | CA_2A-66A-66A-71A  | 2A 66A     |  |
|    |            |         |         | 84 | CA_2A-4A-71A   | 2A 4A     | 4CC-51  | 84 | CA_4A-4A-5A-30A    | 4A 30A     |  |
|    |            |         |         | 85 | CA_2A-5A-30A   | 2A 30A    | 4CC-52  | 85 | CA_4A-4A-12A-30A   | 4A 30A     |  |
|    |            |         |         | 86 | CA_2A-5A-66A   | 2A 66A    | 4CC-69  | 86 | CA_4A-4A-29A-30A   | 4A 30A     |  |
|    |            |         |         | 87 | CA_2A-7A-12A   | 2A 7A     | 4CC-54  | 87 | CA_4A-5B-30A       | 4A 30A     |  |
|    |            |         |         | 88 | CA_2A-7A-66A   | 2A 7A 66A | 4CC-55  | 88 | CA_5A-30A-66A-66A  | 30A 66A    |  |
|    |            |         |         | 89 | CA_2A-12A-30A  | 2A 30A    | 4CC-56  | 89 | CA_5B-30A-66A      | 30A 66A    |  |



# FCC SAR Test Report

Report No. : FA460505

|  |  |  |  |     |                |            |         |     |                    |            |  |
|--|--|--|--|-----|----------------|------------|---------|-----|--------------------|------------|--|
|  |  |  |  | 90  | CA_2A-12A-66A  | 2A 66A     | 4CC-75  | 90  | CA_7A-12B-66A      | 7A 66A     |  |
|  |  |  |  | 91  | CA_2A-13A-66A  | 2A 66A     | 4CC-78  | 91  | CA_12A-30A-66A-66A | 30A 66A    |  |
|  |  |  |  | 92  | CA_2A-14A-30A  | 2A 30A     | 4CC-59  | 92  | CA_13A-48C-66A     | 48A 66A    |  |
|  |  |  |  | 93  | CA_2A-14A-66A  | 2A 66A     | 4CC-60  | 93  | CA_14A-30A-66A-66A | 30A 66A    |  |
|  |  |  |  | 94  | CA_2A-29A-30A  | 2A 30A     | 4CC-61  | 94  | CA_29A-30A-66A-66A | 30A 66A    |  |
|  |  |  |  | 95  | CA_2A-29A-66A  | 2A 66A     |         | 95  | CA_13A-48A-66B     | 48A 66A    |  |
|  |  |  |  | 96  | CA_2A-30A-66A  | 2A 30A 66A | 4CC-62  | 96  | CA_13A-48A-66C     | 48A 66A    |  |
|  |  |  |  | 97  | CA_2A-48A-66A  | 2A 48A 66A | 4CC-100 | 97  | CA_14A-66A-66A-66A | 66A        |  |
|  |  |  |  | 98  | CA_2A-66A-71A  | 2A 66A     | 4CC-63  | 98  | CA_2A-13A-48C      | 2A 48A     |  |
|  |  |  |  | 99  | CA_4A-5A-30A   | 4A 30A     | 4CC-84  | 99  | CA_2A-2A-5B        | 2A         |  |
|  |  |  |  | 100 | CA_4A-7A-12A   | 4A 7A      |         | 100 | CA_2A-48A-66A-66A  | 2A 48A 66A |  |
|  |  |  |  | 101 | CA_4A-12A-30A  | 4A 30A     | 4CC-85  | 101 | CA_2A-48C-66A      | 2A 48A 66A |  |
|  |  |  |  | 102 | CA_4A-29A-30A  | 4A 30A     | 4CC-86  | 102 | CA_2A-5A-48C       | 2A 48A     |  |
|  |  |  |  | 103 | CA_5A-30A-66A  | 30A 66A    | 4CC-88  | 103 | CA_2A-7A-66A-66A   | 2A 7A 66A  |  |
|  |  |  |  | 104 | CA_7A-12A-66A  | 7A 66A     |         | 104 | CA_2A-7A-7A-13A    | 2A 7A      |  |
|  |  |  |  | 105 | CA_12A-30A-66A | 30A 66A    | 4CC-91  | 105 | CA_2A-7A-7A-29A    | 2A 7A      |  |
|  |  |  |  | 106 | CA_13A-48A-66A | 48A 66A    |         | 106 | CA_2A-7A-7A-66A    | 2A 7A 66A  |  |
|  |  |  |  | 107 | CA_14A-30A-66A | 30A 66A    | 4CC-93  | 107 | CA_2C-66A-66A      | 2A 66A     |  |
|  |  |  |  | 108 | CA_29A-30A-66A | 30A 66A    | 4CC-94  | 108 | CA_48C-66A-66A     | 48A 66A    |  |
|  |  |  |  | 109 | CA_25A-25A-25A | 25A        |         | 109 | CA_4A-48D          | 48A        |  |
|  |  |  |  | 110 | CA_2A-13A-48A  | 2A 48A     |         | 110 | CA_5A-48C-66A      | 48A 66A    |  |
|  |  |  |  | 111 | CA_2A-5A-48A   | 2A 48A     |         | 111 | CA_5A-48D          | 48A        |  |
|  |  |  |  | 112 | CA_2A-5A-7A    | 2A 7A      |         | 112 | CA_5A-7A-66A-66A   | 7A 66A     |  |
|  |  |  |  | 113 | CA_2A-7A-13A   | 2A 7A      | 4CC-104 | 113 | CA_5A-7C-66A       | 7A 66A     |  |
|  |  |  |  | 114 | CA_5A-48A-66A  | 48A 66A    |         | 114 | CA_7A-7A-29A-66A   | 7A 66A     |  |
|  |  |  |  | 115 | CA_5A-7A-66A   | 7A 66A     | 4CC-112 | 115 | CA_7A-7A-66A-66A   | 7A 66A     |  |
|  |  |  |  | 116 | CA_66A-66A-66A | 66A        | 4CC-97  | 116 | CA_7C-29A-66A      | 7A 66A     |  |
|  |  |  |  | 117 | CA_2A-7C-13A   | 2A 7A      |         |     |                    |            |  |
|  |  |  |  | 118 | CA_2A-7C-29A   | 2A 7A      |         |     |                    |            |  |
|  |  |  |  | 119 | CA_2A-7C-66A   | 2A 7A 66A  |         |     |                    |            |  |
|  |  |  |  | 120 | CA_7A-29A-66A  | 7A 66A     | 4CC-114 |     |                    |            |  |
|  |  |  |  | 121 | CA_7A-7A-13A   | 7A         | 4CC-104 |     |                    |            |  |
|  |  |  |  | 122 | CA_7A-7A-29A   | 7A         | 4CC-114 |     |                    |            |  |
|  |  |  |  | 123 | CA_7A-7A-66A   | 7A 66A     | 4CC-115 |     |                    |            |  |
|  |  |  |  | 124 | CA_7C-13A      | 7A         |         |     |                    |            |  |
|  |  |  |  | 125 | CA_7C-29A      | 7A         | 4CC-116 |     |                    |            |  |
|  |  |  |  | 126 | CA_48A-66A-66A | 48A 66A    | 4CC-100 |     |                    |            |  |
|  |  |  |  | 127 | CA_5A-48C      | 48A        | 4CC-110 |     |                    |            |  |
|  |  |  |  | 128 | CA_5A-7C       | 7A         | 4CC-113 |     |                    |            |  |



## &lt;2CA DL Power&gt;

| CA List    | PCC     |       |       |        |         |      |     |        |                          | SCC     |       |        |         |                          | Power     |            |
|------------|---------|-------|-------|--------|---------|------|-----|--------|--------------------------|---------|-------|--------|---------|--------------------------|-----------|------------|
|            | LTE     | BW    | BW    | UL     | UL      | Mod. | UL# | UL     | DL Antenna Configuration | LTE     | BW    | DL     | DL      | DL Antenna Configuration | With CA   | Without CA |
|            | Band    | Ant   | (MHz) | Freq.  | Channel |      | RB  | RB     |                          | Band    | (MHz) | Freq.  | Channel |                          | Tx. Power | Tx. Power  |
|            |         |       |       | (MHz)  |         |      |     | Offset |                          |         |       | (MHz)  |         |                          | (dBm)     | (dBm)      |
| CA_2A-17A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 17 | 10M   | 740    | 5790    |                          | 23.52     | 23.66      |
|            | Band 17 | Ant 0 | 10M   | 710    | 23790   | QPSK | 1   | 0      |                          | Band 2  | 20M   | 1960   | 900     | 4X4 MIMO                 | 23.64     | 23.82      |
| CA_4A-17A  | Band 4  | Ant 2 | 10M   | 1732.5 | 20175   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 17 | 10M   | 740    | 5790    |                          | 23.40     | 23.56      |
|            | Band 17 | Ant 0 | 10M   | 710    | 23790   | QPSK | 1   | 0      |                          | Band 4  | 10M   | 1732.5 | 2175    | 4X4 MIMO                 | 23.70     | 23.82      |
| CA_4A-48A  | Band 4  | Ant 2 | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 48 | 20M   | 3609   | 55830   | 4X4 MIMO                 | 23.37     | 23.56      |
|            | Band 48 | Ant 4 | 20M   | 3609   | 55830   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 4  | 20M   | 2132.5 | 2175    | 4X4 MIMO                 | 21.70     | 21.90      |
| CA_5A-25A  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1   | 0      |                          | Band 25 | 20M   | 1960   | 8340    | 4X4 MIMO                 | 23.58     | 23.70      |
|            | Band 25 | Ant 2 | 20M   | 1880   | 26340   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 5  | 10M   | 881.5  | 2525    |                          | 23.40     | 23.60      |
| CA_5A-38A  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1   | 0      |                          | Band 38 | 20M   | 2595   | 38000   | 4X4 MIMO                 | 23.52     | 23.70      |
| CA_5A-41A  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1   | 0      |                          | Band 41 | 20M   | 2593   | 40620   | 4X4 MIMO                 | 23.53     | 23.70      |
| CA_7A-26A  | Band 7  | Ant 3 | 20M   | 2535   | 21100   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 26 | 15M   | 876.5  | 8865    |                          | 22.66     | 22.80      |
|            | Band 26 | Ant 0 | 15M   | 831.5  | 26865   | QPSK | 1   | 0      |                          | Band 7  | 20M   | 2655   | 3100    | 4X4 MIMO                 | 23.48     | 23.62      |
| CA_7B      | Band 7  | Ant 3 | 15M   | 2535   | 21100   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 7  | 5M    | 2544.3 | 3193    | 4X4 MIMO                 | 22.43     | 22.64      |
| CA_12A-25A | Band 12 | Ant 0 | 10M   | 707.5  | 23095   | QPSK | 1   | 0      |                          | Band 25 | 20M   | 1960   | 8340    | 4X4 MIMO                 | 23.71     | 23.89      |
|            | Band 25 | Ant 2 | 20M   | 1880   | 26340   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 12 | 10M   | 737.5  | 5095    |                          | 23.50     | 23.60      |
| CA_38C     | Band 38 | Ant 3 | 20M   | 2580   | 37850   | QPSK | 1   | 0      | 4X4 MIMO                 | Band 38 | 20M   | 2599.8 | 38048   | 4X4 MIMO                 | 22.66     | 22.77      |



## &lt;3CA\_DL Power&gt;

| 3CA List      | PCC     |       |       |             |         |      |     |           |                          | SCC1    |       |             |         |                          | SCC2    |       |             |         | DL Antenna Configuration | Power           |                 |
|---------------|---------|-------|-------|-------------|---------|------|-----|-----------|--------------------------|---------|-------|-------------|---------|--------------------------|---------|-------|-------------|---------|--------------------------|-----------------|-----------------|
|               | LTE     | BW    | BW    | UL          | UL      | Mod. | UL# | UL        | DL Antenna Configuration | LTE     | BW    | DL          | DL      | DL Antenna Configuration | LTE     | BW    | DL          | DL      |                          | With CA         | Without CA      |
|               | Band    | Ant   | (MHz) | Freq. (MHz) | Channel |      | RB  | RB Offset |                          | Band    | (MHz) | Freq. (MHz) | Channel |                          | Band    | (MHz) | Freq. (MHz) | Channel |                          | Tx. Power (dBm) | Tx. Power (dBm) |
| CA_2A-48A-48A | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 48 | 20M   | 3609        | 55830   | 4X4 MIMO                 | Band 48 | 5M    | 3697.5      | 56715   | 4X4 MIMO                 | 23.47           | 23.66           |
| CA_2A-4A-13A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | 23.45           | 23.66           |
|               | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 23.43           | 23.56           |
|               | Band 13 | Ant 0 | 10M   | 782         | 23230   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | 23.55           | 23.71           |
| CA_2A-4A-29A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 29 | 10M   | 722.5       | 9715    | 4X4 MIMO                 | 23.52           | 23.66           |
|               | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 29 | 10M   | 722.5       | 9715    | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 23.39           | 23.56           |
| CA_2A-4A-30A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 30 | 10M   | 2355        | 9820    | 4X4 MIMO                 | 23.51           | 23.66           |
|               | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 30 | 10M   | 2355        | 9820    | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 23.46           | 23.56           |
|               | Band 30 | Ant 3 | 10M   | 2310        | 27710   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | 23.58           | 23.69           |
| CA_2A-29A-66A | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 29 | 10M   | 722.5       | 9715    | 4X4 MIMO                 | Band 66 | 20M   | 2155        | 66886   | 4X4 MIMO                 | 23.46           | 23.66           |
|               | Band 66 | Ant 2 | 20M   | 1745        | 132322  | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 29 | 10M   | 722.5       | 9715    | 4X4 MIMO                 | 23.43           | 23.60           |
| CA_2A-5A-7A   | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 5  | 10M   | 881.5       | 2525    | 4X4 MIMO                 | Band 7  | 20M   | 2535        | 3110    | 4X4 MIMO                 | 23.48           | 23.66           |
|               | Band 5  | Ant 0 | 10M   | 836.5       | 20525   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2535        | 3110    | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 23.55           | 23.70           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 5  | 10M   | 881.5       | 2525    | 4X4 MIMO                 | 22.60           | 22.80           |
| CA_2A-5A-48A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 5  | 10M   | 881.5       | 2525    | 4X4 MIMO                 | Band 48 | 20M   | 3609        | 55830   | 4X4 MIMO                 | 23.48           | 23.66           |
|               | Band 5  | Ant 0 | 10M   | 836.5       | 20525   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 48 | 20M   | 3609        | 55830   | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 23.58           | 23.70           |
| CA_2A-7C-13A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | 23.52           | 23.66           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 22.63           | 22.80           |
|               | Band 13 | Ant 0 | 10M   | 782         | 23230   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 7  | 20M   | 2535        | 3110    | 4X4 MIMO                 | 23.57           | 23.71           |
| CA_2A-7C-29A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 29 | 10M   | 722.5       | 9715    | 4X4 MIMO                 | 23.47           | 23.66           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 29 | 10M   | 722.5       | 9715    | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 22.62           | 22.80           |
| CA_2A-7C-66A  | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 66 | 20M   | 2155        | 66886   | 4X4 MIMO                 | 23.53           | 23.66           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 66 | 20M   | 2155        | 66886   | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 22.64           | 22.80           |
|               | Band 66 | Ant 2 | 20M   | 1745        | 132322  | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 7  | 20M   | 2535        | 3110    | 4X4 MIMO                 | 23.47           | 23.60           |
| CA_2A-13A-48A | Band 2  | Ant 2 | 20M   | 1880        | 18900   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | Band 48 | 5M    | 3697.5      | 56715   | 4X4 MIMO                 | 23.48           | 23.66           |
|               | Band 13 | Ant 0 | 10M   | 782         | 23230   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 48 | 5M    | 3697.5      | 56715   | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | 21.80           | 21.90           |
|               | Band 48 | Ant 4 | 20M   | 3609        | 55830   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 2  | 20M   | 1960        | 900     | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | 21.80           | 21.90           |
| CA_4A-4A-7A   | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 5M    | 2152.5      | 2375    | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | 23.39           | 23.56           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 4  | 5M    | 2152.5      | 2375    | 4X4 MIMO                 | 22.68           | 22.80           |
| CA_4A-4A-13A  | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 5M    | 2152.5      | 2375    | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | 23.37           | 23.56           |
|               | Band 13 | Ant 0 | 10M   | 782         | 23230   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 4  | 5M    | 2152.5      | 2375    | 4X4 MIMO                 | 23.52           | 23.71           |
| CA_4A-4A-71A  | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 5M    | 2152.5      | 2375    | 4X4 MIMO                 | Band 71 | 20M   | 683         | 68786   | 4X4 MIMO                 | 23.45           | 23.56           |
|               | Band 71 | Ant 0 | 20M   | 683         | 133322  | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 4  | 5M    | 2152.5      | 2375    | 4X4 MIMO                 | 22.67           | 22.76           |
| CA_4A-7A-7A   | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | 23.42           | 23.56           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | 22.62           | 22.80           |
|               | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 12 | 10M   | 737.5       | 5095    | 4X4 MIMO                 | 23.44           | 23.56           |
| CA_4A-7A-12A  | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 12 | 10M   | 737.5       | 5095    | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | 22.68           | 22.80           |
|               | Band 12 | Ant 0 | 10M   | 707.5       | 23095   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 4  | 20M   | 2132.5      | 2175    | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | 23.72           | 23.89           |
| CA_4A-48C     | Band 4  | Ant 2 | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 48 | 20M   | 3609        | 55830   | 4X4 MIMO                 | Band 48 | 20M   | 3628.8      | 56028   | 4X4 MIMO                 | 23.35           | 23.56           |
| CA_5A-7A-7A   | Band 5  | Ant 0 | 10M   | 836.5       | 20525   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | 23.55           | 23.70           |
|               | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | Band 5  | 10M   | 881.5       | 2525    | 4X4 MIMO                 | 22.69           | 22.80           |
| CA_5A-48A-66A | Band 5  | Ant 0 | 10M   | 836.5       | 20525   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 48 | 20M   | 3609        | 55830   | 4X4 MIMO                 | Band 66 | 20M   | 2155        | 66886   | 4X4 MIMO                 | 23.61           | 23.70           |
|               | Band 66 | Ant 2 | 20M   | 1745        | 132322  | QPSK | 1   | 0         | 4X4 MIMO                 | Band 5  | 10M   | 881.5       | 2525    | 4X4 MIMO                 | Band 48 | 20M   | 3609        | 55830   | 4X4 MIMO                 | 23.40           | 23.60           |
| CA_7A-7A-26A  | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | Band 26 | 15M   | 876.5       | 8865    | 4X4 MIMO                 | 22.64           | 22.80           |
|               | Band 26 | Ant 0 | 15M   | 831.5       | 26865   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | 23.45           | 23.62           |
| CA_7A-12A-66A | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 12 | 10M   | 737.5       | 5095    | 4X4 MIMO                 | Band 66 | 20M   | 2155        | 66886   | 4X4 MIMO                 | 22.64           | 22.80           |
|               | Band 12 | Ant 0 | 10M   | 707.5       | 23095   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 66 | 20M   | 2155        | 66886   | 4X4 MIMO                 | Band 7  | 5M    | 2687.5      | 3425    | 4X4 MIMO                 | 23.79           | 23.89           |
|               | Band 66 | Ant 2 | 20M   | 1745        | 132322  | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 12 | 10M   | 737.5       | 5095    | 4X4 MIMO                 | 23.44           | 23.60           |
| CA_7C-13A     | Band 7  | Ant 3 | 20M   | 2535        | 21100   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2554.8      | 3298    | 4X4 MIMO                 | Band 13 | 10M   | 751         | 5230    | 4X4 MIMO                 | 22.67           | 22.80           |
|               | Band 13 | Ant 0 | 10M   | 782         | 23230   | QPSK | 1   | 0         | 4X4 MIMO                 | Band 7  | 20M   | 2655        | 3100    | 4X4 MIMO                 | Band 7  | 20M   | 2554.8      | 3298    | 4X4 MIMO                 | 23.50           | 23.71           |



# FCC SAR Test Report

Report No. : FA460505

|                |         |       |     |        |        |      |   |   |          |         |     |        |       |          |         |     |        |       |          |       |       |
|----------------|---------|-------|-----|--------|--------|------|---|---|----------|---------|-----|--------|-------|----------|---------|-----|--------|-------|----------|-------|-------|
| CA_13A-48A-48A | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |          | Band 48 | 20M | 3609   | 55830 | 4X4 MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4X4 MIMO | 23.55 | 23.71 |
| CA_13A-48A-66A | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |          | Band 48 | 20M | 3609   | 55830 | 4X4 MIMO | Band 66 | 20M | 2155   | 66886 | 4X4 MIMO | 23.57 | 23.71 |
|                | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4X4 MIMO | Band 5  | 10M | 881.5  | 2525  |          | Band 48 | 20M | 3609   | 55830 | 4X4 MIMO | 23.48 | 23.60 |
| CA_25A-25A-25A | Band 25 | Ant 2 | 20M | 1880   | 26340  | QPSK | 1 | 0 | 4X4 MIMO | Band 25 | 5M  | 1912.5 | 8665  | 4X4 MIMO | Band 25 | 20M | 1860   | 8140  | 4X4 MIMO | 23.48 | 23.60 |
| CA_25A-25A-26A | Band 25 | Ant 2 | 20M | 1880   | 26340  | QPSK | 1 | 0 | 4X4 MIMO | Band 25 | 5M  | 1912.5 | 8665  | 4X4 MIMO | Band 26 | 15M | 876.5  | 8865  |          | 23.46 | 23.60 |
|                | Band 26 | Ant 0 | 15M | 831.5  | 26865  | QPSK | 1 | 0 |          | Band 25 | 20M | 1880   | 8340  | 4X4 MIMO | Band 25 | 5M  | 1912.5 | 8665  | 4X4 MIMO | 23.48 | 23.62 |
| CA_29A-66A-66A | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4X4 MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4X4 MIMO | Band 29 | 10M | 722.5  | 9715  |          | 23.49 | 23.60 |
| CA_41A-41C     | Band 41 | Ant 3 | 20M | 2675.8 | 39750  | QPSK | 1 | 0 | 4X4 MIMO | Band 41 | 20M | 2660.2 | 41292 | 4X4 MIMO | Band 41 | 20M | 2680   | 41490 | 4X4 MIMO | 22.60 | 22.81 |
| CA_48A-48A-71A | Band 71 | Ant 0 | 20M | 683    | 133322 | QPSK | 1 | 0 |          | Band 48 | 20M | 3609   | 55830 | 4X4 MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4X4 MIMO | 22.65 | 22.76 |
| CA_48C-71A     | Band 71 | Ant 0 | 20M | 683    | 133322 | QPSK | 1 | 0 |          | Band 48 | 20M | 3609   | 55830 | 4X4 MIMO | Band 48 | 20M | 3628.8 | 56028 | 4X4 MIMO | 22.60 | 22.76 |

## <4CA\_DL Power>

| Configure        | PCC     |       |       |        |         |      |        |    |                          | SCC1    |       |        |         |                          | SCC2    |       |        |         |                          | SCC3    |       |        |         |                          | Power     |            |
|------------------|---------|-------|-------|--------|---------|------|--------|----|--------------------------|---------|-------|--------|---------|--------------------------|---------|-------|--------|---------|--------------------------|---------|-------|--------|---------|--------------------------|-----------|------------|
|                  | LTE     | BW    | BW    | UL     | UL      |      | UL#    | UL |                          | LTE     | BW    | DL     | DL      |                          | LTE     | BW    | DL     | DL      |                          | LTE     | BW    | DL     | DL      |                          | With CA   | Without CA |
|                  | Band    | Ant   | (MHz) | Freq.  | Channel | Mod. | RB     | RB | DL Antenna Configuration | Band    | (MHz) | Freq.  | Channel | DL Antenna Configuration | Band    | (MHz) | Freq.  | Channel | DL Antenna Configuration | Band    | (MHz) | Freq.  | Channel | DL Antenna Configuration | Tx. Power | Tx. Power  |
|                  |         |       |       | (MHz)  |         |      | Offset |    |                          |         |       | (MHz)  |         |                          |         |       | (MHz)  |         |                          |         |       | (MHz)  |         |                          | (dBm)     | (dBm)      |
| CA_2A-2A-4A-4A   | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    | 4x4MIMO                  | Band 4  | 5M    | 2152.5 | 2375    |                          | 23.54     | 23.66      |
|                  | Band 4  | Ant 2 | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | 4x4MIMO                  | Band 4  | 5M    | 2152.5 | 2375    | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | 23.39     | 23.56      |
| CA_2A-2A-4A-5A   | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | 23.55     | 23.66      |
|                  | Band 4  | Ant 2 | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | 23.38     | 23.56      |
|                  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    |                          | 23.53     | 23.70      |
| CA_2A-2A-4A-12A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    | 4x4MIMO                  | Band 12 | 10M   | 737.5  | 5095    |                          | 23.45     | 23.66      |
|                  | Band 4  | Ant 2 | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 12 | 10M   | 737.5  | 5095    |                          | 23.42     | 23.56      |
|                  | Band 12 | Ant 0 | 10M   | 707.5  | 23095   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    |                          | 23.71     | 23.89      |
| CA_2A-2A-4A-71A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    | 4x4MIMO                  | Band 71 | 20M   | 683    | 68786   |                          | 23.50     | 23.66      |
|                  | Band 4  | Ant 2 | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 71 | 20M   | 683    | 68786   |                          | 23.43     | 23.56      |
|                  | Band 71 | Ant 0 | 20M   | 683    | 133322  | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 4  | 20M   | 2132.5 | 2175    |                          | 22.56     | 22.76      |
| CA_2A-2A-5A-30A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | Band 30 | 10M   | 2355   | 9820    | 4x4MIMO                  | 23.48     | 23.66      |
|                  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 30 | 10M   | 2355   | 9820    | 4x4MIMO                  | 23.53     | 23.70      |
|                  | Band 30 | Ant 3 | 10M   | 2310   | 27710   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | 23.56     | 23.69      |
| CA_2A-2A-5A-66A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | Band 66 | 20M   | 2155   | 66886   | 4x4MIMO                  | 23.53     | 23.66      |
|                  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 66 | 20M   | 2155   | 66886   | 4x4MIMO                  | 23.57     | 23.70      |
|                  | Band 66 | Ant 2 | 20M   | 1745   | 132322  | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | 23.49     | 23.60      |
| CA_2A-2A-5B      | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 5  | 10M   | 881.5  | 2525    |                          | Band 5  | 5M    | 888.7  | 2597    |                          | 23.53     | 23.66      |
|                  | Band 5  | Ant 0 | 10M   | 836.5  | 20525   | QPSK | 1      | 0  |                          | Band 5  | 5M    | 888.7  | 2597    |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | 23.56     | 23.70      |
| CA_2A-2A-7A-12A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 7  | 20M   | 2655   | 3100    | 4x4MIMO                  | Band 12 | 10M   | 737.5  | 5095    |                          | 23.49     | 23.66      |
|                  | Band 7  | Ant 3 | 20M   | 2535   | 21100   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 12 | 10M   | 737.5  | 5095    |                          | 22.65     | 22.80      |
|                  | Band 12 | Ant 0 | 10M   | 707.5  | 23095   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 7  | 20M   | 2655   | 3100    | 4x4MIMO                  | 23.70     | 23.89      |
| CA_2A-2A-7A-66A  | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 7  | 20M   | 2655   | 3100    | 4x4MIMO                  | Band 66 | 20M   | 2155   | 66886   | 4x4MIMO                  | 23.54     | 23.66      |
|                  | Band 7  | Ant 3 | 20M   | 2535   | 21100   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 66 | 20M   | 2155   | 66886   | 4x4MIMO                  | 22.67     | 22.80      |
|                  | Band 66 | Ant 2 | 20M   | 1745   | 132322  | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 7  | 20M   | 2655   | 3100    | 4x4MIMO                  | 23.45     | 23.60      |
| CA_2A-2A-12A-12A | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 12 | 5M    | 737.5  | 5095    |                          | Band 12 | 5M    | 743.5  | 5155    |                          | 23.50     | 23.66      |
|                  | Band 12 | Ant 0 | 5M    | 707.5  | 23095   | QPSK | 1      | 0  |                          | Band 12 | 5M    | 743.5  | 5155    |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | 23.66     | 23.76      |
| CA_2A-2A-12A-30A | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 12 | 10M   | 737.5  | 5095    |                          | Band 30 | 10M   | 2355   | 9820    | 4x4MIMO                  | 23.46     | 23.66      |
|                  | Band 12 | Ant 0 | 10M   | 707.5  | 23095   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 30 | 10M   | 2355   | 9820    | 4x4MIMO                  | 23.79     | 23.89      |
|                  | Band 30 | Ant 3 | 10M   | 2310   | 27710   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 12 | 10M   | 737.5  | 5095    |                          | 23.57     | 23.69      |
| CA_2A-2A-14A-30A | Band 2  | Ant 2 | 20M   | 1880   | 18900   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 14 | 10M   | 763    | 5330    |                          | Band 30 | 10M   | 2355   | 9820    | 4x4MIMO                  | 23.48     | 23.66      |
|                  | Band 14 | Ant 0 | 10M   | 793    | 23330   | QPSK | 1      | 0  |                          | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 30 | 10M   | 2355   | 9820    | 4x4MIMO                  | 23.71     | 23.83      |
|                  | Band 30 | Ant 3 | 10M   | 2310   | 27710   | QPSK | 1      | 0  | 4x4MIMO                  | Band 2  | 20M   | 1960   | 900     | 4x4MIMO                  | Band 2  | 5M    | 1987.5 | 1175    | 4x4MIMO                  | Band 14 | 10M   | 763    | 5330    |                          | 23.52     | 23.69      |





# FCC SAR Test Report

Report No. : FA460505

|                      |         |       |     |        |        |      |   |   |         |         |     |        |       |         |         |     |        |       |         |         |     |        |       |         |       |       |
|----------------------|---------|-------|-----|--------|--------|------|---|---|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|-------|-------|
| CA_2A-2A-1<br>2A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.46 | 23.66 |
|                      | Band 12 | Ant 0 | 10M | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.80 | 23.89 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | 23.46 | 23.60 |
| CA_2A-2A-1<br>3A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.56 | 23.66 |
|                      | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.54 | 23.71 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.51 | 23.60 |
| CA_2A-2A-1<br>4A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.49 | 23.66 |
|                      | Band 14 | Ant 0 | 10M | 793    | 23330  | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.62 | 23.83 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | 23.49 | 23.60 |
| CA_2A-2A-2<br>9A-30A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.49 | 23.66 |
|                      | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 23.50 | 23.69 |
| CA_2A-2A-3<br>0A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.45 | 23.66 |
|                      | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.54 | 23.69 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.41 | 23.60 |
| CA_2A-2A-6<br>6A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.46 | 23.66 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1880   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | 23.44 | 23.60 |
| CA_2A-2A-6<br>6A-71A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 71 | 20M | 683    | 68786 |         | 23.49 | 23.66 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 71 | 20M | 683    | 68786 |         | Band 2  | 20M | 1880   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | 23.48 | 23.60 |
|                      | Band 71 | Ant 0 | 20M | 683    | 133322 | QPSK | 1 | 0 |         | Band 2  | 20M | 1880   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 22.69 | 22.76 |
| CA_2A-2A-1<br>2B     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.57 | 23.66 |
|                      | Band 12 | Ant 0 | 5M  | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 2  | 20M | 1880   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | 23.65 | 23.76 |
| CA_2A-2A-6<br>6B     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.56 | 23.66 |
|                      | Band 66 | Ant 2 | 15M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 2  | 20M | 1880   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | 23.39 | 23.47 |
| CA_2A-2A-6<br>6C     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 23.51 | 23.66 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 2  | 20M | 1880   | 900   | 4x4MIMO | Band 2  | 5M  | 1987.5 | 1175  | 4x4MIMO | 23.39 | 23.60 |
| CA_2A-4A-4<br>A-5A   | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.52 | 23.66 |
|                      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.32 | 23.56 |
|                      | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.60 | 23.70 |
| CA_2A-4A-4<br>A-12A  | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | 23.50 | 23.66 |
|                      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.36 | 23.56 |
|                      | Band 12 | Ant 0 | 10M | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.80 | 23.89 |
| CA_2A-4A-5<br>B      | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.50 | 23.66 |
|                      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.50 | 23.56 |
|                      | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  |         | 23.53 | 23.70 |
| CA_2A-4A-7<br>A-7A   | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | 23.56 | 23.66 |
|                      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.33 | 23.56 |
|                      | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  |         | 22.67 | 22.80 |
| CA_2A-4A-7<br>C      | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | 23.47 | 23.66 |
|                      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.41 | 23.56 |
|                      | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  |         | 22.70 | 22.80 |
| CA_2A-4A-1<br>2B     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.50 | 23.66 |
|                      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.41 | 23.56 |
|                      | Band 12 | Ant 0 | 5M  | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  |         | 23.64 | 23.76 |
| CA_2C-66A-<br>66A    | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.60 | 23.66 |
|                      | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | 23.55 | 23.60 |
| CA_2C-5A-3<br>0A     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.49 | 23.66 |
|                      | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | 23.47 | 23.70 |



# FCC SAR Test Report

Report No. : FA460505

|                   |         |       |     |       |        |      |   |   |         |         |     |        |       |         |         |     |        |       |         |         |     |        |       |         |       |       |
|-------------------|---------|-------|-----|-------|--------|------|---|---|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|-------|-------|
|                   | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.62 | 23.69 |
| CA_2C-29A-30A     | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.42 | 23.66 |
|                   | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 23.51 | 23.69 |
| CA_2C-12A-30A     | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.46 | 23.66 |
|                   | Band 12 | Ant 0 | 10M | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | 23.80 | 23.89 |
|                   | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 2  | 20M | 1979.8 | 1098  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | 23.48 | 23.69 |
| CA_2A-5A-48C      | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.59 | 23.66 |
|                   | Band 5  | Ant 0 | 10M | 836.5 | 20525  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.52 | 23.70 |
| CA_2A-5A-66A-66A  | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.44 | 23.66 |
|                   | Band 5  | Ant 0 | 10M | 836.5 | 20525  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.47 | 23.70 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.36 | 23.60 |
| CA_2A-5A-66B      | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.55 | 23.66 |
|                   | Band 5  | Ant 0 | 10M | 836.5 | 20525  | QPSK | 1 | 0 |         | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.50 | 23.70 |
|                   | Band 66 | Ant 2 | 15M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.23 | 23.47 |
| CA_2A-5A-66C      | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 23.60 | 23.66 |
|                   | Band 5  | Ant 0 | 10M | 836.5 | 20525  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.53 | 23.70 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.52 | 23.60 |
| CA_2A-5B-30A      | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.47 | 23.66 |
|                   | Band 5  | Ant 0 | 10M | 836.5 | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.62 | 23.70 |
|                   | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.57 | 23.69 |
| CA_2A-5B-66A      | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.59 | 23.66 |
|                   | Band 5  | Ant 0 | 10M | 836.5 | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.62 | 23.70 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.47 | 23.60 |
| CA_2A-7A-12B      | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.44 | 23.66 |
|                   | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 22.56 | 22.80 |
|                   | Band 12 | Ant 0 | 5M  | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | 23.61 | 23.76 |
| CA_2A-7A-7A-13A   | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.58 | 23.66 |
|                   | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 22.58 | 22.80 |
|                   | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | 23.63 | 23.71 |
| CA_2A-7A-7A-29A   | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 23.56 | 23.66 |
|                   | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 22.60 | 22.80 |
| CA_2A-7A-7A-66A   | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.59 | 23.66 |
|                   | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 22.69 | 22.80 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | 23.52 | 23.60 |
| CA_2A-7A-66A-66A  | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.51 | 23.66 |
|                   | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 22.74 | 22.80 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | 23.40 | 23.60 |
| CA_2A-12A-66A-66A | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.53 | 23.66 |
|                   | Band 12 | Ant 0 | 10M | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.67 | 23.89 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | 23.38 | 23.60 |
| CA_2A-12A-66C     | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 23.58 | 23.66 |
|                   | Band 12 | Ant 0 | 10M | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.78 | 23.89 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | 23.55 | 23.60 |
| CA_2A-12B-66A     | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.60 | 23.66 |
|                   | Band 12 | Ant 0 | 5M  | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.56 | 23.76 |
|                   | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.35 | 23.60 |
| CA_2A-13A-48C     | Band 2  | Ant 2 | 20M | 1880  | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.51 | 23.66 |



# FCC SAR Test Report

Report No. : FA460505

|                   |         |       |     |        |        |      |   |   |         |         |     |        |       |         |         |     |        |       |         |         |     |        |       |         |       |       |
|-------------------|---------|-------|-----|--------|--------|------|---|---|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|-------|-------|
|                   | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.51 | 23.71 |
| CA_2A-13A-66A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.48 | 23.66 |
|                   | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.64 | 23.71 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.42 | 23.60 |
| CA_2A-13A-66B     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.55 | 23.66 |
|                   | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |         | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.61 | 23.71 |
|                   | Band 66 | Ant 2 | 15M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.31 | 23.47 |
| CA_2A-13A-66C     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 23.45 | 23.66 |
|                   | Band 13 | Ant 0 | 10M | 782    | 23230  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.51 | 23.71 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.50 | 23.60 |
| CA_2A-14A-66A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.46 | 23.66 |
|                   | Band 14 | Ant 0 | 10M | 793    | 23330  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.71 | 23.83 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | 23.40 | 23.60 |
| CA_2A-30A-66A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.48 | 23.66 |
|                   | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.48 | 23.69 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.54 | 23.60 |
| CA_2A-48D         | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 48 | 20M | 3648.6 | 56226 | 4x4MIMO | 23.55 | 23.66 |
| CA_2A-66A-66A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | 23.59 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.43 | 23.60 |
| CA_2A-66A-66A-71A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 71 | 20M | 683    | 68786 |         | 23.57 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 71 | 20M | 683    | 68786 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.40 | 23.60 |
|                   | Band 71 | Ant 0 | 20M | 683    | 133322 | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 22.68 | 22.76 |
| CA_2A-66A-66B     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 66 | 10M | 2185.1 | 67187 | 4x4MIMO | Band 66 | 10M | 2155   | 67286 | 4x4MIMO | 23.46 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1720   | 132072 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 10M | 2185.1 | 67187 | 4x4MIMO | Band 66 | 10M | 2155   | 67286 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.43 | 23.60 |
| CA_2A-66A-66C     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | 23.55 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1720   | 132072 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.42 | 23.60 |
| CA_2A-66C-71A     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | Band 71 | 20M | 683    | 68786 |         | 23.55 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 71 | 20M | 683    | 68786 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.49 | 23.60 |
|                   | Band 71 | Ant 0 | 20M | 683    | 133322 | QPSK | 1 | 0 |         | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 22.61 | 22.76 |
| CA_2A-66D         | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2145   | 66786 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 66 | 20M | 2184.6 | 67182 | 4x4MIMO | 23.53 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 66 | 20M | 2184.6 | 67182 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.52 | 23.60 |
| CA_2A-48A-48C     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | 23.44 | 23.66 |
|                   | Band 48 | Ant 4 | 20M | 3609   | 55830  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 21.75 | 21.90 |
| CA_2A-48A-66A-66A | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.55 | 23.66 |
|                   | Band 48 | Ant 4 | 20M | 3609   | 55830  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 21.66 | 21.90 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | 23.49 | 23.60 |
| CA_2A-48C-66A     | Band 2  | Ant 2 | 20M | 1880   | 18900  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.46 | 23.66 |
|                   | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 2  | 20M | 1960   | 900   | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | 23.51 | 23.60 |
| CA_4A-4A-12A-12A  | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 743.5  | 5155  |         | 23.41 | 23.56 |
|                   | Band 12 | Ant 0 | 5M  | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 743.5  | 5155  |         | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.56 | 23.76 |
| CA_4A-4A-5B       | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.47 | 23.56 |
|                   | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.59 | 23.70 |
| CA_4A-4A-12A-30A  | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.33 | 23.56 |
|                   | Band 12 | Ant 0 | 10M | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.78 | 23.89 |
|                   | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | 23.60 | 23.69 |
| CA_4A-4A-5A-30A   | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 5  | 10M | 881.5  | 2525  |         | 23.47 | 23.56 |
|                   | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.62 | 23.70 |





# FCC SAR Test Report

Report No. : FA460505

|                       |         |       |     |        |        |      |   |   |         |         |     |        |       |         |         |     |        |       |         |         |     |        |       |         |       |       |
|-----------------------|---------|-------|-----|--------|--------|------|---|---|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|-------|-------|
|                       | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.55 | 23.69 |
| CA_4A-4A-1<br>2B      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.38 | 23.56 |
|                       | Band 12 | Ant 0 | 5M  | 707.5  | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.65 | 23.76 |
| CA_4A-4A-2<br>9A-30A  | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.49 | 23.56 |
|                       | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 23.47 | 23.69 |
| CA_4A-5B-3<br>0A      | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.45 | 23.56 |
|                       | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  |         | 23.60 | 23.70 |
|                       | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 20M | 2132.5 | 2175  | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.47 | 23.69 |
| CA_4A-48D             | Band 4  | Ant 2 | 20M | 1732.5 | 20175  | QPSK | 1 | 0 | 4x4MIMO | Band 4  | 5M  | 2152.5 | 2375  | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.49 | 23.56 |
| CA_5A-5A-6<br>6A-66A  | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 891.5  | 2625  |         | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.55 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 891.5  | 2625  |         | 23.52 | 23.60 |
| CA_5A-5A-6<br>6B      | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 891.5  | 2625  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.65 | 23.70 |
|                       | Band 66 | Ant 2 | 15M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 891.5  | 2625  |         | 23.31 | 23.47 |
| CA_5A-5A-6<br>6C      | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 891.5  | 2625  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 23.59 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 891.5  | 2625  |         | 23.40 | 23.60 |
| CA_5A-66A-<br>66B     | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.58 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1720   | 132072 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | Band 5  | 5M  | 891.5  | 2625  |         | 23.54 | 23.60 |
| CA_5A-66A-<br>66C     | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | 23.54 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1720   | 132072 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | Band 5  | 5M  | 891.5  | 2625  |         | 23.48 | 23.60 |
| CA_5A-66D             | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 66 | 20M | 2145   | 66786 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 66 | 20M | 2184.6 | 67182 | 4x4MIMO | 23.47 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 66 | 20M | 2184.6 | 67182 | 4x4MIMO | Band 5  | 5M  | 891.5  | 2625  |         | 23.44 | 23.60 |
| CA_5A-7A-6<br>6A-66A  | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.60 | 23.70 |
|                       | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 22.74 | 22.80 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | 23.46 | 23.60 |
| CA_5A-30A-<br>66A-66A | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.49 | 23.70 |
|                       | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 23.63 | 23.69 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.40 | 23.60 |
| CA_5A-7C-6<br>6A      | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.54 | 23.70 |
|                       | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | 22.70 | 22.80 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | 23.48 | 23.60 |
| CA_5A-48C-<br>66A     | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.55 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.41 | 23.60 |
| CA_5A-48D             | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 48 | 20M | 3648.6 | 56226 | 4x4MIMO | 23.51 | 23.70 |
| CA_5B-30A-<br>66A     | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.62 | 23.70 |
|                       | Band 30 | Ant 3 | 10M | 2310   | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.56 | 23.69 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.40 | 23.60 |
| CA_5B-66A-<br>66A     | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.64 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.39 | 23.60 |
| CA_5B-66B             | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.50 | 23.70 |
|                       | Band 66 | Ant 2 | 15M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.31 | 23.47 |
| CA_5B-66C             | Band 5  | Ant 0 | 10M | 836.5  | 20525  | QPSK | 1 | 0 |         | Band 5  | 5M  | 888.7  | 2597  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 20M | 2174.8 | 67084 | 4x4MIMO | 23.45 | 23.70 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 5  | 10M | 881.5  | 2525  |         | Band 5  | 5M  | 888.7  | 2597  |         | 23.49 | 23.60 |
| CA_7A-7A-2<br>9A-66A  | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 22.68 | 22.80 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | 23.53 | 23.60 |
| CA_7A-7A-6<br>6A-66A  | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 22.67 | 22.80 |
|                       | Band 66 | Ant 2 | 20M | 1745   | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 5M  | 2687.5 | 3425  | 4x4MIMO | 23.51 | 23.60 |
| CA_7A-12B-<br>66A     | Band 7  | Ant 3 | 20M | 2535   | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 22.57 | 22.80 |



# FCC SAR Test Report

Report No. : FA460505

|                    |         |       |     |       |        |      |   |   |         |         |     |        |       |         |         |     |        |       |         |         |     |        |       |         |       |       |
|--------------------|---------|-------|-----|-------|--------|------|---|---|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|---------|-----|--------|-------|---------|-------|-------|
|                    | Band 12 | Ant 0 | 5M  | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | 23.61 | 23.76 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.53 | 23.60 |
| CA_7C-29A-66A      | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 22.59 | 22.80 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | 23.40 | 23.60 |
| CA_7C-66A-66A      | Band 7  | Ant 3 | 20M | 2535  | 21100  | QPSK | 1 | 0 | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 22.72 | 22.80 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 7  | 20M | 2655   | 3100  | 4x4MIMO | Band 7  | 20M | 2554.8 | 3298  | 4x4MIMO | 23.36 | 23.60 |
| CA_12A-30A-66A-66A | Band 12 | Ant 0 | 10M | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.70 | 23.89 |
|                    | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.50 | 23.69 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 12 | 10M | 737.5  | 5095  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.55 | 23.60 |
| CA_12B-66A-66A     | Band 12 | Ant 0 | 5M  | 707.5 | 23095  | QPSK | 1 | 0 |         | Band 12 | 5M  | 742.3  | 5143  |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.67 | 23.76 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 12 | 5M  | 737.5  | 5095  |         | Band 12 | 5M  | 742.3  | 5143  |         | 23.54 | 23.60 |
| CA_13A-66A-66B     | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 66 | 15M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2164.3 | 66979 | 4x4MIMO | 23.50 | 23.71 |
|                    | Band 66 | Ant 2 | 20M | 1720  | 132072 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.38 | 23.60 |
| CA_13A-66A-66C     | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | 23.63 | 23.71 |
|                    | Band 66 | Ant 2 | 20M | 1720  | 132072 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2150.2 | 66838 | 4x4MIMO | Band 66 | 20M | 2170   | 67036 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.49 | 23.60 |
| CA_13A-48C-66A     | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | 23.51 | 23.71 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.46 | 23.60 |
| CA_13A-48A-66B     | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 66 | 15M | 2145   | 66786 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | 23.51 | 23.71 |
|                    | Band 66 | Ant 2 | 15M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | 23.29 | 23.47 |
| CA_13A-48A-66C     | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 66 | 20M | 2145   | 66786 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | 23.52 | 23.71 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | 23.40 | 23.60 |
| CA_13A-48A-48C     | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | 23.60 | 23.71 |
|                    | Band 48 | Ant 4 | 20M | 3609  | 55830  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | Band 48 | 20M | 3685.8 | 56598 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 21.69 | 21.90 |
| CA_13A-48D         | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 48 | 20M | 3648.6 | 56226 | 4x4MIMO | 23.57 | 23.71 |
| CA_13A-66D         | Band 13 | Ant 0 | 10M | 782   | 23230  | QPSK | 1 | 0 |         | Band 66 | 20M | 2145   | 66786 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 66 | 20M | 2184.6 | 67182 | 4x4MIMO | 23.47 | 23.71 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 66 | 20M | 2184.6 | 67182 | 4x4MIMO | Band 13 | 10M | 751    | 5230  |         | 23.46 | 23.60 |
| CA_14A-30A-66A-66A | Band 14 | Ant 0 | 10M | 793   | 23330  | QPSK | 1 | 0 |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | 23.69 | 23.83 |
|                    | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | 23.63 | 23.69 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.46 | 23.60 |
| CA_14A-66A-66A-66A | Band 14 | Ant 0 | 10M | 793   | 23330  | QPSK | 1 | 0 |         | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | 23.64 | 23.83 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 66 | 20M | 2120   | 66536 | 4x4MIMO | Band 14 | 10M | 763    | 5330  |         | 23.48 | 23.60 |
| CA_25A-41D         | Band 25 | Ant 2 | 20M | 1880  | 26340  | QPSK | 1 | 0 | 4x4MIMO | Band 41 | 20M | 2593   | 40620 | 4x4MIMO | Band 41 | 20M | 2612.8 | 40818 | 4x4MIMO | Band 41 | 20M | 2632.6 | 41016 | 4x4MIMO | 23.49 | 23.60 |
|                    | Band 41 | Ant 3 | 20M | 2593  | 40620  | QPSK | 1 | 0 | 4x4MIMO | Band 41 | 20M | 2612.8 | 40818 | 4x4MIMO | Band 41 | 20M | 2632.6 | 41016 | 4x4MIMO | Band 25 | 20M | 1960   | 8340  | 4x4MIMO | 22.74 | 22.81 |
| CA_29A-30A-66A-66A | Band 30 | Ant 3 | 10M | 2310  | 27710  | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2155   | 66886 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | 23.60 | 23.69 |
|                    | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 29 | 10M | 722.5  | 9715  |         | Band 30 | 10M | 2355   | 9820  | 4x4MIMO | 23.41 | 23.60 |
| CA_41E             | Band 41 | Ant 3 | 20M | 2593  | 40620  | QPSK | 1 | 0 | 4x4MIMO | Band 41 | 20M | 2612.8 | 40818 | 4x4MIMO | Band 41 | 20M | 2632.6 | 41016 | 4x4MIMO | Band 41 | 20M | 2652.4 | 41214 | 4x4MIMO | 22.67 | 22.81 |
| CA_48A-48C-66A     | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3560   | 55340 | 4x4MIMO | Band 48 | 20M | 3670.2 | 56442 | 4x4MIMO | Band 48 | 20M | 3690   | 56640 | 4x4MIMO | 23.43 | 23.60 |
| CA_48A-48A-66A-66A | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | 23.37 | 23.60 |
| CA_48A-48A-66B     | Band 66 | Ant 2 | 15M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | 23.36 | 23.47 |
| CA_48A-48A-66C     | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 5M  | 3697.5 | 56715 | 4x4MIMO | 23.51 | 23.60 |
| CA_48A-48D         | Band 48 | Ant 4 | 20M | 3560  | 55340  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3641   | 56150 | 4x4MIMO | Band 48 | 20M | 3660.8 | 56348 | 4x4MIMO | Band 48 | 20M | 3680.6 | 56546 | 4x4MIMO | 21.78 | 21.90 |
| CA_48C-48C         | Band 48 | Ant 4 | 20M | 3560  | 55340  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3579.8 | 55538 | 4x4MIMO | Band 48 | 20M | 3670.2 | 56442 | 4x4MIMO | Band 48 | 20M | 3690   | 56640 | 4x4MIMO | 21.75 | 21.90 |
| CA_48C-66A-66A     | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2197.5 | 67311 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.39 | 23.60 |
| CA_48C-66B         | Band 66 | Ant 2 | 15M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 5M  | 2154.3 | 66879 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.41 | 23.47 |
| CA_48C-66C         | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 66 | 20M | 2164.8 | 66984 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | 23.47 | 23.60 |
| CA_48D-66A         | Band 66 | Ant 2 | 20M | 1745  | 132322 | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3609   | 55830 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 48 | 20M | 3648.6 | 56226 | 4x4MIMO | 23.44 | 23.60 |
| CA_48E             | Band 48 | Ant 4 | 20M | 3609  | 55830  | QPSK | 1 | 0 | 4x4MIMO | Band 48 | 20M | 3628.8 | 56028 | 4x4MIMO | Band 48 | 20M | 3648.6 | 56226 | 4x4MIMO | Band 48 | 20M | 3668.4 | 56424 | 4x4MIMO | 21.80 | 21.90 |

**LTE Carrier Aggregation Conducted Power (Downlink)**

- i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.
- ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.
- iii. The device supports downlink four carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- v. For inter-band CA, the SCC selected highest bandwidth and near the middle of its transmission band. For SCC DL RB size and offset will base on the PCC corresponding RB allocation.
- vi. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- vii. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

$$\text{Nominal channel spacing} = \left\lceil \frac{BW_{\text{Channel}(1)} + BW_{\text{Channel}(2)} - 0.1|BW_{\text{Channel}(1)} - BW_{\text{Channel}(2)}|}{0.6} \right\rceil 0.3 \text{ [MHz]}$$

**LTE 4x4 MIMO (Downlink)**

This device supports downlink 4x4 MIMO operations for LTE Band 2/4/7/25/30/38/41/48/66 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC Guidance, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

| 4X4 MIMO | Band                             |
|----------|----------------------------------|
|          | LTE Band 2/4/7/25/30/38/41/48/66 |

**LTE Carrier Aggregation Conducted Power (Uplink)**

| LTE Uplink CA | 2CC Uplink Carrier Aggregation |
|---------------|--------------------------------|
| Intra-band    | Antenna Tx                     |
| CA_5B         | Ant0/1                         |
| CA_7C         | Ant3                           |
| CA_38C        | Ant3                           |
| CA_41C        | Ant3                           |
| CA_48C        | Ant4                           |
| CA_66B        | Ant2                           |
| CA_66C        | Ant2                           |

**<Intra-band>**
**General Note:**

- The device supports intra-band uplink carrier aggregation for LTE B5/7/38/41/48/66 with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- The device supports uplink carrier aggregation with a maximum of two uplink component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre the 3GPP requirement.
- According Nov. 2017 TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- Additional SAR measurement for LTE UL CA with other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.
- LTE CA\_66B, test was covered by CA\_66C, therefore, SAR was only assessed for CA\_66C.

**<Uplink CA Full Power>**

| CA_5B Ant0 Default&DSI3               |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 10MHz+10MHz (50RB+50RB)   |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20450                                 | 20549       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 23.35                | 25.00               |
| 20476                                 | 20575       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 23.47                | 25.00               |
| 20600                                 | 20501       | QPSK       | 1       | 0         | 1       | 49        | 2             | 0                     | 23.31                | 25.00               |
| CA_5B Ant1 Default                    |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 10MHz+10MHz (50RB+50RB)   |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20450                                 | 20549       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 22.15                | 24.00               |
| 20476                                 | 20575       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 22.21                | 24.00               |
| 20600                                 | 20501       | QPSK       | 1       | 0         | 1       | 49        | 2             | 0                     | 22.07                | 24.00               |
| CA_7C Ant3 Default                    |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 23.21                | 24.00               |
| 21100                                 | 21298       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 23.27                | 24.00               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 23.15                | 24.00               |



| CA_38C Ant3 Default                   |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 37850                                 | 38048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.51                | 24.00               |
| 37901                                 | 38099       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.68                | 24.00               |
| 38150                                 | 37952       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 22.49                | 24.00               |
| CA_41C Ant3 Default                   |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.59                | 24.00               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.66                | 24.00               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.74                | 24.00               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.61                | 24.00               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 22.65                | 24.00               |
| CA_41C HPUE Ant3 Default              |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 25.65                | 27.00               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 25.74                | 27.00               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 25.85                | 27.00               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 25.71                | 27.00               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 25.68                | 27.00               |
| CA_66C Ant2 Default                   |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132072                                | 132270      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 23.33                | 25.00               |
| 132322                                | 132520      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 23.54                | 25.00               |
| 132572                                | 132374      | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 23.26                | 25.00               |
| CA_66B Ant2 Default                   |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 15MHz+5MHz (75RB+25RB)    |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132047                                | 132140      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 23.25                | 25.00               |
| 132322                                | 132415      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 23.45                | 25.00               |
| 132597                                | 132504      | QPSK       | 1       | 0         | 1       | 24        | 1             | 0                     | 23.21                | 25.00               |
| CA_48C Ant4 Default&DS10&DS11         |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (1RB+99RB)    |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 55340                                 | 55538       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.66                | 23.00               |
| 55830                                 | 56028       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.82                | 23.00               |
| 56150                                 | 56348       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.75                | 23.00               |
| 56640                                 | 56442       | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 21.72                | 23.00               |



## &lt;Uplink CA Power Mode for DSI 2&gt;

| CA_5B Ant0 DSI2                       |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 10MHz+10MHz (50RB+50RB)   |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20450                                 | 20549       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 20.81                | 22.40               |
| 20476                                 | 20575       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 20.95                | 22.40               |
| 20600                                 | 20501       | QPSK       | 1       | 0         | 1       | 49        | 2             | 0                     | 20.75                | 22.40               |
| CA_7C Ant3 DSI2                       |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 15.73                | 16.90               |
| 21100                                 | 21298       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 15.84                | 16.90               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 15.71                | 16.90               |
| CA_38C Ant3 DSI2                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 37850                                 | 38048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 17.00                | 18.70               |
| 37901                                 | 38099       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 17.11                | 18.70               |
| 38150                                 | 37952       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 17.01                | 18.70               |
| CA_41C Ant3 DSI2                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 17.29                | 18.70               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 17.32                | 18.70               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 17.55                | 18.70               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 17.31                | 18.70               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 17.3                 | 18.70               |
| CA_41C HPUE Ant3 DSI2                 |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.79                | 20.30               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.71                | 20.30               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 19.05                | 20.30               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.75                | 20.30               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 18.68                | 20.30               |
| CA_66C Ant2 DSI2                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132072                                | 132270      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 17.51                | 18.90               |
| 132322                                | 132520      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 17.65                | 18.90               |
| 132572                                | 132374      | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 17.49                | 18.90               |
| CA_66B Ant2 DSI2                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 15MHz+5MHz (75RB+25RB)    |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132047                                | 132140      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 17.35                | 18.90               |
| 132322                                | 132415      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 17.49                | 18.90               |
| 132597                                | 132504      | QPSK       | 1       | 0         | 1       | 24        | 1             | 0                     | 17.31                | 18.90               |
| CA_48C Ant4 DSI2                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (1RB+99RB)    |             |            |         |           |         |           |               |                       |                      |                     |





# FCC SAR Test Report

Report No. : FA460505

| PCC Channel | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|-------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
|             |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 55340       | 55538       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 17.21                | 18.20               |
| 55830       | 56028       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 17.35                | 18.20               |
| 56150       | 56348       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 17.26                | 18.20               |
| 56640       | 56442       | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 17.29                | 18.20               |

## <Uplink CA Power Mode for DSI0>

| CA_7C Ant3 DSI0                       |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.15                | 20.90               |
| 21100                                 | 21298       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.22                | 20.90               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 20.09                | 20.90               |
| CA_38C Ant3 DSI0                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 37850                                 | 38048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.02                | 22.80               |
| 37901                                 | 38099       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.14                | 22.80               |
| 38150                                 | 37952       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 22.01                | 22.80               |
| CA_41C Ant3 DSI0                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.05                | 22.80               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.06                | 22.80               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.19                | 22.80               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 22.07                | 22.80               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 22.02                | 22.80               |
| CA_41C HPUE Ant3 DSI0                 |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 23.52                | 24.40               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 23.6                 | 24.40               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 23.75                | 24.40               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 23.57                | 24.40               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 23.59                | 24.40               |
| CA_66C Ant2 DSI0                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132072                                | 132270      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 22.71                | 23.60               |
| 132322                                | 132520      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 22.81                | 23.60               |
| 132572                                | 132374      | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 22.64                | 23.60               |
| CA_66B Ant2 DSI0                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 15MHz+5MHz (75RB+25RB)    |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132047                                | 132140      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 22.62                | 23.60               |
| 132322                                | 132415      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 22.71                | 23.60               |





|        |        |      |   |   |   |    |   |   |       |       |
|--------|--------|------|---|---|---|----|---|---|-------|-------|
| 132597 | 132504 | QPSK | 1 | 0 | 1 | 24 | 1 | 0 | 22.51 | 23.60 |
|--------|--------|------|---|---|---|----|---|---|-------|-------|

**<Uplink CA Power Mode for DSI 1>**

| CA_7C Ant3 DSI1                       |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.22                | 19.40               |
| 21100                                 | 21298       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.24                | 19.40               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 18.09                | 19.40               |
| CA_38C Ant3 DSI1                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 37850                                 | 38048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.16                | 21.30               |
| 37901                                 | 38099       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.28                | 21.30               |
| 38150                                 | 37952       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 20.17                | 21.30               |
| CA_41C Ant3 DSI1                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.15                | 21.30               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.22                | 21.30               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.39                | 21.30               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.24                | 21.30               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 20.21                | 21.30               |
| CA_41C HPUE Ant3 DSI1                 |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.57                | 22.90               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.72                | 22.90               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.66                | 22.90               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.64                | 22.90               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 21.61                | 22.90               |
| CA_66C Ant2 DSI1                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132072                                | 132270      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.31                | 22.10               |
| 132322                                | 132520      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.42                | 22.10               |
| 132572                                | 132374      | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 21.25                | 22.10               |
| CA_66B Ant2 DSI1                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 15MHz+5MHz (75RB+25RB)    |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132047                                | 132140      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 21.24                | 22.10               |
| 132322                                | 132415      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 21.34                | 22.10               |
| 132597                                | 132504      | QPSK       | 1       | 0         | 1       | 24        | 1             | 0                     | 21.20                | 22.10               |

**<Uplink CA Power Mode for DSI 4>**

| CA_5B Ant1 DSI4                       |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 10MHz+10MHz (50RB+50RB)   |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20450                                 | 20549       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 22.15                | 23.60               |
| 20476                                 | 20575       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 22.21                | 23.60               |
| 20600                                 | 20501       | QPSK       | 1       | 0         | 1       | 49        | 2             | 0                     | 22.07                | 23.60               |
| CA_7C Ant3 DSI4                       |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 16.72                | 17.90               |
| 21100                                 | 21298       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 16.74                | 17.90               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 16.59                | 17.90               |
| CA_38C Ant3 DSI4                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 37850                                 | 38048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.66                | 19.80               |
| 37901                                 | 38099       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.78                | 19.80               |
| 38150                                 | 37952       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 18.67                | 19.80               |
| CA_41C Ant3 DSI4                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.65                | 19.80               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.72                | 19.80               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.89                | 19.80               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.74                | 19.80               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 18.71                | 19.80               |
| CA_41C HPUE Ant3 DSI4                 |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.07                | 21.40               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.22                | 21.40               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.16                | 21.40               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.14                | 21.40               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 20.11                | 21.40               |
| CA_66C Ant2 DSI4                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132072                                | 132270      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 19.81                | 20.60               |
| 132322                                | 132520      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 19.92                | 20.60               |
| 132572                                | 132374      | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 19.75                | 20.60               |
| CA_66B Ant2 DSI4                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 15MHz+5MHz (75RB+25RB)    |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132047                                | 132140      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 19.74                | 20.60               |
| 132322                                | 132415      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 19.84                | 20.60               |
| 132597                                | 132504      | QPSK       | 1       | 0         | 1       | 24        | 1             | 0                     | 19.70                | 20.60               |
| CA_48C Ant4 DSI4                      |             |            |         |           |         |           |               |                       |                      |                     |



| Combination 20MHz+20MHz (1RB+99RB) |             |            |         |           |         |           |               |                       |                      |                     |
|------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| PCC Channel                        | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                    |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 55340                              | 55538       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.16                | 22.50               |
| 55830                              | 56028       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.32                | 22.50               |
| 56150                              | 56348       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.25                | 22.50               |
| 56640                              | 56442       | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 21.22                | 22.50               |

**<Uplink CA Power Mode for DSI 5>**

| CA_5B Ant1 DSI5                       |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 10MHz+10MHz (50RB+50RB)   |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20450                                 | 20549       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 22.15                | 23.60               |
| 20476                                 | 20575       | QPSK       | 1       | 49        | 1       | 0         | 2             | 0                     | 22.21                | 23.60               |
| 20600                                 | 20501       | QPSK       | 1       | 0         | 1       | 49        | 2             | 0                     | 22.07                | 23.60               |
| CA_7C Ant3 DSI5                       |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.65                | 19.40               |
| 21100                                 | 21298       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 18.72                | 19.40               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 18.59                | 19.40               |
| CA_38C Ant3 DSI5                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 37850                                 | 38048       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.02                | 20.80               |
| 37901                                 | 38099       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.14                | 20.80               |
| 38150                                 | 37952       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 20.01                | 20.80               |
| CA_41C Ant3 DSI5                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.05                | 20.80               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.06                | 20.80               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.19                | 20.80               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 20.07                | 20.80               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 20.02                | 20.80               |
| CA_41C HPUE Ant3 DSI5                 |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.52                | 22.40               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.6                 | 22.40               |
| 40620                                 | 40818       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.75                | 22.40               |
| 41055                                 | 41253       | QPSK       | 1       | 99        | 1       | 0         | 2             | 0                     | 21.57                | 22.40               |
| 41490                                 | 41292       | QPSK       | 1       | 0         | 1       | 99        | 2             | 0                     | 21.59                | 22.40               |
| CA_66C Ant2 DSI5                      |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132072                                | 132270      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.21                | 22.10               |
| 132322                                | 132520      | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.31                | 22.10               |
| 132572                                | 132374      | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 21.14                | 22.10               |
| CA_66B Ant2 DSI5                      |             |            |         |           |         |           |               |                       |                      |                     |



| Combination 15MHz+5MHz (75RB+25RB) |             |            |         |           |         |           |               |                       |                      |                     |
|------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| PCC Channel                        | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                    |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 132047                             | 132140      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 21.12                | 22.10               |
| 132322                             | 132415      | QPSK       | 1       | 74        | 1       | 0         | 1             | 0                     | 21.21                | 22.10               |
| 132597                             | 132504      | QPSK       | 1       | 0         | 1       | 24        | 1             | 0                     | 21.01                | 22.10               |
| CA_48C Ant4 DSI5                   |             |            |         |           |         |           |               |                       |                      |                     |
| Combination 20MHz+20MHz (1RB+99RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                        | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                    |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 55340                              | 55538       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.16                | 22.50               |
| 55830                              | 56028       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.32                | 22.50               |
| 56150                              | 56348       | QPSK       | 1       | 99        | 1       | 0         | 1             | 0                     | 21.25                | 22.50               |
| 56640                              | 56442       | QPSK       | 1       | 0         | 1       | 99        | 1             | 0                     | 21.22                | 22.50               |

**<Inter-band uplink carrier aggregation consideration>**

| LTE Uplink CA | 2CC Uplink Carrier Aggregation |          |
|---------------|--------------------------------|----------|
| Inter-band    | LTE TX1                        | LTE TX 2 |
| CA_2A-4A      | Ant2                           | Ant5     |
| CA_2A-5A      | Ant2                           | Ant0     |
| CA_2A-7A      | Ant2                           | Ant3     |
| CA_2A-12A     | Ant2                           | Ant0     |
| CA_2A-13A     | Ant2                           | Ant0     |
| CA_2A-66A     | Ant2                           | Ant5     |
| CA_4A-5A      | Ant5                           | Ant0     |
| CA_4A-7A      | Ant2                           | Ant3     |
| CA_4A-12A     | Ant2                           | Ant0     |
| CA_4A-13A     | Ant2                           | Ant0     |
| CA_5A-7A      | Ant0                           | Ant3     |
| CA_5A-66A     | Ant0                           | Ant5     |
| CA_12A-66A    | Ant0                           | Ant2     |
| CA_13A-66A    | Ant0                           | Ant2     |

**General Note:**

1. The single carrier of inter band CA uplink power level is the same as Non-CA standalone LTE power level.
2. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with FCC RF exposure limit over a defined time window, for SAR (transmit frequency  $\leq 6\text{GHz}$ ). To control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement.
3. For LTE inter-band CA mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure between two LTE bands. Smart Transmit algorithm controls the total RF exposure base on LTE inter CA bands to not exceed FCC limit. In Part 1 Report, simultaneous transmission compliance was evaluated with other Radios (WLAN or BT) using standalone LTE SAR mode.



## 13.2 EN-DC Combination Configuration

### <EN-DC combination>

| ENDC        | Main Antenna Tx |       |
|-------------|-----------------|-------|
|             | LTE TX          | NR TX |
| DC_13A_n2A  | Ant0            | Ant2  |
| DC_13A_n66A | Ant0            | Ant2  |
| DC_13A_n77A | Ant0            | Ant4  |
| DC_66A_n5A  | Ant5            | Ant0  |
| DC_2A_n41A  | Ant2            | Ant3  |
| DC_2A_n71A  | Ant2            | Ant0  |
| DC_12A_n78A | Ant0            | Ant4  |
| DC_66A_n41A | Ant2            | Ant3  |
| DC_66A_n71A | Ant2            | Ant0  |
| DC_14A_n2A  | Ant0            | Ant2  |
| DC_14A_n66A | Ant0            | Ant2  |
| DC_2A_n66A  | Ant5            | Ant2  |
| DC_2A_n77A  | Ant5            | Ant4  |
| DC_5A_n2A   | Ant0            | Ant2  |
| DC_5A_n77A  | Ant0            | Ant4  |
| DC_12A_n66A | Ant0            | Ant2  |
| DC_25A_n41A | Ant2            | Ant3  |
| DC_48A_n5A  | Ant4            | Ant0  |
| DC_48A_n66A | Ant4            | Ant5  |
| DC_66A_n2A  | Ant5            | Ant2  |
| DC_66A_n77A | Ant5            | Ant4  |
| DC_12A_n2A  | Ant0            | Ant2  |
| DC_71A_n2A  | Ant0            | Ant2  |
| DC_2A_n5A   | Ant2            | Ant0  |
| DC_2A_n7A   | Ant2            | Ant3  |
| DC_5A_n7A   | Ant0            | Ant3  |
| DC_12A_n7A  | Ant0            | Ant3  |
| DC_13A_n7A  | Ant0            | Ant3  |
| DC_66A_n7A  | Ant2            | Ant3  |
| DC_2A_n12A  | Ant2            | Ant0  |
| DC_66A_n12A | Ant2            | Ant0  |
| DC_12A_n25A | Ant0            | Ant2  |
| DC_48A_n25A | Ant4            | Ant5  |
| DC_66A_n25A | Ant5            | Ant2  |
| DC_2A_n38A  | Ant2            | Ant3  |
| DC_4A_n38A  | Ant2            | Ant3  |
| DC_5A_n38A  | Ant0            | Ant3  |
| DC_12A_n38A | Ant0            | Ant3  |
| DC_66A_n38A | Ant2            | Ant3  |
| DC_71A_n38A | Ant0            | Ant3  |
| DC_4A_n41A  | Ant2            | Ant3  |
| DC_12A_n41A | Ant0            | Ant3  |
| DC_26A_n41A | Ant0            | Ant3  |
| DC_2A_n48A  | Ant2            | Ant4  |
| DC_5A_n48A  | Ant0            | Ant4  |
| DC_13A_n48A | Ant0            | Ant4  |
| DC_66A_n48A | Ant2            | Ant4  |
| DC_5A_n66A  | Ant0            | Ant5  |
| DC_7A_n66A  | Ant3            | Ant2  |



|             |      |      |
|-------------|------|------|
| DC_71A_n66A | Ant0 | Ant2 |
| DC_7A_n71A  | Ant3 | Ant0 |
| DC_7A_n77A  | Ant3 | Ant4 |
| DC_12A_n77A | Ant0 | Ant4 |
| DC_14A_n77A | Ant0 | Ant4 |
| DC_2A_n78A  | Ant5 | Ant4 |
| DC_4A_n78A  | Ant5 | Ant4 |
| DC_5A_n78A  | Ant0 | Ant4 |
| DC_7A_n78A  | Ant3 | Ant4 |
| DC_13A_n78A | Ant0 | Ant4 |
| DC_38A_n78A | Ant3 | Ant4 |
| DC_66A_n78A | Ant5 | Ant4 |
| DC_71A_n78A | Ant0 | Ant4 |

**NR UL MIMO Bands Configuration:**

| NR UL MIMO | TX Ant | TX Ant |
|------------|--------|--------|
| n77        | Ant4   | Ant6   |
| n78        | Ant4   | Ant6   |





## **14. Antenna Location**

The detailed antenna location information can refer to SAR Test Setup Photos.

## 15. SAR Test Results

### General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
  - c. For SAR testing of Bluetooth signal with 83.3% theoretical duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle) \*83.3%".
  - d. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
  - e. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor
  - f. For TDD LTE SAR measurement of power class 3, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.
  - g. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.
  - h. For RFID: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor\* Transmission duty cycle factor.
  - i. The transmission duty cycle for RFID is 30% declared by Manufacturer.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - $\leq 0.8$  W/kg or  $2.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  W/kg or  $1.5$  W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
  - $\leq 0.4$  W/kg or  $1.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is  $\geq 0.8$ W/kg. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The device implements receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
5. For WLAN when transmit simultaneous with WWAN, power reduction will be activated to head body-worn, hotspot and extremity exposure condition.
6. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension  $> 15.0$  cm or an overall diagonal dimension  $> 16.0$  cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR  $> 1.2$  W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
  - a. For this device SAR for WWAN/WLAN transmitter scaled to maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of WCDMA Band II/IV, LTE Band 2/4/7/25/30/66/38/41, 5G NR n2/n7/n25/n30/n66/n38/n41/n48/n78/n77, WLAN 2.4/5.2/5.8GHz, therefore product specific 10g SAR is necessary.
  - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
  - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
7. Although the headset SAR is greater than 0.8 W/kg, the headset SAR verified the worst of the non-headset SAR and less than non-headset SAR, so there is no need to be tested other channels.
8. According to Nov. 2017 TCB workshop, when the reported 1gSAR for UL CA configuration is  $<1.2$  W/kg, UL CA 1gSAR is

not required for all required test channels (PCC based).

9. LTE B7/30 and 5G NR n7/30/38/41 at ant3 support different PAs for some antennas, and LTE/NR bands support Other PA only under ENDC. Some LTE/NR bands support different PAs for some antennas, whether it is the maximum power of Main PA is higher than and very close to the other PA, for RF exposure, after verification all PAs in a same position, so the worst-case PA was chosen to perform full SAR testing to ensure the RF exposure is compliance and other PAs verified the worst case.
10. SAR is not required because the distance from the antenna to the edge is  $> 25$  mm as per KDB 941225 D06 Hotspot SAR.
11. For Phablet devices, when hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at  $\leq 25$ mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.
12. For WLAN SISO & MIMO(CDD) & TX Beamforming mode of 802.11ax, and WLAN SISO & TX Beamforming mode is not greater than WLAN MIMO(CDD) mode, so WLAN MIMO(CDD) mode SAR covers WLAN SISO & Tx Beamforming mode SAR.
13. When the RFID is active will continue scan and only evaluation on hotspot, body-worn and product specific exposure condition for Sim-Tx analysis, when the device operate on head RFID was not perform due to the P-light sensor if detect used on head that RFID is turn off.

**WCDMA Note:**

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA / HSPA+ is  $\leq \frac{1}{4}$  dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA / HSPA+ to RMC12.2Kbps and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than  $\frac{1}{4}$  dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

**LTE Note:**

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B17 / B26 / B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE B2 / B4 / B5 / B17 / B38 SAR test was covered by B25 / B66 / B26 / B12 / B41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. the maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion
  - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

**5G NR Note:**

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
  - a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
  - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
  - c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
  - d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not  $\frac{1}{2}$  dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
  - e. Smaller bandwidth output power for each RB allocation configuration for this device will not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device
  - f. For 5G FR1 n5/n7/n26/n66/n38/n41/n77 the maximum bandwidth does not support three non-overlapping channels, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

**WLAN/Bluetooth Note:**

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is  $> 0.4$  W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is  $\leq 0.8$  W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.
6. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing. However, in order to do SISO simultaneous transmission, additional tested the WLAN 2.4GHz SISO antenna 9.
7. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. Further simplification chose the worse SAR value and the worst scaling factor from each transmit chain perform reported SAR calculation conservatively. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain.

**DSI status description:**

The device has the following DSI state which used at different exposure condition.

This WWAN bands enabled with Qualcomm Smart Transmit feature which located at chapter 5. The default power is Pmax power, When Plimit power higher than Pmax power, the output power will be limited at Pmax, and so the SAR will use Pmax power to do the testing.

| Exposure Condition  | DSI  | Trigger Conditions                    |
|---------------------|------|---------------------------------------|
| Head                | DSI2 | Receiver on                           |
| Body Worn/Extremity | DSI0 | RFID Off + Receiver Off + Hotspot Off |
| Hotspot             | DSI1 | RFID Off + Receiver Off + Hotspot On  |
| Hotspot             | DSI4 | RFID On + Receiver Off + Hotspot On   |
| Body Worn/Extremity | DSI5 | RFID On + Receiver Off + Hotspot Off  |



## 15.1 Head SAR

| Plot No. | Band        | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power State | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 750MHz   |             |          |            |         |           |               |               |          |         |             |        |             |                     |                     |                        |              |                           |                  |                        |                        |
| 01       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.76               | 22.90               | 1.300                  | -            | -                         | -0.02            | 0.813                  | 1.057                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.68               | 22.90               | 1.324                  | -            | -                         | 0.08             | 0.648                  | 0.858                  |
|          | LTE Band 71 | 20M      | QPSK       | 100     | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.62               | 22.90               | 1.343                  | -            | -                         | 0.01             | 0.633                  | 0.850                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.76               | 22.90               | 1.300                  | -            | -                         | 0.03             | 0.683                  | 0.888                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.68               | 22.90               | 1.324                  | -            | -                         | -0.08            | 0.557                  | 0.738                  |
|          | LTE Band 71 | 20M      | QPSK       | 100     | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.62               | 22.90               | 1.343                  | -            | -                         | -0.08            | 0.547                  | 0.734                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.76               | 22.90               | 1.300                  | -            | -                         | 0.1              | 0.592                  | 0.770                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.68               | 22.90               | 1.324                  | -            | -                         | -0.18            | 0.496                  | 0.657                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.76               | 22.90               | 1.300                  | -            | -                         | 0.12             | 0.493                  | 0.641                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 133297 | 680.5       | 21.68               | 22.90               | 1.324                  | -            | -                         | 0.08             | 0.407                  | 0.539                  |
| 02       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.77               | 22.70               | 1.239                  | -            | -                         | -0.09            | 0.865                  | 1.072                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.72               | 22.70               | 1.253                  | -            | -                         | -0.03            | 0.700                  | 0.877                  |
|          | LTE Band 12 | 10M      | QPSK       | 50      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.74               | 22.70               | 1.247                  | -            | -                         | 0.14             | 0.688                  | 0.858                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.77               | 22.70               | 1.239                  | -            | -                         | 0.11             | 0.730                  | 0.904                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.72               | 22.70               | 1.253                  | -            | -                         | -0.05            | 0.600                  | 0.752                  |
|          | LTE Band 12 | 10M      | QPSK       | 50      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.74               | 22.70               | 1.247                  | -            | -                         | 0.18             | 0.600                  | 0.748                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.77               | 22.70               | 1.239                  | -            | -                         | 0.14             | 0.659                  | 0.816                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.72               | 22.70               | 1.253                  | -            | -                         | -0.17            | 0.539                  | 0.675                  |
|          | LTE Band 12 | 10M      | QPSK       | 50      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.74               | 22.70               | 1.247                  | -            | -                         | 0.17             | 0.537                  | 0.670                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.77               | 22.70               | 1.239                  | -            | -                         | -0.05            | 0.587                  | 0.727                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 23095  | 707.5       | 21.72               | 22.70               | 1.253                  | -            | -                         | 0.01             | 0.470                  | 0.589                  |
| 03       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.20               | 22.40               | 1.318                  | -            | -                         | -0.04            | 0.824                  | 1.086                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.09               | 22.40               | 1.352                  | -            | -                         | -0.17            | 0.663                  | 0.896                  |
|          | LTE Band 13 | 10M      | QPSK       | 50      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.05               | 22.40               | 1.365                  | -            | -                         | 0.04             | 0.669                  | 0.913                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.20               | 22.40               | 1.318                  | -            | -                         | -0.01            | 0.680                  | 0.896                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.09               | 22.40               | 1.352                  | -            | -                         | -0.08            | 0.551                  | 0.745                  |
|          | LTE Band 13 | 10M      | QPSK       | 50      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.05               | 22.40               | 1.365                  | -            | -                         | 0.05             | 0.556                  | 0.759                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.20               | 22.40               | 1.318                  | -            | -                         | 0.06             | 0.631                  | 0.832                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.09               | 22.40               | 1.352                  | -            | -                         | -0.09            | 0.514                  | 0.695                  |
|          | LTE Band 13 | 10M      | QPSK       | 50      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.05               | 22.40               | 1.365                  | -            | -                         | -0.08            | 0.534                  | 0.729                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.20               | 22.40               | 1.318                  | -            | -                         | 0.13             | 0.535                  | 0.705                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 23230  | 782         | 21.09               | 22.40               | 1.352                  | -            | -                         | 0.12             | 0.441                  | 0.596                  |
| 04       | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.72               | 22.40               | 1.169                  | -            | -                         | -0.03            | 0.903                  | 1.056                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.66               | 22.40               | 1.186                  | -            | -                         | 0.18             | 0.692                  | 0.821                  |
|          | LTE Band 14 | 10M      | QPSK       | 50      | 0         | -             | Right Cheek   | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.62               | 22.40               | 1.197                  | -            | -                         | 0.16             | 0.674                  | 0.807                  |
|          | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.72               | 22.40               | 1.169                  | -            | -                         | -0.1             | 0.792                  | 0.926                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.66               | 22.40               | 1.186                  | -            | -                         | 0.07             | 0.633                  | 0.751                  |
|          | LTE Band 14 | 10M      | QPSK       | 50      | 0         | -             | Right Tilted  | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.62               | 22.40               | 1.197                  | -            | -                         | 0.18             | 0.622                  | 0.744                  |
|          | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.72               | 22.40               | 1.169                  | -            | -                         | -0.1             | 0.739                  | 0.864                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.66               | 22.40               | 1.186                  | -            | -                         | 0.01             | 0.572                  | 0.678                  |
|          | LTE Band 14 | 10M      | QPSK       | 50      | 0         | -             | Left Cheek    | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.62               | 22.40               | 1.197                  | -            | -                         | -0.15            | 0.573                  | 0.686                  |
|          | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.72               | 22.40               | 1.169                  | -            | -                         | 0.19             | 0.639                  | 0.747                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Left Tilted   | 0mm      | Ant 0   | DSI2        | 23330  | 793         | 21.66               | 22.40               | 1.186                  | -            | -                         | 0.07             | 0.515                  | 0.611                  |
| 05       | FR1 n71     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Right Cheek   | 0mm      | Ant 0   | DSI2        | 136100 | 680.5       | 21.26               | 22.40               | 1.300                  | -            | -                         | 0.03             | 0.839                  | 1.091                  |
|          | FR1 n71     | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Right Cheek   | 0mm      | Ant 0   | DSI2        | 136100 | 680.5       | 21.17               | 22.40               | 1.327                  | -            | -                         | 0.03             | 0.790                  | 1.049                  |
|          | FR1 n71     | 20M      | QPSK       | 100     | 0         | DFT-SCS-15KHz | Right Cheek   | 0mm      | Ant 0   | DSI2        | 136100 | 680.5       | 21.06               | 22.40               | 1.361                  | -            | -                         | -0.15            | 0.634                  | 0.863                  |
|          | FR1 n71     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Right Tilted  | 0mm      | Ant 0   | DSI2        | 136100 | 680.5       | 21.26               | 22.40               | 1.300                  | -            | -                         | -0.15            | 0.672                  | 0.874                  |
|          | FR1 n71     | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Right Tilted  | 0mm      | Ant 0   | DSI2        | 136100 | 680.5       | 21.17               | 22.40               | 1.327                  | -            | -                         | 0.11             | 0.677                  | 0.899                  |
|          | FR1 n71     | 20M      | QPSK       | 100     | 0         | DFT-SCS-15KHz | Right Tilted  | 0mm      | Ant 0   | DSI2        | 136100 | 680.5       | 21.06               | 22.40               | 1.361                  | -            | -                         | -0.08            | 0.545                  | 0.742                  |



# FCC SAR Test Report

Report No. : FA460505

|        |             |     |      |     |    |               |              |     |       |      |                 |                 |       |       |       |   |   |       |       |       |
|--------|-------------|-----|------|-----|----|---------------|--------------|-----|-------|------|-----------------|-----------------|-------|-------|-------|---|---|-------|-------|-------|
|        | FR1 n71     | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 136100          | 680.5           | 21.26 | 22.40 | 1.300 | - | - | -0.17 | 0.591 | 0.768 |
|        | FR1 n71     | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 136100          | 680.5           | 21.17 | 22.40 | 1.327 | - | - | -0.08 | 0.624 | 0.828 |
|        | FR1 n71     | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 136100          | 680.5           | 21.06 | 22.40 | 1.361 | - | - | -0.04 | 0.507 | 0.690 |
|        | FR1 n71     | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 136100          | 680.5           | 21.26 | 22.40 | 1.300 | - | - | -0.08 | 0.490 | 0.637 |
|        | FR1 n71     | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 136100          | 680.5           | 21.17 | 22.40 | 1.327 | - | - | 0.17  | 0.520 | 0.690 |
| 06     | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.47 | 22.40 | 1.239 | - | - | -0.01 | 0.851 | 1.054 |
|        | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.44 | 22.40 | 1.247 | - | - | -0.04 | 0.801 | 0.999 |
|        | FR1 n12     | 15M | QPSK | 75  | 0  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.34 | 22.40 | 1.276 | - | - | -0.08 | 0.633 | 0.808 |
|        | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.47 | 22.40 | 1.239 | - | - | -0.13 | 0.711 | 0.881 |
|        | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.44 | 22.40 | 1.247 | - | - | -0.13 | 0.560 | 0.699 |
|        | FR1 n12     | 15M | QPSK | 75  | 0  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.34 | 22.40 | 1.276 | - | - | 0.06  | 0.529 | 0.675 |
|        | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.47 | 22.40 | 1.239 | - | - | -0.03 | 0.633 | 0.784 |
|        | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.44 | 22.40 | 1.247 | - | - | -0.03 | 0.649 | 0.810 |
|        | FR1 n12     | 15M | QPSK | 75  | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.34 | 22.40 | 1.276 | - | - | 0.08  | 0.525 | 0.670 |
|        | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.47 | 22.40 | 1.239 | - | - | -0.07 | 0.521 | 0.645 |
|        | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 141500          | 707.5           | 21.44 | 22.40 | 1.247 | - | - | 0.05  | 0.557 | 0.695 |
| 07     | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.47 | 22.40 | 1.239 | - | - | 0.03  | 0.865 | 1.072 |
|        | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.45 | 22.40 | 1.245 | - | - | -0.12 | 0.849 | 1.057 |
|        | FR1 n13     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.35 | 22.40 | 1.274 | - | - | 0.03  | 0.675 | 0.860 |
|        | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.47 | 22.40 | 1.239 | - | - | -0.16 | 0.665 | 0.824 |
|        | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.45 | 22.40 | 1.245 | - | - | -0.02 | 0.723 | 0.900 |
|        | FR1 n13     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.35 | 22.40 | 1.274 | - | - | 0.15  | 0.570 | 0.726 |
|        | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.47 | 22.40 | 1.239 | - | - | -0.09 | 0.649 | 0.804 |
|        | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.45 | 22.40 | 1.245 | - | - | 0.11  | 0.680 | 0.846 |
|        | FR1 n13     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.35 | 22.40 | 1.274 | - | - | -0.05 | 0.549 | 0.699 |
|        | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.47 | 22.40 | 1.239 | - | - | -0.08 | 0.533 | 0.660 |
|        | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 156400          | 782             | 21.45 | 22.40 | 1.245 | - | - | 0.16  | 0.585 | 0.728 |
| 08     | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.49 | 22.40 | 1.233 | - | - | -0.08 | 0.838 | 1.033 |
|        | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.44 | 22.40 | 1.247 | - | - | 0.05  | 0.801 | 0.999 |
|        | FR1 n14     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.34 | 22.40 | 1.276 | - | - | -0.03 | 0.646 | 0.825 |
|        | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.49 | 22.40 | 1.233 | - | - | -0.15 | 0.753 | 0.929 |
|        | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.44 | 22.40 | 1.247 | - | - | 0.02  | 0.742 | 0.926 |
|        | FR1 n14     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.34 | 22.40 | 1.276 | - | - | 0.07  | 0.587 | 0.749 |
|        | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.49 | 22.40 | 1.233 | - | - | 0.16  | 0.715 | 0.882 |
|        | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.44 | 22.40 | 1.247 | - | - | 0.13  | 0.694 | 0.866 |
|        | FR1 n14     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.34 | 22.40 | 1.276 | - | - | -0.18 | 0.530 | 0.677 |
|        | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.49 | 22.40 | 1.233 | - | - | 0.02  | 0.630 | 0.777 |
|        | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 158600          | 793             | 21.44 | 22.40 | 1.247 | - | - | 0.16  | 0.630 | 0.786 |
| 835MHz |             |     |      |     |    |               |              |     |       |      |                 |                 |       |       |       |   |   |       |       |       |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 0 | DSI2 | 4182            | 836.4           | 21.49 | 22.70 | 1.321 | - | - | -0.04 | 0.722 | 0.954 |
| 09     | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 0 | DSI2 | 4132            | 826.4           | 21.40 | 22.70 | 1.349 | - | - | -0.02 | 0.796 | 1.074 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 0 | DSI2 | 4233            | 846.6           | 21.42 | 22.70 | 1.343 | - | - | -0.05 | 0.709 | 0.952 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Tilted | 0mm | Ant 0 | DSI2 | 4182            | 836.4           | 21.49 | 22.70 | 1.321 | - | - | 0     | 0.676 | 0.893 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Tilted | 0mm | Ant 0 | DSI2 | 4132            | 826.4           | 21.40 | 22.70 | 1.349 | - | - | -0.13 | 0.695 | 0.938 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Tilted | 0mm | Ant 0 | DSI2 | 4233            | 846.6           | 21.42 | 22.70 | 1.343 | - | - | -0.01 | 0.667 | 0.896 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 0 | DSI2 | 4182            | 836.4           | 21.49 | 22.70 | 1.321 | - | - | -0.09 | 0.626 | 0.827 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 0 | DSI2 | 4132            | 826.4           | 21.40 | 22.70 | 1.349 | - | - | 0.05  | 0.649 | 0.875 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 0 | DSI2 | 4233            | 846.6           | 21.42 | 22.70 | 1.343 | - | - | 0.02  | 0.621 | 0.834 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Tilted  | 0mm | Ant 0 | DSI2 | 4182            | 836.4           | 21.49 | 22.70 | 1.321 | - | - | -0.13 | 0.594 | 0.785 |
|        | WCDMA V     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Tilted  | 0mm | Ant 0 | DSI2 | 4132            | 826.4           | 21.40 | 22.70 | 1.349 | - | - | 0.17  | 0.580 | 0.782 |
| 10     | LTE Band 26 | 15M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 0 | DSI2 | 26865           | 831.5           | 21.09 | 22.40 | 1.352 | - | - | -0.07 | 0.792 | 1.071 |
|        | LTE Band 5B | 10M | QPSK | 1   | 49 | -             | Right Cheek  | 0mm | Ant 0 | DSI2 | 20476+<br>20575 | 826.6+<br>836.5 | 20.95 | 22.40 | 1.396 | - | - | 0.03  | 0.712 | 0.994 |
|        | LTE Band 26 | 15M | QPSK | 36  | 0  | -             | Right Cheek  | 0mm | Ant 0 | DSI2 | 26865           | 831.5           | 21.08 | 22.40 | 1.355 | - | - | 0     | 0.634 | 0.859 |
|        | LTE Band 26 | 15M | QPSK | 75  | 0  | -             | Right Cheek  | 0mm | Ant 0 | DSI2 | 26865           | 831.5           | 21.07 | 22.40 | 1.358 | - | - | -0.04 | 0.613 | 0.833 |
|        | LTE Band 26 | 15M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 0 | DSI2 | 26865           | 831.5           | 21.09 | 22.40 | 1.352 | - | - | -0.15 | 0.736 | 0.995 |
|        | LTE Band 26 | 15M | QPSK | 36  | 0  | -             | Right Tilted | 0mm | Ant 0 | DSI2 | 26865           | 831.5           | 21.08 | 22.40 | 1.355 | - | - | 0.11  | 0.608 | 0.824 |





# FCC SAR Test Report

Report No. : FA460505

|         |              |     |      |     |    |               |              |     |       |      |               |             |       |       |       |   |   |       |       |       |
|---------|--------------|-----|------|-----|----|---------------|--------------|-----|-------|------|---------------|-------------|-------|-------|-------|---|---|-------|-------|-------|
|         | LTE Band 26  | 15M | QPSK | 75  | 0  | -             | Right Tilted | 0mm | Ant 0 | DSI2 | 26865         | 831.5       | 21.07 | 22.40 | 1.358 | - | - | -0.02 | 0.588 | 0.799 |
|         | LTE Band 26  | 15M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 0 | DSI2 | 26865         | 831.5       | 21.09 | 22.40 | 1.352 | - | - | 0.1   | 0.639 | 0.864 |
|         | LTE Band 26  | 15M | QPSK | 36  | 0  | -             | Left Cheek   | 0mm | Ant 0 | DSI2 | 26865         | 831.5       | 21.08 | 22.40 | 1.355 | - | - | 0.04  | 0.521 | 0.706 |
|         | LTE Band 26  | 15M | QPSK | 75  | 0  | -             | Left Cheek   | 0mm | Ant 0 | DSI2 | 26865         | 831.5       | 21.07 | 22.40 | 1.358 | - | - | 0.13  | 0.516 | 0.701 |
|         | LTE Band 26  | 15M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 0 | DSI2 | 26865         | 831.5       | 21.09 | 22.40 | 1.352 | - | - | -0.18 | 0.583 | 0.788 |
|         | LTE Band 26  | 15M | QPSK | 36  | 0  | -             | Left Tilted  | 0mm | Ant 0 | DSI2 | 26865         | 831.5       | 21.08 | 22.40 | 1.355 | - | - | -0.11 | 0.482 | 0.653 |
| 11      | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.86 | 22.00 | 1.300 | - | - | -0.18 | 0.833 | 1.083 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.81 | 22.00 | 1.315 | - | - | 0.07  | 0.748 | 0.984 |
|         | FR1 n26      | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.79 | 22.00 | 1.321 | - | - | 0     | 0.589 | 0.778 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.86 | 22.00 | 1.300 | - | - | 0.01  | 0.748 | 0.973 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.81 | 22.00 | 1.315 | - | - | -0.01 | 0.723 | 0.951 |
|         | FR1 n26      | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.79 | 22.00 | 1.321 | - | - | -0.06 | 0.559 | 0.739 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.86 | 22.00 | 1.300 | - | - | -0.04 | 0.658 | 0.856 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.81 | 22.00 | 1.315 | - | - | -0.09 | 0.619 | 0.814 |
|         | FR1 n26      | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.79 | 22.00 | 1.321 | - | - | -0.17 | 0.499 | 0.659 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.86 | 22.00 | 1.300 | - | - | -0.1  | 0.604 | 0.785 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 166300        | 831.5       | 20.81 | 22.00 | 1.315 | - | - | 0.18  | 0.594 | 0.781 |
| 1750MHz |              |     |      |     |    |               |              |     |       |      |               |             |       |       |       |   |   |       |       |       |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 2 | DSI2 | 1413          | 1732.6      | 18.31 | 19.40 | 1.285 | - | - | -0.15 | 0.564 | 0.725 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Tilted | 0mm | Ant 2 | DSI2 | 1413          | 1732.6      | 18.31 | 19.40 | 1.285 | - | - | -0.19 | 0.194 | 0.249 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 2 | DSI2 | 1413          | 1732.6      | 18.31 | 19.40 | 1.285 | - | - | 0.02  | 0.814 | 1.046 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 2 | DSI2 | 1312          | 1712.4      | 18.25 | 19.40 | 1.303 | - | - | 0.12  | 0.754 | 0.983 |
| 12      | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 2 | DSI2 | 1513          | 1752.6      | 18.26 | 19.40 | 1.300 | - | - | 0.02  | 0.840 | 1.092 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Tilted  | 0mm | Ant 2 | DSI2 | 1413          | 1732.6      | 18.31 | 19.40 | 1.285 | - | - | -0.16 | 0.152 | 0.195 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.83 | 18.90 | 1.279 | - | - | -0.12 | 0.535 | 0.684 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.80 | 18.90 | 1.288 | - | - | -0.05 | 0.435 | 0.560 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.83 | 18.90 | 1.279 | - | - | 0.01  | 0.206 | 0.264 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.80 | 18.90 | 1.288 | - | - | -0.04 | 0.170 | 0.219 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.83 | 18.90 | 1.279 | - | - | -0.06 | 0.786 | 1.006 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132072        | 1720        | 17.68 | 18.90 | 1.324 | - | - | -0.15 | 0.727 | 0.963 |
| 13      | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132572        | 1770        | 17.76 | 18.90 | 1.300 | - | - | 0.05  | 0.830 | 1.079 |
|         | LTE Band 66C | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132572+132374 | 1770+1750.2 | 17.65 | 18.90 | 1.334 | - | - | 0.06  | 0.728 | 0.971 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.80 | 18.90 | 1.288 | - | - | 0.03  | 0.637 | 0.821 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132072        | 1720        | 17.72 | 18.90 | 1.312 | - | - | -0.13 | 0.606 | 0.795 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132572        | 1770        | 17.65 | 18.90 | 1.334 | - | - | 0.16  | 0.675 | 0.900 |
|         | LTE Band 66  | 20M | QPSK | 100 | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.70 | 18.90 | 1.318 | - | - | -0.15 | 0.656 | 0.865 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.83 | 18.90 | 1.279 | - | - | -0.02 | 0.166 | 0.212 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 2 | DSI2 | 132322        | 1745        | 17.80 | 18.90 | 1.288 | - | - | 0.1   | 0.137 | 0.176 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 23.45 | 25.00 | 1.429 | - | - | 0.07  | 0.160 | 0.229 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 22.36 | 24.00 | 1.459 | - | - | -0.09 | 0.142 | 0.207 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 23.45 | 25.00 | 1.429 | - | - | -0.16 | 0.078 | 0.111 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 22.36 | 24.00 | 1.459 | - | - | -0.18 | 0.072 | 0.105 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 23.45 | 25.00 | 1.429 | - | - | -0.07 | 0.197 | 0.281 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 22.36 | 24.00 | 1.459 | - | - | -0.1  | 0.154 | 0.225 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 23.45 | 25.00 | 1.429 | - | - | -0.17 | 0.073 | 0.104 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 5 | DSI2 | 132322        | 1745        | 22.36 | 24.00 | 1.459 | - | - | -0.01 | 0.066 | 0.096 |
|         | FR1 n66      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.79 | 19.70 | 1.233 | - | - | -0.11 | 0.567 | 0.699 |
|         | FR1 n66      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.74 | 19.70 | 1.247 | - | - | 0.14  | 0.618 | 0.771 |
|         | FR1 n66      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.79 | 19.70 | 1.233 | - | - | 0.1   | 0.206 | 0.254 |
|         | FR1 n66      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.74 | 19.70 | 1.247 | - | - | 0.16  | 0.233 | 0.291 |
|         | FR1 n66      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.79 | 19.70 | 1.233 | - | - | 0.02  | 0.840 | 1.036 |
| 14      | FR1 n66      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.74 | 19.70 | 1.247 | - | - | -0.04 | 0.859 | 1.072 |
|         | FR1 n66      | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.73 | 19.70 | 1.250 | - | - | -0.16 | 0.649 | 0.811 |
|         | FR1 n66      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.79 | 19.70 | 1.233 | - | - | 0.05  | 0.159 | 0.196 |
|         | FR1 n66      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 349000        | 1745        | 18.74 | 19.70 | 1.247 | - | - | -0.03 | 0.170 | 0.212 |
|         | FR1 n66      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 5 | DSI2 | 349000        | 1745        | 24.36 | 25.00 | 1.159 | - | - | 0.17  | 0.175 | 0.203 |





# FCC SAR Test Report

Report No. : FA460505

|         |             |     |      |     |    |               |              |     |       |      |        |        |       |       |       |   |   |       |       |       |
|---------|-------------|-----|------|-----|----|---------------|--------------|-----|-------|------|--------|--------|-------|-------|-------|---|---|-------|-------|-------|
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.26 | 25.00 | 1.186 | - | - | -0.15 | 0.183 | 0.217 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.36 | 25.00 | 1.159 | - | - | 0.16  | 0.084 | 0.097 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.26 | 25.00 | 1.186 | - | - | 0.05  | 0.088 | 0.104 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.36 | 25.00 | 1.159 | - | - | -0.06 | 0.175 | 0.203 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.26 | 25.00 | 1.186 | - | - | -0.01 | 0.195 | 0.231 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.36 | 25.00 | 1.159 | - | - | -0.13 | 0.072 | 0.083 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 5 | DSI2 | 349000 | 1745   | 24.26 | 25.00 | 1.186 | - | - | -0.01 | 0.089 | 0.106 |
| 1900MHz |             |     |      |     |    |               |              |     |       |      |        |        |       |       |       |   |   |       |       |       |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 2 | DSI2 | 9400   | 1880   | 18.45 | 19.60 | 1.303 | - | - | -0.11 | 0.639 | 0.833 |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 2 | DSI2 | 9262   | 1852.4 | 18.39 | 19.60 | 1.321 | - | - | 0.19  | 0.645 | 0.852 |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Right Cheek  | 0mm | Ant 2 | DSI2 | 9538   | 1907.6 | 18.40 | 19.60 | 1.318 | - | - | -0.14 | 0.585 | 0.771 |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Right Tilted | 0mm | Ant 2 | DSI2 | 9400   | 1880   | 18.45 | 19.60 | 1.303 | - | - | -0.18 | 0.190 | 0.248 |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 2 | DSI2 | 9400   | 1880   | 18.45 | 19.60 | 1.303 | - | - | 0.16  | 0.764 | 0.996 |
| 15      | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 2 | DSI2 | 9262   | 1852.4 | 18.39 | 19.60 | 1.321 | - | - | 0     | 0.824 | 1.089 |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Cheek   | 0mm | Ant 2 | DSI2 | 9538   | 1907.6 | 18.40 | 19.60 | 1.318 | - | - | 0.01  | 0.676 | 0.891 |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Tilted  | 0mm | Ant 2 | DSI2 | 9400   | 1880   | 18.45 | 19.60 | 1.303 | - | - | -0.04 | 0.133 | 0.173 |
|         | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 23.62 | 24.40 | 1.197 | - | - | 0.15  | 0.150 | 0.180 |
|         | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 22.51 | 24.00 | 1.409 | - | - | -0.05 | 0.131 | 0.185 |
|         | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 23.62 | 24.40 | 1.197 | - | - | -0.08 | 0.067 | 0.080 |
|         | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 22.51 | 24.00 | 1.409 | - | - | -0.08 | 0.071 | 0.100 |
| 16      | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 23.62 | 24.40 | 1.197 | - | - | -0.13 | 0.177 | 0.212 |
|         | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 22.51 | 24.00 | 1.409 | - | - | 0.03  | 0.143 | 0.202 |
|         | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 23.62 | 24.40 | 1.197 | - | - | -0.12 | 0.065 | 0.078 |
|         | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 5 | DSI2 | 18900  | 1880   | 22.51 | 24.00 | 1.409 | - | - | 0.07  | 0.062 | 0.087 |
|         | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.49 | 19.60 | 1.291 | - | - | 0.09  | 0.598 | 0.772 |
|         | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.37 | 19.60 | 1.327 | - | - | -0.13 | 0.475 | 0.631 |
|         | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.49 | 19.60 | 1.291 | - | - | -0.16 | 0.172 | 0.222 |
|         | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.37 | 19.60 | 1.327 | - | - | -0.05 | 0.142 | 0.188 |
|         | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.49 | 19.60 | 1.291 | - | - | -0.14 | 0.745 | 0.962 |
| 17      | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26140  | 1860   | 18.31 | 19.60 | 1.346 | - | - | 0.03  | 0.796 | 1.071 |
|         | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26590  | 1905   | 18.37 | 19.60 | 1.327 | - | - | -0.15 | 0.676 | 0.897 |
|         | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.37 | 19.60 | 1.327 | - | - | -0.12 | 0.607 | 0.806 |
|         | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26140  | 1860   | 18.24 | 19.60 | 1.368 | - | - | -0.17 | 0.649 | 0.888 |
|         | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26590  | 1905   | 18.26 | 19.60 | 1.361 | - | - | 0.08  | 0.556 | 0.757 |
|         | LTE Band 25 | 20M | QPSK | 100 | 0  | -             | Left Cheek   | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.20 | 19.60 | 1.380 | - | - | 0.01  | 0.616 | 0.850 |
|         | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.49 | 19.60 | 1.291 | - | - | 0.02  | 0.120 | 0.155 |
|         | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 2 | DSI2 | 26340  | 1880   | 18.37 | 19.60 | 1.327 | - | - | -0.11 | 0.098 | 0.130 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.79 | 19.60 | 1.205 | - | - | 0.09  | 0.656 | 0.791 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.73 | 19.60 | 1.222 | - | - | 0.1   | 0.609 | 0.744 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.79 | 19.60 | 1.205 | - | - | 0.15  | 0.217 | 0.261 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.73 | 19.60 | 1.222 | - | - | 0.09  | 0.201 | 0.246 |
| 18      | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.79 | 19.60 | 1.205 | - | - | -0.03 | 0.868 | 1.046 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.73 | 19.60 | 1.222 | - | - | 0.05  | 0.739 | 0.903 |
|         | FR1 n25     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.58 | 19.60 | 1.265 | - | - | 0.08  | 0.603 | 0.763 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.79 | 19.60 | 1.205 | - | - | -0.18 | 0.157 | 0.189 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 376500 | 1882.5 | 18.73 | 19.60 | 1.222 | - | - | -0.03 | 0.138 | 0.169 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.38 | 24.40 | 1.265 | - | - | -0.09 | 0.152 | 0.192 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.28 | 24.40 | 1.294 | - | - | 0.18  | 0.132 | 0.171 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.38 | 24.40 | 1.265 | - | - | 0.11  | 0.072 | 0.091 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.28 | 24.40 | 1.294 | - | - | 0.07  | 0.077 | 0.100 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.38 | 24.40 | 1.265 | - | - | -0.03 | 0.157 | 0.199 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.28 | 24.40 | 1.294 | - | - | -0.03 | 0.153 | 0.198 |
|         | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.38 | 24.40 | 1.265 | - | - | 0.09  | 0.069 | 0.087 |
|         | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 5 | DSI2 | 376500 | 1882.5 | 23.28 | 24.40 | 1.294 | - | - | -0.08 | 0.067 | 0.087 |
| 2300MHz |             |     |      |     |    |               |              |     |       |      |        |        |       |       |       |   |   |       |       |       |
| 19      | LTE Band 30 | 10M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 27710  | 2310   | 15.48 | 16.20 | 1.180 | - | - | -0.01 | 0.895 | 1.056 |



# FCC SAR Test Report

Report No. : FA460505

|         |                      |     |      |     |    |               |              |     |       |      |             |             |       |       |       |      |       |       |       |       |
|---------|----------------------|-----|------|-----|----|---------------|--------------|-----|-------|------|-------------|-------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.35 | 16.20 | 1.216 | -    | -     | -0.05 | 0.714 | 0.868 |
|         | LTE Band 30          | 10M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.31 | 16.20 | 1.227 | -    | -     | -0.03 | 0.701 | 0.860 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.48 | 16.20 | 1.180 | -    | -     | 0.17  | 0.376 | 0.444 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Right Tilted | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.35 | 16.20 | 1.216 | -    | -     | -0.14 | 0.298 | 0.362 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.48 | 16.20 | 1.180 | -    | -     | -0.06 | 0.243 | 0.287 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Left Cheek   | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.35 | 16.20 | 1.216 | -    | -     | -0.15 | 0.190 | 0.231 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.48 | 16.20 | 1.180 | -    | -     | -0.16 | 0.168 | 0.198 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Left Tilted  | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.35 | 16.20 | 1.216 | -    | -     | -0.03 | 0.135 | 0.164 |
|         | LTE Band 30 Other PA | 10M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 27710       | 2310        | 15.48 | 16.20 | 1.180 | -    | -     | 0.09  | 0.788 | 0.930 |
| 20      | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.22 | 16.20 | 1.253 | -    | -     | 0.03  | 0.859 | 1.076 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.16 | 16.20 | 1.271 | -    | -     | 0.02  | 0.770 | 0.978 |
|         | FR1 n30              | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.06 | 16.20 | 1.300 | -    | -     | 0     | 0.661 | 0.859 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.22 | 16.20 | 1.253 | -    | -     | 0.18  | 0.394 | 0.494 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.16 | 16.20 | 1.271 | -    | -     | -0.11 | 0.363 | 0.461 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.22 | 16.20 | 1.253 | -    | -     | -0.04 | 0.187 | 0.234 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.16 | 16.20 | 1.271 | -    | -     | -0.08 | 0.177 | 0.225 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.22 | 16.20 | 1.253 | -    | -     | -0.14 | 0.118 | 0.148 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.16 | 16.20 | 1.271 | -    | -     | 0.01  | 0.107 | 0.136 |
|         | FR1 n30 Other PA     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 462000      | 2310        | 15.22 | 16.20 | 1.253 | -    | -     | 0.09  | 0.815 | 1.021 |
| 2600MHz |                      |     |      |     |    |               |              |     |       |      |             |             |       |       |       |      |       |       |       |       |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.91 | 16.90 | 1.256 | -    | -     | 0.02  | 0.813 | 1.021 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 20850       | 2510        | 15.75 | 16.90 | 1.303 | -    | -     | 0.16  | 0.738 | 0.962 |
| 21      | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21350       | 2560        | 15.81 | 16.90 | 1.285 | -    | -     | 0.01  | 0.838 | 1.077 |
|         | LTE Band 7C          | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21350+21152 | 2560+2540.2 | 15.71 | 16.90 | 1.315 | -    | -     | 0.09  | 0.744 | 0.979 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.85 | 16.90 | 1.274 | -    | -     | 0.06  | 0.671 | 0.855 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 20850       | 2510        | 15.73 | 16.90 | 1.309 | -    | -     | -0.02 | 0.625 | 0.818 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21350       | 2560        | 15.64 | 16.90 | 1.337 | -    | -     | 0.07  | 0.692 | 0.925 |
|         | LTE Band 7           | 20M | QPSK | 100 | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.75 | 16.90 | 1.303 | -    | -     | -0.17 | 0.671 | 0.874 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.91 | 16.90 | 1.256 | -    | -     | 0.1   | 0.438 | 0.550 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.85 | 16.90 | 1.274 | -    | -     | -0.13 | 0.350 | 0.446 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.91 | 16.90 | 1.256 | -    | -     | -0.17 | 0.271 | 0.340 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.85 | 16.90 | 1.274 | -    | -     | 0.11  | 0.221 | 0.281 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.91 | 16.90 | 1.256 | -    | -     | 0.07  | 0.271 | 0.340 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 3 | DSI2 | 21100       | 2535        | 15.85 | 16.90 | 1.274 | -    | -     | -0.03 | 0.213 | 0.271 |
|         | LTE Band 7 Other PA  | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 21350       | 2560        | 15.81 | 16.90 | 1.285 | -    | -     | 0.09  | 0.786 | 1.010 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.61 | 18.70 | 1.285 | 62.9 | 1.006 | 0.09  | 0.789 | 1.020 |
|         | LTE Band 41C         | 20M | QPSK | 1   | 99 | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40620+40818 | 2593+2612.8 | 17.55 | 18.70 | 1.303 | 62.9 | 1.006 | 0.09  | 0.755 | 0.990 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 39750       | 2506        | 17.41 | 18.70 | 1.346 | 62.9 | 1.006 | -0.04 | 0.702 | 0.950 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40185       | 2549.5      | 17.45 | 18.70 | 1.334 | 62.9 | 1.006 | -0.18 | 0.751 | 1.007 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 41055       | 2636.5      | 17.52 | 18.70 | 1.312 | 62.9 | 1.006 | -0.13 | 0.765 | 1.010 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 41490       | 2680        | 17.40 | 18.70 | 1.349 | 62.9 | 1.006 | -0.13 | 0.721 | 0.978 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.46 | 18.70 | 1.330 | 62.9 | 1.006 | 0     | 0.642 | 0.859 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 39750       | 2506        | 17.31 | 18.70 | 1.377 | 62.9 | 1.006 | -0.15 | 0.587 | 0.813 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40185       | 2549.5      | 17.43 | 18.70 | 1.340 | 62.9 | 1.006 | -0.09 | 0.632 | 0.852 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 41055       | 2636.5      | 17.37 | 18.70 | 1.358 | 62.9 | 1.006 | 0.05  | 0.628 | 0.858 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 41490       | 2680        | 17.28 | 18.70 | 1.387 | 62.9 | 1.006 | 0.13  | 0.625 | 0.872 |
|         | LTE Band 41          | 20M | QPSK | 100 | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.51 | 18.70 | 1.315 | 62.9 | 1.006 | 0     | 0.632 | 0.836 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.61 | 18.70 | 1.285 | 62.9 | 1.006 | -0.12 | 0.293 | 0.379 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.46 | 18.70 | 1.330 | 62.9 | 1.006 | -0.02 | 0.235 | 0.315 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.61 | 18.70 | 1.285 | 62.9 | 1.006 | 0.03  | 0.226 | 0.292 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.46 | 18.70 | 1.330 | 62.9 | 1.006 | -0.09 | 0.180 | 0.241 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.61 | 18.70 | 1.285 | 62.9 | 1.006 | -0.06 | 0.166 | 0.215 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 17.46 | 18.70 | 1.330 | 62.9 | 1.006 | -0.19 | 0.131 | 0.175 |
| 22      | LTE Band 41 HPUE     | 20M | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40620       | 2593        | 19.25 | 20.30 | 1.274 | 42.9 | 1.009 | 0.09  | 0.835 | 1.073 |
|         | LTE Band 41C HPUE    | 20M | QPSK | 1   | 99 | -             | Right Cheek  | 0mm | Ant 3 | DSI2 | 40620+40818 | 2593+2612.8 | 19.05 | 20.30 | 1.334 | 42.9 | 1.009 | 0.09  | 0.742 | 0.998 |



# FCC SAR Test Report

Report No. : FA460505

|         |                      |      |      |     |    |               |              |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
|---------|----------------------|------|------|-----|----|---------------|--------------|-----|-------|------|-----------------|-----------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | FR1 n7               | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.62 | 17.40 | 1.197 | -    | -     | 0.08  | 0.858 | 1.027 |
| 23      | FR1 n7               | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.58 | 17.40 | 1.208 | -    | -     | 0.01  | 0.899 | 1.086 |
|         | FR1 n7               | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.50 | 17.40 | 1.230 | -    | -     | 0.01  | 0.695 | 0.855 |
|         | FR1 n7               | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.62 | 17.40 | 1.197 | -    | -     | 0.03  | 0.538 | 0.644 |
|         | FR1 n7               | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.58 | 17.40 | 1.208 | -    | -     | -0.08 | 0.470 | 0.568 |
|         | FR1 n7               | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.62 | 17.40 | 1.197 | -    | -     | 0.1   | 0.330 | 0.395 |
|         | FR1 n7               | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.58 | 17.40 | 1.208 | -    | -     | -0.18 | 0.303 | 0.366 |
|         | FR1 n7               | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.62 | 17.40 | 1.197 | -    | -     | 0.12  | 0.330 | 0.395 |
|         | FR1 n7               | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.58 | 17.40 | 1.208 | -    | -     | 0.08  | 0.286 | 0.345 |
|         | FR1 n7 Other PA      | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 507000          | 2535            | 16.58 | 17.40 | 1.208 | -    | -     | 0.02  | 0.745 | 0.900 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.29 | 17.10 | 1.205 | -    | -     | 0.02  | 0.900 | 1.085 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.27 | 17.10 | 1.211 | -    | -     | -0.03 | 0.824 | 0.998 |
|         | FR1 n41 PC2          | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.22 | 17.10 | 1.225 | -    | -     | 0.14  | 0.737 | 0.903 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.29 | 17.10 | 1.205 | -    | -     | 0.11  | 0.410 | 0.494 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.27 | 17.10 | 1.211 | -    | -     | -0.05 | 0.275 | 0.333 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.29 | 17.10 | 1.205 | -    | -     | 0.14  | 0.275 | 0.331 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.27 | 17.10 | 1.211 | -    | -     | -0.17 | 0.241 | 0.292 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.29 | 17.10 | 1.205 | -    | -     | -0.05 | 0.248 | 0.299 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.27 | 17.10 | 1.211 | -    | -     | 0.01  | 0.167 | 0.202 |
|         | FR1 n41 PC2 Other PA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 518598          | 2592.99         | 16.29 | 17.10 | 1.205 | -    | -     | 0.06  | 0.824 | 0.993 |
| 24      | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.31 | 17.30 | 1.256 | -    | -     | 0.12  | 0.872 | 1.095 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.19 | 17.30 | 1.291 | -    | -     | -0.17 | 0.765 | 0.988 |
|         | FR1 n41 PC2          | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.11 | 17.30 | 1.315 | -    | -     | 0.04  | 0.635 | 0.835 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.31 | 17.30 | 1.256 | -    | -     | -0.01 | 0.605 | 0.760 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.19 | 17.30 | 1.291 | -    | -     | -0.08 | 0.511 | 0.660 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.31 | 17.30 | 1.256 | -    | -     | 0.06  | 0.446 | 0.560 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.19 | 17.30 | 1.291 | -    | -     | -0.09 | 0.384 | 0.496 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.31 | 17.30 | 1.256 | -    | -     | 0.13  | 0.298 | 0.374 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 0 | DSI2 | 518598          | 2592.99         | 16.19 | 17.30 | 1.291 | -    | -     | 0.12  | 0.263 | 0.340 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.35 | 20.40 | 1.274 | -    | -     | 0.18  | 0.097 | 0.124 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.32 | 20.40 | 1.282 | -    | -     | 0.16  | 0.092 | 0.118 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.35 | 20.40 | 1.274 | -    | -     | -0.1  | 0.000 | 0.000 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.32 | 20.40 | 1.282 | -    | -     | 0.07  | 0.000 | 0.000 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.35 | 20.40 | 1.274 | -    | -     | 0.01  | 0.098 | 0.125 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.32 | 20.40 | 1.282 | -    | -     | 0.18  | 0.095 | 0.122 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.35 | 20.40 | 1.274 | -    | -     | -0.1  | 0.038 | 0.048 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 5 | DSI2 | 518598          | 2592.99         | 19.32 | 20.40 | 1.282 | -    | -     | 0.01  | 0.000 | 0.000 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.22 | 20.30 | 1.282 | -    | -     | -0.15 | 0.137 | 0.176 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.17 | 20.30 | 1.297 | -    | -     | 0.19  | 0.126 | 0.163 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.22 | 20.30 | 1.282 | -    | -     | 0.07  | 0.055 | 0.071 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.17 | 20.30 | 1.297 | -    | -     | -0.18 | 0.058 | 0.075 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.22 | 20.30 | 1.282 | -    | -     | 0.08  | 0.366 | 0.469 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.17 | 20.30 | 1.297 | -    | -     | 0.03  | 0.320 | 0.415 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.22 | 20.30 | 1.282 | -    | -     | -0.15 | 0.058 | 0.074 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 518598          | 2592.99         | 19.17 | 20.30 | 1.297 | -    | -     | 0.11  | 0.055 | 0.071 |
| 3500MHz |                      |      |      |     |    |               |              |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
|         | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Right Cheek  | 0mm | Ant 4 | DSI2 | 55830           | 3609            | 17.41 | 18.20 | 1.199 | 62.9 | 1.006 | -0.08 | 0.305 | 0.368 |
|         | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Right Cheek  | 0mm | Ant 4 | DSI2 | 55830           | 3609            | 17.15 | 18.20 | 1.274 | 62.9 | 1.006 | -0.08 | 0.259 | 0.332 |
|         | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Right Tilted | 0mm | Ant 4 | DSI2 | 55830           | 3609            | 17.41 | 18.20 | 1.199 | 62.9 | 1.006 | -0.13 | 0.107 | 0.129 |
|         | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Right Tilted | 0mm | Ant 4 | DSI2 | 55830           | 3609            | 17.15 | 18.20 | 1.274 | 62.9 | 1.006 | -0.13 | 0.088 | 0.113 |
|         | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 55830           | 3609            | 17.41 | 18.20 | 1.199 | 62.9 | 1.006 | 0.06  | 0.757 | 0.913 |
| 25      | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 55340+<br>55538 | 3560+<br>3579.8 | 17.24 | 18.20 | 1.247 | 62.9 | 1.006 | 0.07  | 0.866 | 1.087 |
|         | LTE Band 48C         | 20M  | QPSK | 1   | 99 | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 55340+<br>55538 | 3560+<br>3579.8 | 17.21 | 18.20 | 1.256 | 62.9 | 1.006 | 0.04  | 0.788 | 0.996 |
|         | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 56150           | 3641            | 17.31 | 18.20 | 1.227 | 62.9 | 1.006 | -0.03 | 0.716 | 0.884 |
|         | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 56640           | 3690            | 17.34 | 18.20 | 1.219 | 62.9 | 1.006 | -0.03 | 0.753 | 0.923 |



# FCC SAR Test Report

Report No. : FA460505

|    |                         |      |      |     |    |               |              |     |       |      |        |         |       |       |       |      |       |       |       |       |
|----|-------------------------|------|------|-----|----|---------------|--------------|-----|-------|------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 55830  | 3609    | 17.15 | 18.20 | 1.274 | 62.9 | 1.006 | 0.08  | 0.614 | 0.787 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 55340  | 3560    | 17.12 | 18.20 | 1.282 | 62.9 | 1.006 | -0.07 | 0.707 | 0.912 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 56150  | 3641    | 17.28 | 18.20 | 1.236 | 62.9 | 1.006 | 0.05  | 0.589 | 0.732 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 56640  | 3690    | 17.19 | 18.20 | 1.262 | 62.9 | 1.006 | -0.11 | 0.591 | 0.750 |
|    | LTE Band 48             | 20M  | QPSK | 100 | 0  | -             | Left Cheek   | 0mm | Ant 4 | DSI2 | 55830  | 3609    | 17.08 | 18.20 | 1.294 | 62.9 | 1.006 | -0.12 | 0.614 | 0.799 |
|    | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Left Tilted  | 0mm | Ant 4 | DSI2 | 55830  | 3609    | 17.41 | 18.20 | 1.199 | 62.9 | 1.006 | 0.03  | 0.176 | 0.212 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Left Tilted  | 0mm | Ant 4 | DSI2 | 55830  | 3609    | 17.15 | 18.20 | 1.274 | 62.9 | 1.006 | -0.09 | 0.148 | 0.190 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.21 | 15.90 | 1.172 | -    | -     | 0.05  | 0.337 | 0.395 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.18 | 15.90 | 1.180 | -    | -     | -0.15 | 0.333 | 0.393 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.21 | 15.90 | 1.172 | -    | -     | 0.13  | 0.111 | 0.130 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.18 | 15.90 | 1.180 | -    | -     | -0.18 | 0.109 | 0.129 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.21 | 15.90 | 1.172 | -    | -     | 0.02  | 0.852 | 0.999 |
| 26 | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 638000 | 3570    | 15.15 | 15.90 | 1.189 | -    | -     | -0.06 | 0.908 | 1.079 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 645332 | 3679.98 | 15.07 | 15.90 | 1.211 | -    | -     | 0.16  | 0.793 | 0.960 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.18 | 15.90 | 1.180 | -    | -     | -0.03 | 0.830 | 0.980 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 638000 | 3570    | 15.07 | 15.90 | 1.211 | -    | -     | 0.07  | 0.886 | 1.073 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 645332 | 3679.98 | 15.00 | 15.90 | 1.230 | -    | -     | 0     | 0.773 | 0.951 |
|    | FR1 n48                 | 40M  | QPSK | 100 | 0  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.11 | 15.90 | 1.199 | -    | -     | 0.01  | 0.844 | 1.012 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.21 | 15.90 | 1.172 | -    | -     | -0.01 | 0.196 | 0.230 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 15.18 | 15.90 | 1.180 | -    | -     | -0.09 | 0.189 | 0.223 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.68 | 15.40 | 1.180 | -    | -     | -0.17 | 0.237 | 0.280 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.63 | 15.40 | 1.194 | -    | -     | -0.04 | 0.230 | 0.275 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.68 | 15.40 | 1.180 | -    | -     | 0     | 0.081 | 0.096 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.63 | 15.40 | 1.194 | -    | -     | -0.13 | 0.076 | 0.091 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.68 | 15.40 | 1.180 | -    | -     | -0.12 | 0.612 | 0.722 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.63 | 15.40 | 1.194 | -    | -     | -0.09 | 0.606 | 0.724 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.68 | 15.40 | 1.180 | -    | -     | 0.02  | 0.143 | 0.169 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 656000 | 3840    | 14.63 | 15.40 | 1.194 | -    | -     | -0.13 | 0.145 | 0.173 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.07 | 15.40 | 1.358 | -    | -     | 0.06  | 0.281 | 0.382 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.02 | 15.40 | 1.374 | -    | -     | 0     | 0.288 | 0.396 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.07 | 15.40 | 1.358 | -    | -     | -0.15 | 0.097 | 0.132 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.02 | 15.40 | 1.374 | -    | -     | 0.11  | 0.095 | 0.131 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.07 | 15.40 | 1.358 | -    | -     | 0.04  | 0.759 | 1.031 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.02 | 15.40 | 1.374 | -    | -     | 0.1   | 0.706 | 0.970 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 13.89 | 15.40 | 1.416 | -    | -     | 0.08  | 0.689 | 0.975 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.07 | 15.40 | 1.358 | -    | -     | 0.13  | 0.161 | 0.219 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 633334 | 3500.01 | 14.02 | 15.40 | 1.374 | -    | -     | -0.18 | 0.164 | 0.225 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.44 | 15.40 | 1.247 | -    | -     | -0.16 | 0.269 | 0.336 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.39 | 15.40 | 1.262 | -    | -     | -0.15 | 0.239 | 0.302 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.44 | 15.40 | 1.247 | -    | -     | -0.14 | 0.088 | 0.110 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.39 | 15.40 | 1.262 | -    | -     | -0.19 | 0.078 | 0.098 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.44 | 15.40 | 1.247 | -    | -     | -0.16 | 0.671 | 0.837 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.39 | 15.40 | 1.262 | -    | -     | 0.06  | 0.579 | 0.731 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.35 | 15.40 | 1.274 | -    | -     | 0.09  | 0.622 | 0.792 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.44 | 15.40 | 1.247 | -    | -     | 0.12  | 0.156 | 0.195 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 4 | DSI2 | 641666 | 3624.99 | 14.39 | 15.40 | 1.262 | -    | -     | -0.16 | 0.134 | 0.169 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.27 | 16.60 | 1.079 | -    | -     | 0.07  | 0.629 | 0.679 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.20 | 16.60 | 1.096 | -    | -     | -0.16 | 0.453 | 0.497 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.27 | 16.60 | 1.079 | -    | -     | -0.03 | 0.082 | 0.088 |
|    | FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.20 | 16.60 | 1.096 | -    | -     | 0.17  | 0.060 | 0.066 |



# FCC SAR Test Report

Report No. : FA460505

|    |                         |      |      |     |    |               |              |     |       |      |        |         |       |       |       |   |   |       |       |       |
|----|-------------------------|------|------|-----|----|---------------|--------------|-----|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.27 | 16.60 | 1.079 | - | - | 0.16  | 0.614 | 0.662 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.20 | 16.60 | 1.096 | - | - | 0.05  | 0.459 | 0.503 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.27 | 16.60 | 1.079 | - | - | -0.13 | 0.076 | 0.082 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 656000 | 3840    | 16.20 | 16.60 | 1.096 | - | - | -0.01 | 0.054 | 0.059 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.15 | 16.60 | 1.396 | - | - | -0.17 | 0.702 | 0.980 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.11 | 16.60 | 1.409 | - | - | -0.07 | 0.765 | 1.078 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.08 | 16.60 | 1.419 | - | - | -0.03 | 0.638 | 0.905 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.15 | 16.60 | 1.396 | - | - | 0.14  | 0.119 | 0.166 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.11 | 16.60 | 1.409 | - | - | 0.11  | 0.126 | 0.178 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.15 | 16.60 | 1.396 | - | - | -0.05 | 0.641 | 0.895 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.11 | 16.60 | 1.409 | - | - | 0.18  | 0.724 | 1.020 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.08 | 16.60 | 1.419 | - | - | 0.14  | 0.578 | 0.820 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.15 | 16.60 | 1.396 | - | - | -0.17 | 0.103 | 0.144 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 633334 | 3500.01 | 15.11 | 16.60 | 1.409 | - | - | 0.17  | 0.112 | 0.158 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.19 | 16.60 | 1.099 | - | - | -0.12 | 0.839 | 0.922 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.17 | 16.60 | 1.104 | - | - | -0.05 | 0.799 | 0.882 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.12 | 16.60 | 1.117 | - | - | 0.01  | 0.814 | 0.909 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.19 | 16.60 | 1.099 | - | - | 0.1   | 0.132 | 0.145 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.17 | 16.60 | 1.104 | - | - | -0.17 | 0.124 | 0.137 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.19 | 16.60 | 1.099 | - | - | 0.04  | 0.808 | 0.888 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.17 | 16.60 | 1.104 | - | - | -0.01 | 0.799 | 0.882 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.12 | 16.60 | 1.117 | - | - | -0.08 | 0.787 | 0.879 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.19 | 16.60 | 1.099 | - | - | 0.05  | 0.121 | 0.133 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 2 | DSI2 | 641666 | 3624.99 | 16.17 | 16.60 | 1.104 | - | - | 0.06  | 0.115 | 0.127 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.82 | 17.70 | 1.225 | - | - | -0.02 | 0.575 | 0.704 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.78 | 17.70 | 1.236 | - | - | 0.08  | 0.416 | 0.514 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.82 | 17.70 | 1.225 | - | - | 0.03  | 0.167 | 0.205 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.78 | 17.70 | 1.236 | - | - | -0.08 | 0.136 | 0.168 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.82 | 17.70 | 1.225 | - | - | 0.1   | 0.119 | 0.146 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.78 | 17.70 | 1.236 | - | - | -0.18 | 0.078 | 0.096 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.82 | 17.70 | 1.225 | - | - | 0.1   | 0.066 | 0.081 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 656000 | 3840    | 16.78 | 17.70 | 1.236 | - | - | 0.12  | 0.046 | 0.057 |
| 27 | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.47 | 17.70 | 1.327 | - | - | 0.06  | 0.813 | 1.079 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.44 | 17.70 | 1.337 | - | - | -0.11 | 0.639 | 0.854 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.35 | 17.70 | 1.365 | - | - | -0.16 | 0.534 | 0.729 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.47 | 17.70 | 1.327 | - | - | -0.15 | 0.242 | 0.321 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.44 | 17.70 | 1.337 | - | - | -0.06 | 0.203 | 0.271 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.47 | 17.70 | 1.327 | - | - | -0.19 | 0.180 | 0.239 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.44 | 17.70 | 1.337 | - | - | 0.01  | 0.149 | 0.199 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.47 | 17.70 | 1.327 | - | - | 0.06  | 0.132 | 0.175 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 633334 | 3500.01 | 16.44 | 17.70 | 1.337 | - | - | 0.02  | 0.096 | 0.128 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.97 | 17.70 | 1.183 | - | - | -0.01 | 0.788 | 0.932 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.93 | 17.70 | 1.194 | - | - | -0.16 | 0.639 | 0.763 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.85 | 17.70 | 1.216 | - | - | -0.12 | 0.610 | 0.742 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.97 | 17.70 | 1.183 | - | - | 0.07  | 0.233 | 0.276 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.93 | 17.70 | 1.194 | - | - | -0.02 | 0.186 | 0.222 |
|    | FR1 n77                 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.97 | 17.70 | 1.183 | - | - | -0.13 | 0.176 | 0.208 |





# FCC SAR Test Report

Report No. : FA460505

|                         |      |      |     |    |               |              |     |       |      |        |         |       |       |       |   |   |       |       |       |
|-------------------------|------|------|-----|----|---------------|--------------|-----|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
| Part 96 PC3             |      |      |     |    |               |              |     |       |      |        |         |       |       |       |   |   |       |       |       |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.93 | 17.70 | 1.194 | - | - | 0.08  | 0.146 | 0.174 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.97 | 17.70 | 1.183 | - | - | 0.16  | 0.119 | 0.141 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 3 | DSI2 | 641666 | 3624.99 | 16.93 | 17.70 | 1.194 | - | - | 0.01  | 0.109 | 0.130 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.06 | 0.139 | 0.158 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.04 | 0.108 | 0.123 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.17 | 0.118 | 0.134 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.1  | 0.099 | 0.113 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.07 | 0.243 | 0.276 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.17 | 0.200 | 0.228 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.05 | 0.087 | 0.099 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | 0     | 0.084 | 0.096 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | -0.18 | 0.065 | 0.073 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | 0.02  | 0.080 | 0.091 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | 0.16  | 0.064 | 0.071 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | -0.03 | 0.074 | 0.084 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | 0.07  | 0.151 | 0.169 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | -0.01 | 0.195 | 0.222 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | 0.01  | 0.047 | 0.052 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | -0.01 | 0.056 | 0.064 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.91 | 20.10 | 1.315 | - | - | 0.05  | 0.062 | 0.082 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Cheek  | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.87 | 20.10 | 1.327 | - | - | 0.05  | 0.066 | 0.088 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.91 | 20.10 | 1.315 | - | - | -0.03 | 0.049 | 0.064 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Tilted | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.87 | 20.10 | 1.327 | - | - | -0.15 | 0.049 | 0.065 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.91 | 20.10 | 1.315 | - | - | 0.02  | 0.145 | 0.191 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Cheek   | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.87 | 20.10 | 1.327 | - | - | 0.02  | 0.141 | 0.187 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.91 | 20.10 | 1.315 | - | - | 0.16  | 0.037 | 0.049 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Tilted  | 0mm | Ant 6 | DSI2 | 641666 | 3624.99 | 18.87 | 20.10 | 1.327 | - | - | 0.13  | 0.039 | 0.052 |



| Plot No. | Band       | Mode                 | Test Position | Gap (mm) | Antenna      | Power State          | Ch. | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|------------|----------------------|---------------|----------|--------------|----------------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 2450MHz  |            |                      |               |          |              |                      |     |             |                     |                     |                        |              |                           |                  |                        |                        |
| 28       | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 16.64               | 18.00               | 1.368                  | 98.35        | 1.017                     | -0.07            | 0.794                  | 1.104                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 7+9(7)   | Standalone Non DBS   | 1   | 2412        | 16.54               | 18.00               | 1.400                  | 98.35        | 1.017                     | 0.01             | 0.686                  | 0.976                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 7+9(9)   | Standalone Non DBS   | 6   | 2437        | 16.60               | 18.00               | 1.380                  | 98.35        | 1.017                     | 0.02             | 0.651                  | 0.914                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Tilted  | 0mm      | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 16.64               | 18.00               | 1.368                  | 98.35        | 1.017                     | 0.12             | 0.637                  | 0.886                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Tilted  | 0mm      | Ant 7+9(7)   | Standalone Non DBS   | 1   | 2412        | 16.54               | 18.00               | 1.400                  | 98.35        | 1.017                     | 0.02             | 0.616                  | 0.877                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Left Cheek    | 0mm      | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 16.64               | 18.00               | 1.368                  | 98.35        | 1.017                     | 0                | 0.756                  | 1.052                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Left Cheek    | 0mm      | Ant 7+9(7)   | Standalone Non DBS   | 1   | 2412        | 16.54               | 18.00               | 1.400                  | 98.35        | 1.017                     | -0.1             | 0.589                  | 0.838                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Left Tilted   | 0mm      | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 16.64               | 18.00               | 1.368                  | 98.35        | 1.017                     | 0                | 0.751                  | 1.045                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Left Tilted   | 0mm      | Ant 7+9(7)   | Standalone Non DBS   | 1   | 2412        | 16.54               | 18.00               | 1.400                  | 98.35        | 1.017                     | 0.07             | 0.600                  | 0.854                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 7+9(7)   | Standalone DBS only  | 11  | 2462        | 13.51               | 15.00               | 1.409                  | 98.35        | 1.017                     | 0.01             | 0.395                  | 0.566                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 7+9(9)   | Simultaneous Non DBS | 11  | 2462        | 12.26               | 14.00               | 1.493                  | 98.35        | 1.017                     | -0.01            | 0.259                  | 0.393                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 7+9(7)   | Simultaneous DBS     | 11  | 2462        | 9.97                | 11.50               | 1.422                  | 98.35        | 1.017                     | -0.06            | 0.133                  | 0.192                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 9        | Standalone Non DBS   | 11  | 2462        | 17.65               | 19.00               | 1.365                  | 98.35        | 1.017                     | 0.06             | 0.787                  | 1.092                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 9        | Standalone Non DBS   | 1   | 2412        | 17.63               | 19.00               | 1.371                  | 98.35        | 1.017                     | 0.08             | 0.671                  | 0.935                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 9        | Standalone Non DBS   | 6   | 2437        | 17.60               | 19.00               | 1.380                  | 98.35        | 1.017                     | 0.01             | 0.644                  | 0.904                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Tilted  | 0mm      | Ant 9        | Standalone Non DBS   | 11  | 2462        | 17.65               | 19.00               | 1.365                  | 98.35        | 1.017                     | 0.03             | 0.063                  | 0.087                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Left Cheek    | 0mm      | Ant 9        | Standalone Non DBS   | 11  | 2462        | 17.65               | 19.00               | 1.365                  | 98.35        | 1.017                     | -0.08            | 0.318                  | 0.441                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Left Tilted   | 0mm      | Ant 9        | Standalone Non DBS   | 11  | 2462        | 17.65               | 19.00               | 1.365                  | 98.35        | 1.017                     | -0.18            | 0.092                  | 0.128                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 9        | Standalone DBS only  | 11  | 2462        | 14.71               | 16.00               | 1.346                  | 98.35        | 1.017                     | 0.06             | 0.398                  | 0.545                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 9        | Simultaneous Non DBS | 11  | 2462        | 13.19               | 14.50               | 1.352                  | 98.35        | 1.017                     | 0.01             | 0.255                  | 0.351                  |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Right Cheek   | 0mm      | Ant 9        | Simultaneous DBS     | 11  | 2462        | 10.14               | 11.50               | 1.368                  | 98.35        | 1.017                     | 0.08             | 0.129                  | 0.179                  |
|          | Bluetooth  | 1Mbps                | Right Cheek   | 0mm      | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | -0.08            | 0.038                  | 0.062                  |
|          | Bluetooth  | 1Mbps                | Right Tilted  | 0mm      | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | -0.04            | 0.044                  | 0.072                  |
| 29       | Bluetooth  | 1Mbps                | Left Cheek    | 0mm      | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.08             | 0.069                  | 0.113                  |
|          | Bluetooth  | 1Mbps                | Left Tilted   | 0mm      | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | -0.08            | 0.065                  | 0.106                  |
|          | Bluetooth  | 1Mbps                | Left Cheek    | 0mm      | Ant 7        | Full Power           | 0   | 2402        | 9.12                | 11.00               | 1.543                  | 76.78        | 1.085                     | 0.17             | 0.053                  | 0.089                  |
|          | Bluetooth  | 1Mbps                | Left Cheek    | 0mm      | Ant 7        | Full Power           | 78  | 2480        | 9.04                | 11.00               | 1.571                  | 76.78        | 1.085                     | 0.18             | 0.064                  | 0.109                  |
| 5000MHz  |            |                      |               |          |              |                      |     |             |                     |                     |                        |              |                           |                  |                        |                        |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Right Cheek   | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | -0.08            | 0.332                  | 0.491                  |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Right Tilted  | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | -0.08            | 0.298                  | 0.441                  |
| 30       | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | -0.01            | 0.801                  | 1.185                  |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Left Tilted   | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | 0.07             | 0.589                  | 0.871                  |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone DBS only  | 50  | 5250        | 11.96               | 13.50               | 1.426                  | 100          | 1.000                     | -0.17            | 0.412                  | 0.587                  |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(8)  | Simultaneous Non DBS | 50  | 5250        | 11.18               | 13.00               | 1.521                  | 100          | 1.000                     | -0.03            | 0.250                  | 0.380                  |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Simultaneous DBS     | 50  | 5250        | 8.14                | 10.00               | 1.535                  | 100          | 1.000                     | 0.14             | 0.129                  | 0.198                  |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Right Cheek   | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 114 | 5570        | 15.37               | 17.00               | 1.455                  | 100          | 1.000                     | -0.08            | 0.484                  | 0.704                  |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Right Tilted  | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 114 | 5570        | 15.37               | 17.00               | 1.455                  | 100          | 1.000                     | 0.12             | 0.315                  | 0.458                  |
| 31       | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 114 | 5570        | 15.37               | 17.00               | 1.455                  | 100          | 1.000                     | -0.06            | 0.823                  | 1.198                  |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Left Tilted   | 0mm      | Ant 8+10(10) | Standalone Non DBS   | 114 | 5570        | 15.37               | 17.00               | 1.455                  | 100          | 1.000                     | -0.05            | 0.600                  | 0.873                  |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone DBS only  | 114 | 5570        | 12.32               | 14.00               | 1.472                  | 100          | 1.000                     | 0.1              | 0.405                  | 0.596                  |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(8)  | Simultaneous Non DBS | 114 | 5570        | 11.76               | 13.50               | 1.493                  | 100          | 1.000                     | 0.12             | 0.255                  | 0.381                  |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Simultaneous DBS     | 114 | 5570        | 8.44                | 10.00               | 1.432                  | 100          | 1.000                     | 0.08             | 0.135                  | 0.193                  |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Right Cheek   | 0mm      | Ant 8+10(8)  | Standalone Non DBS   | 155 | 5775        | 15.81               | 17.50               | 1.476                  | 100          | 1.000                     | -0.15            | 0.316                  | 0.466                  |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Right Tilted  | 0mm      | Ant 8+10(8)  | Standalone Non DBS   | 155 | 5775        | 15.81               | 17.50               | 1.476                  | 100          | 1.000                     | -0.18            | 0.279                  | 0.412                  |
| 32       | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Left Cheek    | 0mm      | Ant 8+10(8)  | Standalone Non DBS   | 155 | 5775        | 15.81               | 17.50               | 1.476                  | 100          | 1.000                     | -0.01            | 0.766                  | 1.130                  |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Left Tilted   | 0mm      | Ant 8+10(8)  | Standalone Non DBS   | 155 | 5775        | 15.81               | 17.50               | 1.476                  | 100          | 1.000                     | -0.08            | 0.507                  | 0.748                  |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Left Cheek    | 0mm      | Ant 8+10(8)  | Standalone DBS only  | 155 | 5775        | 12.81               | 14.50               | 1.476                  | 100          | 1.000                     | -0.01            | 0.399                  | 0.589                  |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Left Cheek    | 0mm      | Ant 8+10(8)  | Simultaneous Non DBS | 155 | 5775        | 11.43               | 13.00               | 1.435                  | 100          | 1.000                     | -0.01            | 0.257                  | 0.369                  |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Left Cheek    | 0mm      | Ant 8+10(8)  | Simultaneous DBS     | 155 | 5775        | 8.65                | 10.50               | 1.531                  | 100          | 1.000                     | -0.01            | 0.122                  | 0.187                  |





## 15.2 Hotspot SAR

| Plot No. | Band        | BW (MHz) | Modulation | RB Size | RB offset | Mode | Test Position | Gap (mm) | Antenna | Power State | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------|----------|------------|---------|-----------|------|---------------|----------|---------|-------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 750MHz   |             |          |            |         |           |      |               |          |         |             |        |             |                     |                     |                        |              |                           |                  |                        |                        |
| 33       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Front         | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | 0.18             | 0.407                  | 0.541                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Front         | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.04            | 0.349                  | 0.473                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Back          | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | 0.05             | 0.431                  | 0.573                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Back          | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.08            | 0.369                  | 0.500                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Left Side     | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | -0.13            | 0.289                  | 0.385                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Left Side     | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.13            | 0.261                  | 0.354                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Right Side    | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | 0.06             | 0.069                  | 0.092                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Right Side    | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.03            | 0.082                  | 0.111                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Top Side      | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | -0.03            | 0.411                  | 0.547                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Top Side      | 10mm     | Ant 0   | DSI1        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | 0.08             | 0.371                  | 0.503                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Front         | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | -0.1             | 0.155                  | 0.219                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Front         | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | 0.01             | 0.127                  | 0.175                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Back          | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | -0.15            | 0.181                  | 0.256                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Back          | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | 0.19             | 0.147                  | 0.202                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Left Side     | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | 0.07             | 0.054                  | 0.076                  |
| 34       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Left Side     | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | -0.18            | 0.045                  | 0.062                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Right Side    | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | 0.03             | 0.207                  | 0.293                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Right Side    | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | -0.15            | 0.169                  | 0.232                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -    | Bottom Side   | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | -0.15            | 0.137                  | 0.194                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -    | Bottom Side   | 10mm     | Ant 1   | DSI1        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | 0.11             | 0.108                  | 0.148                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Front         | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | -0.07            | 0.491                  | 0.634                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Front         | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | 0.05             | 0.391                  | 0.510                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Back          | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | -0.18            | 0.524                  | 0.677                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Back          | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | -0.11            | 0.420                  | 0.547                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | -0.12            | 0.355                  | 0.458                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | 0.03             | 0.290                  | 0.378                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | -0.16            | 0.070                  | 0.090                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Right Side    | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | -0.02            | 0.052                  | 0.068                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Top Side      | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | 0.15             | 0.493                  | 0.637                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Top Side      | 10mm     | Ant 0   | DSI1        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | -0.09            | 0.373                  | 0.486                  |
| 35       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Front         | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | -0.17            | 0.228                  | 0.321                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Front         | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.08            | 0.191                  | 0.259                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Back          | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | -0.04            | 0.262                  | 0.368                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Back          | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.08            | 0.219                  | 0.297                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | 0.17             | 0.058                  | 0.082                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | 0.18             | 0.049                  | 0.066                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | -0.04            | 0.233                  | 0.328                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Right Side    | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.08            | 0.198                  | 0.268                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -    | Bottom Side   | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | -0.13            | 0.196                  | 0.276                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -    | Bottom Side   | 10mm     | Ant 1   | DSI1        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.13            | 0.162                  | 0.220                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -    | Front         | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | -0.15            | 0.526                  | 0.708                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -    | Front         | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | 0.11             | 0.428                  | 0.576                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -    | Back          | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | -0.03            | 0.542                  | 0.729                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -    | Back          | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | -0.08            | 0.450                  | 0.606                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | -0.17            | 0.380                  | 0.511                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | -0.08            | 0.325                  | 0.437                  |
| 35       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | -0.04            | 0.116                  | 0.156                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -    | Right Side    | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | -0.08            | 0.102                  | 0.137                  |
| 35       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -    | Top Side      | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | 0.09             | 0.556                  | 0.748                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -    | Top Side      | 10mm     | Ant 0   | DSI1        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | 0.17             | 0.429                  | 0.577                  |



# FCC SAR Test Report

Report No. : FA460505

|    |             |     |      |    |    |               |             |      |       |      |        |       |       |       |       |   |   |       |       |       |
|----|-------------|-----|------|----|----|---------------|-------------|------|-------|------|--------|-------|-------|-------|-------|---|---|-------|-------|-------|
|    | LTE Band 13 | 10M | QPSK | 1  | 0  | -             | Front       | 10mm | Ant 1 | DSI1 | 23230  | 782   | 22.45 | 24.00 | 1.429 | - | - | -0.03 | 0.231 | 0.330 |
|    | LTE Band 13 | 10M | QPSK | 25 | 0  | -             | Front       | 10mm | Ant 1 | DSI1 | 23230  | 782   | 21.62 | 23.00 | 1.374 | - | - | -0.03 | 0.187 | 0.257 |
|    | LTE Band 13 | 10M | QPSK | 1  | 0  | -             | Back        | 10mm | Ant 1 | DSI1 | 23230  | 782   | 22.45 | 24.00 | 1.429 | - | - | 0.08  | 0.266 | 0.380 |
|    | LTE Band 13 | 10M | QPSK | 25 | 0  | -             | Back        | 10mm | Ant 1 | DSI1 | 23230  | 782   | 21.62 | 23.00 | 1.374 | - | - | -0.07 | 0.213 | 0.293 |
|    | LTE Band 13 | 10M | QPSK | 1  | 0  | -             | Left Side   | 10mm | Ant 1 | DSI1 | 23230  | 782   | 22.45 | 24.00 | 1.429 | - | - | 0.05  | 0.000 | 0.000 |
|    | LTE Band 13 | 10M | QPSK | 25 | 0  | -             | Left Side   | 10mm | Ant 1 | DSI1 | 23230  | 782   | 21.62 | 23.00 | 1.374 | - | - | -0.11 | 0.000 | 0.000 |
|    | LTE Band 13 | 10M | QPSK | 1  | 0  | -             | Right Side  | 10mm | Ant 1 | DSI1 | 23230  | 782   | 22.45 | 24.00 | 1.429 | - | - | -0.12 | 0.189 | 0.270 |
|    | LTE Band 13 | 10M | QPSK | 25 | 0  | -             | Right Side  | 10mm | Ant 1 | DSI1 | 23230  | 782   | 21.62 | 23.00 | 1.374 | - | - | 0.03  | 0.152 | 0.209 |
|    | LTE Band 13 | 10M | QPSK | 1  | 0  | -             | Bottom Side | 10mm | Ant 1 | DSI1 | 23230  | 782   | 22.45 | 24.00 | 1.429 | - | - | -0.16 | 0.183 | 0.261 |
|    | LTE Band 13 | 10M | QPSK | 25 | 0  | -             | Bottom Side | 10mm | Ant 1 | DSI1 | 23230  | 782   | 21.62 | 23.00 | 1.374 | - | - | -0.02 | 0.147 | 0.202 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Front       | 10mm | Ant 0 | DSI1 | 23330  | 793   | 23.83 | 25.00 | 1.309 | - | - | -0.1  | 0.599 | 0.784 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Front       | 10mm | Ant 0 | DSI1 | 23330  | 793   | 22.82 | 24.00 | 1.312 | - | - | 0.01  | 0.478 | 0.627 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Back        | 10mm | Ant 0 | DSI1 | 23330  | 793   | 23.83 | 25.00 | 1.309 | - | - | -0.04 | 0.607 | 0.795 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Back        | 10mm | Ant 0 | DSI1 | 23330  | 793   | 22.82 | 24.00 | 1.312 | - | - | -0.15 | 0.504 | 0.661 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Left Side   | 10mm | Ant 0 | DSI1 | 23330  | 793   | 23.83 | 25.00 | 1.309 | - | - | 0.19  | 0.464 | 0.607 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Left Side   | 10mm | Ant 0 | DSI1 | 23330  | 793   | 22.82 | 24.00 | 1.312 | - | - | 0.07  | 0.373 | 0.489 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Right Side  | 10mm | Ant 0 | DSI1 | 23330  | 793   | 23.83 | 25.00 | 1.309 | - | - | -0.18 | 0.141 | 0.185 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Right Side  | 10mm | Ant 0 | DSI1 | 23330  | 793   | 22.82 | 24.00 | 1.312 | - | - | 0.03  | 0.118 | 0.155 |
| 36 | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Top Side    | 10mm | Ant 0 | DSI1 | 23330  | 793   | 23.83 | 25.00 | 1.309 | - | - | 0.04  | 0.679 | 0.889 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Top Side    | 10mm | Ant 0 | DSI1 | 23330  | 793   | 22.82 | 24.00 | 1.312 | - | - | -0.15 | 0.520 | 0.682 |
|    | LTE Band 14 | 10M | QPSK | 50 | 0  | -             | Top Side    | 10mm | Ant 0 | DSI1 | 23330  | 793   | 22.80 | 24.00 | 1.318 | - | - | 0.01  | 0.602 | 0.794 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Front       | 10mm | Ant 1 | DSI1 | 23330  | 793   | 22.47 | 24.00 | 1.422 | - | - | -0.09 | 0.193 | 0.275 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Front       | 10mm | Ant 1 | DSI1 | 23330  | 793   | 21.54 | 23.00 | 1.400 | - | - | 0.11  | 0.158 | 0.221 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Back        | 10mm | Ant 1 | DSI1 | 23330  | 793   | 22.47 | 24.00 | 1.422 | - | - | -0.05 | 0.226 | 0.321 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Back        | 10mm | Ant 1 | DSI1 | 23330  | 793   | 21.54 | 23.00 | 1.400 | - | - | -0.08 | 0.185 | 0.259 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Left Side   | 10mm | Ant 1 | DSI1 | 23330  | 793   | 22.47 | 24.00 | 1.422 | - | - | 0.16  | 0.000 | 0.000 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Left Side   | 10mm | Ant 1 | DSI1 | 23330  | 793   | 21.54 | 23.00 | 1.400 | - | - | 0.05  | 0.000 | 0.000 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Right Side  | 10mm | Ant 1 | DSI1 | 23330  | 793   | 22.47 | 24.00 | 1.422 | - | - | 0.05  | 0.159 | 0.226 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Right Side  | 10mm | Ant 1 | DSI1 | 23330  | 793   | 21.54 | 23.00 | 1.400 | - | - | -0.03 | 0.135 | 0.189 |
|    | LTE Band 14 | 10M | QPSK | 1  | 0  | -             | Bottom Side | 10mm | Ant 1 | DSI1 | 23330  | 793   | 22.47 | 24.00 | 1.422 | - | - | -0.15 | 0.141 | 0.201 |
|    | LTE Band 14 | 10M | QPSK | 25 | 0  | -             | Bottom Side | 10mm | Ant 1 | DSI1 | 23330  | 793   | 21.54 | 23.00 | 1.400 | - | - | 0.02  | 0.115 | 0.161 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.65 | 24.00 | 1.365 | - | - | -0.08 | 0.436 | 0.595 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.48 | 24.00 | 1.419 | - | - | 0.13  | 0.479 | 0.680 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.65 | 24.00 | 1.365 | - | - | 0.12  | 0.496 | 0.677 |
| 37 | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.48 | 24.00 | 1.419 | - | - | -0.09 | 0.511 | 0.725 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.65 | 24.00 | 1.365 | - | - | 0.03  | 0.306 | 0.418 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.48 | 24.00 | 1.419 | - | - | 0.18  | 0.373 | 0.529 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.65 | 24.00 | 1.365 | - | - | 0.16  | 0.068 | 0.093 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.48 | 24.00 | 1.419 | - | - | -0.1  | 0.140 | 0.199 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.65 | 24.00 | 1.365 | - | - | 0.07  | 0.438 | 0.598 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 136100 | 680.5 | 22.48 | 24.00 | 1.419 | - | - | 0.18  | 0.510 | 0.724 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.53 | 24.00 | 1.403 | - | - | 0.16  | 0.210 | 0.295 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.23 | 24.00 | 1.503 | - | - | 0.13  | 0.175 | 0.263 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.53 | 24.00 | 1.403 | - | - | -0.18 | 0.238 | 0.334 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.23 | 24.00 | 1.503 | - | - | 0.02  | 0.208 | 0.313 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.53 | 24.00 | 1.403 | - | - | 0.16  | 0.127 | 0.178 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.23 | 24.00 | 1.503 | - | - | -0.03 | 0.100 | 0.150 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.53 | 24.00 | 1.403 | - | - | 0.07  | 0.270 | 0.379 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.23 | 24.00 | 1.503 | - | - | 0     | 0.249 | 0.374 |
|    | FR1 n71     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.53 | 24.00 | 1.403 | - | - | 0.01  | 0.152 | 0.213 |
|    | FR1 n71     | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 136100 | 680.5 | 22.23 | 24.00 | 1.503 | - | - | -0.01 | 0.123 | 0.185 |
|    | FR1 n12     | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.79 | 25.00 | 1.321 | - | - | 0.01  | 0.541 | 0.715 |
|    | FR1 n12     | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.67 | 25.00 | 1.358 | - | - | 0.1   | 0.595 | 0.808 |
|    | FR1 n12     | 15M | QPSK | 75 | 0  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 22.75 | 24.00 | 1.334 | - | - | 0.09  | 0.559 | 0.745 |
|    | FR1 n12     | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.79 | 25.00 | 1.321 | - | - | -0.17 | 0.582 | 0.769 |
| 38 | FR1 n12     | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.67 | 25.00 | 1.358 | - | - | -0.07 | 0.634 | 0.861 |



# FCC SAR Test Report

Report No. : FA460505

|    |         |     |      |    |    |               |             |      |       |      |        |       |       |       |       |   |   |       |       |       |
|----|---------|-----|------|----|----|---------------|-------------|------|-------|------|--------|-------|-------|-------|-------|---|---|-------|-------|-------|
|    | FR1 n12 | 15M | QPSK | 75 | 0  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 22.75 | 24.00 | 1.334 | - | - | 0.03  | 0.546 | 0.728 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.79 | 25.00 | 1.321 | - | - | 0.04  | 0.423 | 0.559 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.67 | 25.00 | 1.358 | - | - | -0.01 | 0.416 | 0.565 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.79 | 25.00 | 1.321 | - | - | -0.08 | 0.087 | 0.115 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.67 | 25.00 | 1.358 | - | - | 0.05  | 0.070 | 0.095 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.79 | 25.00 | 1.321 | - | - | 0.06  | 0.559 | 0.739 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 23.67 | 25.00 | 1.358 | - | - | -0.09 | 0.601 | 0.816 |
|    | FR1 n12 | 15M | QPSK | 75 | 0  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 141500 | 707.5 | 22.75 | 24.00 | 1.334 | - | - | 0.04  | 0.533 | 0.711 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI4 | 141500 | 707.5 | 23.15 | 24.40 | 1.334 | - | - | -0.07 | 0.565 | 0.753 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.49 | 24.00 | 1.416 | - | - | -0.04 | 0.254 | 0.360 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.32 | 24.00 | 1.472 | - | - | -0.09 | 0.258 | 0.380 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.49 | 24.00 | 1.416 | - | - | -0.17 | 0.288 | 0.408 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.32 | 24.00 | 1.472 | - | - | -0.1  | 0.290 | 0.427 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.49 | 24.00 | 1.416 | - | - | 0.18  | 0.146 | 0.207 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.32 | 24.00 | 1.472 | - | - | -0.17 | 0.132 | 0.194 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.49 | 24.00 | 1.416 | - | - | -0.04 | 0.263 | 0.372 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.32 | 24.00 | 1.472 | - | - | -0.05 | 0.284 | 0.418 |
|    | FR1 n12 | 15M | QPSK | 1  | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.49 | 24.00 | 1.416 | - | - | 0     | 0.205 | 0.290 |
|    | FR1 n12 | 15M | QPSK | 36 | 22 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 141500 | 707.5 | 22.32 | 24.00 | 1.472 | - | - | -0.13 | 0.198 | 0.292 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.72 | 25.00 | 1.343 | - | - | 0.08  | 0.567 | 0.761 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | 0.01  | 0.614 | 0.857 |
|    | FR1 n13 | 10M | QPSK | 50 | 0  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | 0.06  | 0.562 | 0.785 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.72 | 25.00 | 1.343 | - | - | 0.03  | 0.604 | 0.811 |
| 39 | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | -0.09 | 0.657 | 0.917 |
|    | FR1 n13 | 10M | QPSK | 50 | 0  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | 0.03  | 0.546 | 0.762 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.72 | 25.00 | 1.343 | - | - | -0.08 | 0.423 | 0.568 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | -0.08 | 0.487 | 0.680 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.72 | 25.00 | 1.343 | - | - | 0.1   | 0.134 | 0.180 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | -0.18 | 0.148 | 0.207 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.72 | 25.00 | 1.343 | - | - | 0.1   | 0.617 | 0.828 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | 0.12  | 0.609 | 0.850 |
|    | FR1 n13 | 10M | QPSK | 50 | 0  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 156400 | 782   | 23.55 | 25.00 | 1.396 | - | - | 0.02  | 0.549 | 0.767 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI4 | 156400 | 782   | 23.08 | 24.40 | 1.355 | - | - | -0.09 | 0.586 | 0.794 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.42 | 24.00 | 1.439 | - | - | -0.09 | 0.263 | 0.378 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.17 | 24.00 | 1.524 | - | - | 0.05  | 0.253 | 0.386 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.42 | 24.00 | 1.439 | - | - | 0.02  | 0.316 | 0.455 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.17 | 24.00 | 1.524 | - | - | -0.13 | 0.293 | 0.447 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.42 | 24.00 | 1.439 | - | - | 0.17  | 0.094 | 0.135 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.17 | 24.00 | 1.524 | - | - | 0.06  | 0.081 | 0.123 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.42 | 24.00 | 1.439 | - | - | 0     | 0.239 | 0.344 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.17 | 24.00 | 1.524 | - | - | -0.04 | 0.241 | 0.367 |
|    | FR1 n13 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.42 | 24.00 | 1.439 | - | - | -0.15 | 0.234 | 0.337 |
|    | FR1 n13 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 156400 | 782   | 22.17 | 24.00 | 1.524 | - | - | 0.11  | 0.215 | 0.328 |
|    | FR1 n14 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.69 | 25.00 | 1.352 | - | - | 0.08  | 0.592 | 0.800 |
|    | FR1 n14 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.51 | 25.00 | 1.409 | - | - | -0.17 | 0.590 | 0.831 |
|    | FR1 n14 | 10M | QPSK | 50 | 0  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 158600 | 793   | 22.53 | 24.00 | 1.403 | - | - | 0.09  | 0.474 | 0.665 |
|    | FR1 n14 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.69 | 25.00 | 1.352 | - | - | -0.03 | 0.610 | 0.825 |
| 40 | FR1 n14 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.51 | 25.00 | 1.409 | - | - | -0.01 | 0.649 | 0.915 |
|    | FR1 n14 | 10M | QPSK | 50 | 0  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 158600 | 793   | 22.53 | 24.00 | 1.403 | - | - | 0.14  | 0.487 | 0.683 |
|    | FR1 n14 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.69 | 25.00 | 1.352 | - | - | 0.11  | 0.448 | 0.606 |
|    | FR1 n14 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.51 | 25.00 | 1.409 | - | - | -0.05 | 0.454 | 0.640 |
|    | FR1 n14 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.69 | 25.00 | 1.352 | - | - | 0.18  | 0.146 | 0.197 |
|    | FR1 n14 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.51 | 25.00 | 1.409 | - | - | 0.14  | 0.148 | 0.209 |
|    | FR1 n14 | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.69 | 25.00 | 1.352 | - | - | -0.17 | 0.612 | 0.827 |
|    | FR1 n14 | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 158600 | 793   | 23.51 | 25.00 | 1.409 | - | - | 0.17  | 0.568 | 0.800 |
|    | FR1 n14 | 10M | QPSK | 50 | 0  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 158600 | 793   | 22.53 | 24.00 | 1.403 | - | - | -0.05 | 0.545 | 0.765 |



# FCC SAR Test Report

Report No. : FA460505

|        |             |     |      |    |    |               |             |      |       |      |                 |                 |       |       |       |   |   |       |       |       |
|--------|-------------|-----|------|----|----|---------------|-------------|------|-------|------|-----------------|-----------------|-------|-------|-------|---|---|-------|-------|-------|
|        | FR1 n14     | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI4 | 158600          | 793             | 23.02 | 24.40 | 1.374 | - | - | -0.01 | 0.578 | 0.794 |
|        | FR1 n14     | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.54 | 24.00 | 1.400 | - | - | 0.1   | 0.243 | 0.340 |
|        | FR1 n14     | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.27 | 24.00 | 1.489 | - | - | 0.04  | 0.225 | 0.335 |
|        | FR1 n14     | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.54 | 24.00 | 1.400 | - | - | 0.13  | 0.289 | 0.404 |
|        | FR1 n14     | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.27 | 24.00 | 1.489 | - | - | -0.18 | 0.268 | 0.399 |
|        | FR1 n14     | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.54 | 24.00 | 1.400 | - | - | -0.11 | 0.073 | 0.102 |
|        | FR1 n14     | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.27 | 24.00 | 1.489 | - | - | -0.16 | 0.065 | 0.097 |
|        | FR1 n14     | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.54 | 24.00 | 1.400 | - | - | -0.15 | 0.233 | 0.326 |
|        | FR1 n14     | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.27 | 24.00 | 1.489 | - | - | -0.06 | 0.221 | 0.329 |
|        | FR1 n14     | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.54 | 24.00 | 1.400 | - | - | -0.14 | 0.201 | 0.281 |
|        | FR1 n14     | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 158600          | 793             | 22.27 | 24.00 | 1.489 | - | - | -0.19 | 0.197 | 0.293 |
| 835MHz |             |     |      |    |    |               |             |      |       |      |                 |                 |       |       |       |   |   |       |       |       |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 0 | DSI1 | 4182            | 836.4           | 23.98 | 25.00 | 1.265 | - | - | 0.07  | 0.635 | 0.803 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 0 | DSI1 | 4132            | 826.4           | 23.93 | 25.00 | 1.279 | - | - | -0.17 | 0.602 | 0.770 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 0 | DSI1 | 4233            | 846.6           | 23.95 | 25.00 | 1.274 | - | - | 0.1   | 0.636 | 0.810 |
| 41     | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 0 | DSI1 | 4182            | 836.4           | 23.98 | 25.00 | 1.265 | - | - | -0.1  | 0.690 | 0.873 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 0 | DSI1 | 4132            | 826.4           | 23.93 | 25.00 | 1.279 | - | - | 0.08  | 0.625 | 0.800 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 0 | DSI1 | 4233            | 846.6           | 23.95 | 25.00 | 1.274 | - | - | 0     | 0.670 | 0.853 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 0 | DSI1 | 4182            | 836.4           | 23.98 | 25.00 | 1.265 | - | - | -0.13 | 0.356 | 0.450 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Right Side  | 10mm | Ant 0 | DSI1 | 4182            | 836.4           | 23.98 | 25.00 | 1.265 | - | - | -0.1  | 0.121 | 0.153 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Top Side    | 10mm | Ant 0 | DSI1 | 4182            | 836.4           | 23.98 | 25.00 | 1.265 | - | - | -0.07 | 0.689 | 0.871 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Top Side    | 10mm | Ant 0 | DSI1 | 4132            | 826.4           | 23.93 | 25.00 | 1.279 | - | - | 0.11  | 0.665 | 0.851 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Top Side    | 10mm | Ant 0 | DSI1 | 4233            | 846.6           | 23.95 | 25.00 | 1.274 | - | - | -0.17 | 0.655 | 0.834 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 0 | DSI4 | 4182            | 836.4           | 23.48 | 24.50 | 1.265 | - | - | -0.1  | 0.615 | 0.778 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 1 | DSI4 | 4182            | 836.4           | 22.71 | 24.00 | 1.346 | - | - | 0.01  | 0.257 | 0.346 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 1 | DSI4 | 4182            | 836.4           | 22.71 | 24.00 | 1.346 | - | - | 0.06  | 0.212 | 0.285 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 1 | DSI4 | 4182            | 836.4           | 22.71 | 24.00 | 1.346 | - | - | 0.02  | 0.050 | 0.067 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Right Side  | 10mm | Ant 1 | DSI4 | 4182            | 836.4           | 22.71 | 24.00 | 1.346 | - | - | 0.12  | 0.130 | 0.175 |
|        | WCDMA V     | -   | -    | -  | -  | RMC 12.2Kbps  | Bottom Side | 10mm | Ant 1 | DSI4 | 4182            | 836.4           | 22.71 | 24.00 | 1.346 | - | - | -0.16 | 0.132 | 0.178 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Front       | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 23.62 | 25.00 | 1.374 | - | - | 0     | 0.520 | 0.715 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Front       | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.75 | 24.00 | 1.334 | - | - | -0.14 | 0.473 | 0.631 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Back        | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 23.62 | 25.00 | 1.374 | - | - | -0.05 | 0.588 | 0.808 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Back        | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.75 | 24.00 | 1.334 | - | - | 0.01  | 0.531 | 0.708 |
|        | LTE Band 26 | 15M | QPSK | 75 | 0  | -             | Back        | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.63 | 24.00 | 1.371 | - | - | 0.09  | 0.509 | 0.698 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Left Side   | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 23.62 | 25.00 | 1.374 | - | - | 0.18  | 0.407 | 0.559 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Left Side   | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.75 | 24.00 | 1.334 | - | - | 0.02  | 0.352 | 0.469 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Right Side  | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 23.62 | 25.00 | 1.374 | - | - | 0.16  | 0.110 | 0.151 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Right Side  | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.75 | 24.00 | 1.334 | - | - | 0.06  | 0.098 | 0.131 |
| 42     | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Top Side    | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 23.62 | 25.00 | 1.374 | - | - | 0.09  | 0.747 | 1.026 |
|        | LTE Band 5B | 10M | QPSK | 1  | 49 | -             | Top Side    | 10mm | Ant 0 | DSI1 | 20476+<br>20575 | 826.6+<br>836.5 | 23.47 | 25.00 | 1.422 | - | - | 0.09  | 0.687 | 0.977 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Top Side    | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.75 | 24.00 | 1.334 | - | - | -0.02 | 0.652 | 0.869 |
|        | LTE Band 26 | 15M | QPSK | 75 | 0  | -             | Top Side    | 10mm | Ant 0 | DSI1 | 26865           | 831.5           | 22.63 | 24.00 | 1.371 | - | - | 0.09  | 0.641 | 0.879 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Top Side    | 10mm | Ant 0 | DSI4 | 26865           | 831.5           | 22.65 | 23.60 | 1.245 | - | - | 0.09  | 0.633 | 0.788 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Front       | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 22.34 | 23.60 | 1.337 | - | - | 0.07  | 0.233 | 0.311 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Front       | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 21.49 | 23.00 | 1.416 | - | - | -0.02 | 0.186 | 0.263 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Back        | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 22.34 | 23.60 | 1.337 | - | - | -0.05 | 0.251 | 0.335 |
|        | LTE Band 5B | 10M | QPSK | 1  | 49 | -             | Back        | 10mm | Ant 1 | DSI4 | 20476+<br>20575 | 826.6+<br>836.5 | 22.21 | 23.60 | 1.377 | - | - | 0.05  | 0.211 | 0.291 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Back        | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 21.49 | 23.00 | 1.416 | - | - | -0.13 | 0.202 | 0.286 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Left Side   | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 22.34 | 23.60 | 1.337 | - | - | 0.08  | 0.062 | 0.083 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Left Side   | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 21.49 | 23.00 | 1.416 | - | - | 0.16  | 0.051 | 0.072 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Right Side  | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 22.34 | 23.60 | 1.337 | - | - | 0.01  | 0.150 | 0.200 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Right Side  | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 21.49 | 23.00 | 1.416 | - | - | -0.16 | 0.121 | 0.171 |
|        | LTE Band 26 | 15M | QPSK | 1  | 0  | -             | Bottom Side | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 22.34 | 23.60 | 1.337 | - | - | 0.1   | 0.159 | 0.213 |
|        | LTE Band 26 | 15M | QPSK | 36 | 0  | -             | Bottom Side | 10mm | Ant 1 | DSI4 | 26865           | 831.5           | 21.49 | 23.00 | 1.416 | - | - | -0.04 | 0.129 | 0.183 |
|        | FR1 n26     | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 166300          | 831.5           | 23.73 | 25.00 | 1.340 | - | - | -0.15 | 0.646 | 0.865 |



# FCC SAR Test Report

Report No. : FA460505

|         |              |     |      |     |    |               |             |      |       |      |               |             |       |       |       |       |       |       |       |       |
|---------|--------------|-----|------|-----|----|---------------|-------------|------|-------|------|---------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | -0.12 | 0.714 | 1.018 |
|         | FR1 n26      | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Front       | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 22.66 | 24.00 | 1.361 | -     | -     | -0.16 | 0.539 | 0.734 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.73 | 25.00 | 1.340 | -     | -     | -0.03 | 0.690 | 0.924 |
| 43      | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | -0.06 | 0.756 | 1.078 |
|         | FR1 n26      | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 22.66 | 24.00 | 1.361 | -     | -     | 0.17  | 0.577 | 0.786 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.73 | 25.00 | 1.340 | -     | -     | 0.02  | 0.379 | 0.508 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | 0     | 0.399 | 0.569 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.73 | 25.00 | 1.340 | -     | -     | 0.18  | 0.100 | 0.134 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | -0.11 | 0.117 | 0.167 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.73 | 25.00 | 1.340 | -     | -     | -0.05 | 0.724 | 0.970 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | -0.04 | 0.704 | 1.004 |
|         | FR1 n26      | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 0 | DSI1 | 166300        | 831.5       | 22.66 | 24.00 | 1.361 | -     | -     | -0.08 | 0.596 | 0.811 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 10mm | Ant 0 | DSI4 | 166300        | 831.5       | 22.21 | 23.60 | 1.377 | -     | -     | -0.06 | 0.571 | 0.786 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | 0     | 0.228 | 0.329 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front       | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | -0.11 | 0.250 | 0.392 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | -0.06 | 0.279 | 0.402 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | -0.15 | 0.302 | 0.473 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | 0.03  | 0.064 | 0.092 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | -0.13 | 0.062 | 0.097 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | 0.16  | 0.151 | 0.218 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | -0.15 | 0.153 | 0.240 |
|         | FR1 n26      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | -0.02 | 0.180 | 0.260 |
|         | FR1 n26      | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 1 | DSI4 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | -0.09 | 0.196 | 0.307 |
| 900MHz  |              |     |      |     |    |               |             |      |       |      |               |             |       |       |       |       |       |       |       |       |
| 44      | RFID         | -   | -    | -   | -  | -             | Front       | 10mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | 0.05  | 0.698 | 0.284 |
|         | RFID         | -   | -    | -   | -  | -             | Back        | 10mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | 0.08  | 0.422 | 0.171 |
|         | RFID         | -   | -    | -   | -  | -             | Left Side   | 10mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | 0.01  | 0.218 | 0.089 |
|         | RFID         | -   | -    | -   | -  | -             | Right Side  | 10mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | 0.03  | 0.079 | 0.032 |
|         | RFID         | -   | -    | -   | -  | -             | Top Side    | 10mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | -0.08 | 0.562 | 0.228 |
|         | RFID         | -   | -    | -   | -  | -             | Bottom Side | 10mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | -0.08 | 0.000 | 0.000 |
|         | RFID         | -   | -    | -   | -  | -             | Front       | 10mm | -     | -    | -             | 902.75      | 23.84 | 25.00 | 1.307 | 86.92 | 0.345 | 0.1   | 0.535 | 0.241 |
|         | RFID         | -   | -    | -   | -  | -             | Front       | 10mm | -     | -    | -             | 914.75      | 24.12 | 25.00 | 1.225 | 86.92 | 0.345 | -0.18 | 0.571 | 0.241 |
| 1750MHz |              |     |      |     |    |               |             |      |       |      |               |             |       |       |       |       |       |       |       |       |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 2 | DSI1 | 1413          | 1732.6      | 21.79 | 22.90 | 1.291 | -     | -     | -0.18 | 0.546 | 0.705 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 2 | DSI1 | 1312          | 1712.4      | 21.68 | 22.90 | 1.324 | -     | -     | -0.03 | 0.519 | 0.687 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 2 | DSI1 | 1413          | 1732.6      | 21.79 | 22.90 | 1.291 | -     | -     | -0.09 | 0.708 | 0.914 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 2 | DSI1 | 1312          | 1712.4      | 21.68 | 22.90 | 1.324 | -     | -     | 0.18  | 0.682 | 0.903 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 2 | DSI1 | 1513          | 1752.6      | 21.71 | 22.90 | 1.315 | -     | -     | 0.11  | 0.702 | 0.923 |
| 45      | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI1 | 1413          | 1732.6      | 21.79 | 22.90 | 1.291 | -     | -     | 0.02  | 0.833 | 1.076 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI1 | 1312          | 1712.4      | 21.68 | 22.90 | 1.324 | -     | -     | 0.07  | 0.761 | 1.008 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI1 | 1513          | 1752.6      | 21.71 | 22.90 | 1.315 | -     | -     | -0.03 | 0.813 | 1.069 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Right Side  | 10mm | Ant 2 | DSI1 | 1413          | 1732.6      | 21.79 | 22.90 | 1.291 | -     | -     | 0.09  | 0.042 | 0.054 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Top Side    | 10mm | Ant 2 | DSI1 | 1413          | 1732.6      | 21.79 | 22.90 | 1.291 | -     | -     | -0.08 | 0.230 | 0.297 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Bottom Side | 10mm | Ant 2 | DSI1 | 1413          | 1732.6      | 21.79 | 22.90 | 1.291 | -     | -     | -0.05 | 0.091 | 0.118 |
|         | WCDMA IV     | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI4 | 1413          | 1732.6      | 20.29 | 21.40 | 1.291 | -     | -     | 0.02  | 0.590 | 0.762 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 2 | DSI1 | 132322        | 1745        | 21.59 | 22.10 | 1.125 | -     | -     | -0.08 | 0.510 | 0.574 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 2 | DSI1 | 132322        | 1745        | 21.51 | 22.10 | 1.146 | -     | -     | -0.11 | 0.419 | 0.480 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 2 | DSI1 | 132322        | 1745        | 21.59 | 22.10 | 1.125 | -     | -     | -0.01 | 0.629 | 0.707 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 2 | DSI1 | 132322        | 1745        | 21.51 | 22.10 | 1.146 | -     | -     | 0.09  | 0.500 | 0.573 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132322        | 1745        | 21.59 | 22.10 | 1.125 | -     | -     | 0.12  | 0.882 | 0.992 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132072        | 1720        | 21.38 | 22.10 | 1.180 | -     | -     | -0.11 | 0.801 | 0.945 |
|         | LTE Band 66  | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132572        | 1770        | 21.32 | 22.10 | 1.197 | -     | -     | 0.05  | 0.896 | 1.072 |
|         | LTE Band 66C | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132572+132374 | 1770+1750.2 | 21.25 | 22.10 | 1.216 | -     | -     | 0.09  | 0.802 | 0.975 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132322        | 1745        | 21.51 | 22.10 | 1.146 | -     | -     | 0.17  | 0.707 | 0.810 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132072        | 1720        | 21.18 | 22.10 | 1.236 | -     | -     | -0.16 | 0.657 | 0.812 |
|         | LTE Band 66  | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132572        | 1770        | 21.33 | 22.10 | 1.194 | -     | -     | -0.17 | 0.733 | 0.875 |





# FCC SAR Test Report

Report No. : FA460505

|         |             |     |      |     |    |               |             |      |       |      |        |      |       |       |       |   |   |       |       |       |
|---------|-------------|-----|------|-----|----|---------------|-------------|------|-------|------|--------|------|-------|-------|-------|---|---|-------|-------|-------|
|         | LTE Band 66 | 20M | QPSK | 100 | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.24 | 22.10 | 1.219 | - | - | 0.11  | 0.692 | 0.844 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.59 | 22.10 | 1.125 | - | - | -0.05 | 0.000 | 0.000 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.51 | 22.10 | 1.146 | - | - | -0.01 | 0.000 | 0.000 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.59 | 22.10 | 1.125 | - | - | -0.14 | 0.232 | 0.261 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.51 | 22.10 | 1.146 | - | - | -0.15 | 0.189 | 0.217 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.59 | 22.10 | 1.125 | - | - | -0.12 | 0.058 | 0.065 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 2 | DSI1 | 132322 | 1745 | 21.51 | 22.10 | 1.146 | - | - | -0.17 | 0.041 | 0.047 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI4 | 132572 | 1770 | 19.82 | 20.60 | 1.197 | - | - | 0.05  | 0.634 | 0.759 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 22.15 | 23.00 | 1.216 | - | - | -0.11 | 0.445 | 0.541 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.65 | 23.00 | 1.365 | - | - | -0.18 | 0.382 | 0.521 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 22.15 | 23.00 | 1.216 | - | - | 0.01  | 0.509 | 0.619 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.65 | 23.00 | 1.365 | - | - | 0.12  | 0.406 | 0.554 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 22.15 | 23.00 | 1.216 | - | - | -0.06 | 0.285 | 0.347 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.65 | 23.00 | 1.365 | - | - | 0     | 0.232 | 0.317 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 22.15 | 23.00 | 1.216 | - | - | -0.03 | 0.265 | 0.322 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.65 | 23.00 | 1.365 | - | - | 0.07  | 0.220 | 0.300 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 22.15 | 23.00 | 1.216 | - | - | -0.12 | 0.034 | 0.041 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.65 | 23.00 | 1.365 | - | - | -0.03 | 0.034 | 0.046 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 22.15 | 23.00 | 1.216 | - | - | 0.02  | 0.751 | 0.913 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132072 | 1720 | 21.93 | 23.00 | 1.279 | - | - | 0.12  | 0.751 | 0.961 |
| 46      | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132572 | 1770 | 21.78 | 23.00 | 1.324 | - | - | -0.06 | 0.821 | 1.087 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.65 | 23.00 | 1.365 | - | - | 0.02  | 0.636 | 0.868 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132072 | 1720 | 21.60 | 23.00 | 1.380 | - | - | -0.03 | 0.599 | 0.827 |
|         | LTE Band 66 | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132572 | 1770 | 21.59 | 23.00 | 1.384 | - | - | 0     | 0.605 | 0.837 |
|         | LTE Band 66 | 20M | QPSK | 100 | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 132322 | 1745 | 21.67 | 23.00 | 1.358 | - | - | -0.1  | 0.646 | 0.877 |
|         | LTE Band 66 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI4 | 132572 | 1770 | 20.28 | 21.50 | 1.324 | - | - | -0.06 | 0.581 | 0.769 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.15 | 22.10 | 1.245 | - | - | -0.06 | 0.609 | 0.758 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.09 | 22.10 | 1.262 | - | - | -0.17 | 0.693 | 0.874 |
|         | FR1 n66     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Front       | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.04 | 22.10 | 1.276 | - | - | 0.02  | 0.595 | 0.759 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.15 | 22.10 | 1.245 | - | - | -0.11 | 0.640 | 0.796 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.09 | 22.10 | 1.262 | - | - | 0.14  | 0.691 | 0.872 |
|         | FR1 n66     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Back        | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.04 | 22.10 | 1.276 | - | - | 0.09  | 0.674 | 0.860 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.15 | 22.10 | 1.245 | - | - | 0.06  | 0.818 | 1.018 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.09 | 22.10 | 1.262 | - | - | 0.1   | 0.799 | 1.008 |
|         | FR1 n66     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.04 | 22.10 | 1.276 | - | - | 0.16  | 0.640 | 0.817 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.15 | 22.10 | 1.245 | - | - | -0.06 | 0.202 | 0.251 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.09 | 22.10 | 1.262 | - | - | 0.02  | 0.212 | 0.268 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.15 | 22.10 | 1.245 | - | - | -0.16 | 0.094 | 0.117 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 2 | DSI1 | 349000 | 1745 | 21.09 | 22.10 | 1.262 | - | - | 0.05  | 0.085 | 0.107 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI4 | 349000 | 1745 | 19.65 | 20.60 | 1.245 | - | - | 0.06  | 0.609 | 0.758 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.37 | 24.20 | 1.211 | - | - | -0.05 | 0.570 | 0.690 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.30 | 24.20 | 1.230 | - | - | -0.13 | 0.574 | 0.706 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.37 | 24.20 | 1.211 | - | - | 0.16  | 0.597 | 0.723 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.30 | 24.20 | 1.230 | - | - | 0.01  | 0.621 | 0.764 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.37 | 24.20 | 1.211 | - | - | 0.1   | 0.281 | 0.340 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.30 | 24.20 | 1.230 | - | - | -0.04 | 0.331 | 0.407 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.37 | 24.20 | 1.211 | - | - | -0.01 | 0.229 | 0.277 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.30 | 24.20 | 1.230 | - | - | 0     | 0.301 | 0.370 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.37 | 24.20 | 1.211 | - | - | -0.11 | 0.056 | 0.068 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.30 | 24.20 | 1.230 | - | - | -0.06 | 0.070 | 0.086 |
| 47      | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.37 | 24.20 | 1.211 | - | - | 0.02  | 0.890 | 1.077 |
|         | FR1 n66     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 23.30 | 24.20 | 1.230 | - | - | -0.15 | 0.865 | 1.064 |
|         | FR1 n66     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 349000 | 1745 | 22.79 | 24.00 | 1.321 | - | - | 0.03  | 0.719 | 0.950 |
|         | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI4 | 349000 | 1745 | 21.62 | 22.50 | 1.225 | - | - | 0.02  | 0.630 | 0.772 |
| 1900MHz |             |     |      |     |    |               |             |      |       |      |        |      |       |       |       |   |   |       |       |       |
|         | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Front       | 10mm | Ant 2 | DSI1 | 9400   | 1880 | 20.97 | 21.70 | 1.183 | - | - | -0.15 | 0.462 | 0.547 |



# FCC SAR Test Report

Report No. : FA460505

|    |             |     |      |     |    |               |             |      |       |      |        |        |       |       |       |   |   |       |       |       |
|----|-------------|-----|------|-----|----|---------------|-------------|------|-------|------|--------|--------|-------|-------|-------|---|---|-------|-------|-------|
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Back        | 10mm | Ant 2 | DSI1 | 9400   | 1880   | 20.97 | 21.70 | 1.183 | - | - | 0.14  | 0.535 | 0.633 |
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI1 | 9400   | 1880   | 20.97 | 21.70 | 1.183 | - | - | 0.07  | 0.759 | 0.898 |
| 48 | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI1 | 9262   | 1852.4 | 20.84 | 21.70 | 1.219 | - | - | 0.05  | 0.841 | 1.025 |
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI1 | 9538   | 1907.6 | 20.88 | 21.70 | 1.208 | - | - | -0.09 | 0.629 | 0.760 |
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Right Side  | 10mm | Ant 2 | DSI1 | 9400   | 1880   | 20.97 | 21.70 | 1.183 | - | - | -0.16 | 0.018 | 0.021 |
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Top Side    | 10mm | Ant 2 | DSI1 | 9400   | 1880   | 20.97 | 21.70 | 1.183 | - | - | -0.18 | 0.147 | 0.174 |
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Bottom Side | 10mm | Ant 2 | DSI1 | 9400   | 1880   | 20.97 | 21.70 | 1.183 | - | - | -0.07 | 0.042 | 0.050 |
|    | WCDMA II    | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 10mm | Ant 2 | DSI4 | 9262   | 1852.4 | 19.34 | 20.20 | 1.219 | - | - | 0.05  | 0.625 | 0.762 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 22.35 | 23.20 | 1.216 | - | - | 0     | 0.422 | 0.513 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.93 | 23.20 | 1.340 | - | - | -0.09 | 0.353 | 0.473 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 22.35 | 23.20 | 1.216 | - | - | 0.17  | 0.506 | 0.615 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.93 | 23.20 | 1.340 | - | - | -0.04 | 0.404 | 0.541 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 22.35 | 23.20 | 1.216 | - | - | 0.1   | 0.245 | 0.298 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.93 | 23.20 | 1.340 | - | - | 0.04  | 0.206 | 0.276 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 22.35 | 23.20 | 1.216 | - | - | 0.13  | 0.156 | 0.190 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.93 | 23.20 | 1.340 | - | - | -0.18 | 0.134 | 0.180 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 22.35 | 23.20 | 1.216 | - | - | -0.11 | 0.032 | 0.039 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.93 | 23.20 | 1.340 | - | - | -0.16 | 0.029 | 0.039 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 22.35 | 23.20 | 1.216 | - | - | -0.15 | 0.793 | 0.964 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 18700  | 1860   | 22.17 | 23.20 | 1.268 | - | - | -0.06 | 0.742 | 0.941 |
| 49 | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 19100  | 1900   | 22.03 | 23.20 | 1.309 | - | - | 0.03  | 0.824 | 1.079 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.93 | 23.20 | 1.340 | - | - | -0.14 | 0.679 | 0.910 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 18700  | 1860   | 21.90 | 23.20 | 1.349 | - | - | -0.19 | 0.629 | 0.848 |
|    | LTE Band 2  | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 19100  | 1900   | 21.85 | 23.20 | 1.365 | - | - | 0.01  | 0.686 | 0.936 |
|    | LTE Band 2  | 20M | QPSK | 100 | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI1 | 18900  | 1880   | 21.90 | 23.20 | 1.349 | - | - | 0.06  | 0.692 | 0.933 |
|    | LTE Band 2  | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 5 | DSI4 | 19100  | 1900   | 20.53 | 21.70 | 1.309 | - | - | 0.02  | 0.583 | 0.763 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.06 | 21.70 | 1.159 | - | - | -0.09 | 0.441 | 0.511 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.01 | 21.70 | 1.172 | - | - | -0.08 | 0.347 | 0.407 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.06 | 21.70 | 1.159 | - | - | 0.05  | 0.521 | 0.604 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.01 | 21.70 | 1.172 | - | - | -0.15 | 0.426 | 0.499 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.06 | 21.70 | 1.159 | - | - | 0.13  | 0.760 | 0.881 |
| 50 | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26140  | 1860   | 20.84 | 21.70 | 1.219 | - | - | 0.01  | 0.834 | 1.017 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26590  | 1905   | 20.91 | 21.70 | 1.199 | - | - | -0.18 | 0.673 | 0.807 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.01 | 21.70 | 1.172 | - | - | 0.02  | 0.704 | 0.825 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26140  | 1860   | 20.72 | 21.70 | 1.253 | - | - | 0.16  | 0.654 | 0.820 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26590  | 1905   | 20.85 | 21.70 | 1.216 | - | - | -0.03 | 0.572 | 0.696 |
|    | LTE Band 25 | 20M | QPSK | 100 | 0  | -             | Left Side   | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 20.77 | 21.70 | 1.239 | - | - | 0.07  | 0.585 | 0.725 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.06 | 21.70 | 1.159 | - | - | 0     | 0.035 | 0.041 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.01 | 21.70 | 1.172 | - | - | 0.01  | 0.028 | 0.033 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.06 | 21.70 | 1.159 | - | - | -0.01 | 0.153 | 0.177 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.01 | 21.70 | 1.172 | - | - | -0.06 | 0.113 | 0.132 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.06 | 21.70 | 1.159 | - | - | -0.04 | 0.059 | 0.068 |
|    | LTE Band 25 | 20M | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 2 | DSI1 | 26340  | 1880   | 21.01 | 21.70 | 1.172 | - | - | -0.09 | 0.038 | 0.045 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 2 | DSI4 | 26140  | 1860   | 19.34 | 20.20 | 1.219 | - | - | -0.03 | 0.630 | 0.768 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.63 | 21.70 | 1.279 | - | - | 0.18  | 0.476 | 0.609 |
|    | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.61 | 21.70 | 1.285 | - | - | -0.04 | 0.455 | 0.585 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.63 | 21.70 | 1.279 | - | - | -0.13 | 0.619 | 0.792 |
|    | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.61 | 21.70 | 1.285 | - | - | -0.13 | 0.567 | 0.729 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.63 | 21.70 | 1.279 | - | - | 0.05  | 0.848 | 1.085 |
|    | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.61 | 21.70 | 1.285 | - | - | -0.03 | 0.808 | 1.039 |
|    | FR1 n25     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.57 | 21.70 | 1.297 | - | - | -0.03 | 0.621 | 0.806 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.63 | 21.70 | 1.279 | - | - | 0.08  | 0.201 | 0.257 |
|    | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.61 | 21.70 | 1.285 | - | - | -0.07 | 0.151 | 0.194 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.63 | 21.70 | 1.279 | - | - | 0.05  | 0.048 | 0.061 |
|    | FR1 n25     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 2 | DSI1 | 376500 | 1882.5 | 20.61 | 21.70 | 1.285 | - | - | -0.11 | 0.047 | 0.060 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 2 | DSI4 | 376500 | 1882.5 | 19.13 | 20.20 | 1.279 | - | - | -0.08 | 0.600 | 0.768 |





# FCC SAR Test Report

Report No. : FA460505

|         |                      |     |      |     |    |               |             |      |       |      |             |             |       |       |       |   |   |       |       |       |
|---------|----------------------|-----|------|-----|----|---------------|-------------|------|-------|------|-------------|-------------|-------|-------|-------|---|---|-------|-------|-------|
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.38 | 23.70 | 1.355 | - | - | -0.15 | 0.432 | 0.585 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.35 | 23.70 | 1.365 | - | - | 0.19  | 0.416 | 0.568 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.38 | 23.70 | 1.355 | - | - | -0.18 | 0.479 | 0.649 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.35 | 23.70 | 1.365 | - | - | 0.03  | 0.472 | 0.644 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.38 | 23.70 | 1.355 | - | - | -0.15 | 0.208 | 0.282 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.35 | 23.70 | 1.365 | - | - | 0.11  | 0.221 | 0.302 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.38 | 23.70 | 1.355 | - | - | -0.08 | 0.188 | 0.255 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.35 | 23.70 | 1.365 | - | - | -0.17 | 0.144 | 0.196 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.38 | 23.70 | 1.355 | - | - | -0.08 | 0.742 | 1.006 |
| 51      | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.35 | 23.70 | 1.365 | - | - | 0.02  | 0.801 | 1.093 |
|         | FR1 n25              | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 376500      | 1882.5      | 22.29 | 23.70 | 1.384 | - | - | -0.04 | 0.642 | 0.888 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 5 | DSI4 | 376500      | 1882.5      | 20.85 | 22.20 | 1.365 | - | - | 0.01  | 0.567 | 0.774 |
| 2300MHz |                      |     |      |     |    |               |             |      |       |      |             |             |       |       |       |   |   |       |       |       |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | -0.06 | 0.335 | 0.411 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Front       | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.46 | 20.40 | 1.242 | - | - | 0.07  | 0.267 | 0.332 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | -0.08 | 0.354 | 0.435 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Back        | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.46 | 20.40 | 1.242 | - | - | -0.15 | 0.325 | 0.404 |
| 52      | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | 0.09  | 0.857 | 1.052 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.46 | 20.40 | 1.242 | - | - | 0.04  | 0.704 | 0.874 |
|         | LTE Band 30          | 10M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.17 | 20.40 | 1.327 | - | - | -0.01 | 0.762 | 1.011 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | -0.08 | 0.033 | 0.041 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Right Side  | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.46 | 20.40 | 1.242 | - | - | 0.05  | 0.026 | 0.032 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | 0.06  | 0.243 | 0.298 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Top Side    | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.46 | 20.40 | 1.242 | - | - | -0.09 | 0.193 | 0.240 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | -0.08 | 0.067 | 0.082 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Bottom Side | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.46 | 20.40 | 1.242 | - | - | 0.13  | 0.056 | 0.070 |
|         | LTE Band 30 Other PA | 10M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 27710       | 2310        | 19.51 | 20.40 | 1.227 | - | - | 0.02  | 0.816 | 1.002 |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI4 | 27710       | 2310        | 18.01 | 18.90 | 1.227 | - | - | 0.02  | 0.607 | 0.745 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.54 | 20.60 | 1.276 | - | - | 0.08  | 0.744 | 0.950 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front       | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.51 | 20.60 | 1.285 | - | - | 0.01  | 0.688 | 0.884 |
|         | FR1 n30              | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Front       | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.44 | 20.60 | 1.306 | - | - | 0.03  | 0.665 | 0.869 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.54 | 20.60 | 1.276 | - | - | -0.08 | 0.543 | 0.693 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back        | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.51 | 20.60 | 1.285 | - | - | -0.08 | 0.518 | 0.666 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.54 | 20.60 | 1.276 | - | - | -0.18 | 0.665 | 0.849 |
| 53      | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.51 | 20.60 | 1.285 | - | - | 0.03  | 0.805 | 1.035 |
|         | FR1 n30              | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.44 | 20.60 | 1.306 | - | - | 0.1   | 0.726 | 0.948 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.54 | 20.60 | 1.276 | - | - | 0.12  | 0.092 | 0.117 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.51 | 20.60 | 1.285 | - | - | 0.08  | 0.132 | 0.170 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.54 | 20.60 | 1.276 | - | - | -0.17 | 0.046 | 0.059 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Bottom Side | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.51 | 20.60 | 1.285 | - | - | -0.03 | 0.048 | 0.062 |
|         | FR1 n30 Other PA     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 462000      | 2310        | 19.51 | 20.60 | 1.285 | - | - | 0.03  | 0.723 | 0.929 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI4 | 462000      | 2310        | 18.51 | 19.60 | 1.285 | - | - | 0.01  | 0.620 | 0.797 |
| 2600MHz |                      |     |      |     |    |               |             |      |       |      |             |             |       |       |       |   |   |       |       |       |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | - | - | -0.17 | 0.394 | 0.502 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.28 | 19.40 | 1.294 | - | - | 0.05  | 0.321 | 0.415 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | - | - | 0.18  | 0.480 | 0.611 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.28 | 19.40 | 1.294 | - | - | -0.01 | 0.386 | 0.500 |
| 54      | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | - | - | 0.06  | 0.845 | 1.076 |
|         | LTE Band 7C          | 20M | QPSK | 1   | 99 | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21100+21298 | 2535+2554.8 | 18.24 | 19.40 | 1.306 | - | - | 0.09  | 0.749 | 0.978 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 20850       | 2510        | 18.25 | 19.40 | 1.303 | - | - | 0.06  | 0.768 | 1.001 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21350       | 2560        | 18.27 | 19.40 | 1.297 | - | - | 0.15  | 0.811 | 1.052 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.28 | 19.40 | 1.294 | - | - | -0.06 | 0.738 | 0.955 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 20850       | 2510        | 18.16 | 19.40 | 1.330 | - | - | -0.15 | 0.695 | 0.925 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21350       | 2560        | 18.19 | 19.40 | 1.321 | - | - | -0.03 | 0.733 | 0.969 |
|         | LTE Band 7           | 20M | QPSK | 100 | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.14 | 19.40 | 1.337 | - | - | 0.1   | 0.686 | 0.917 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | - | - | -0.05 | 0.026 | 0.033 |



# FCC SAR Test Report

Report No. : FA460505

|    |                     |      |      |     |    |               |             |      |       |      |             |             |       |       |       |      |       |       |       |       |
|----|---------------------|------|------|-----|----|---------------|-------------|------|-------|------|-------------|-------------|-------|-------|-------|------|-------|-------|-------|-------|
|    | LTE Band 7          | 20M  | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.28 | 19.40 | 1.294 | -    | -     | -0.03 | 0.024 | 0.031 |
|    | LTE Band 7          | 20M  | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | -    | -     | 0.09  | 0.329 | 0.419 |
|    | LTE Band 7          | 20M  | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.28 | 19.40 | 1.294 | -    | -     | 0     | 0.285 | 0.369 |
|    | LTE Band 7          | 20M  | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | -    | -     | 0.18  | 0.048 | 0.061 |
|    | LTE Band 7          | 20M  | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.28 | 19.40 | 1.294 | -    | -     | -0.08 | 0.046 | 0.060 |
|    | LTE Band 7 Other PA | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 21100       | 2535        | 18.35 | 19.40 | 1.274 | -    | -     | 0.06  | 0.811 | 1.033 |
|    | LTE Band 7          | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI4 | 21100       | 2535        | 16.85 | 17.90 | 1.274 | -    | -     | -0.17 | 0.598 | 0.762 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.48 | 21.30 | 1.208 | 62.9 | 1.006 | -0.07 | 0.351 | 0.426 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.37 | 21.30 | 1.239 | 62.9 | 1.006 | -0.03 | 0.285 | 0.355 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.48 | 21.30 | 1.208 | 62.9 | 1.006 | 0     | 0.461 | 0.560 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.37 | 21.30 | 1.239 | 62.9 | 1.006 | 0.1   | 0.379 | 0.472 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.48 | 21.30 | 1.208 | 62.9 | 1.006 | 0.07  | 0.848 | 1.030 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 39750       | 2506        | 20.20 | 21.30 | 1.288 | 62.9 | 1.006 | -0.12 | 0.750 | 0.972 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 40185       | 2549.5      | 20.34 | 21.30 | 1.247 | 62.9 | 1.006 | 0.1   | 0.802 | 1.006 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41055       | 2636.5      | 20.34 | 21.30 | 1.247 | 62.9 | 1.006 | -0.16 | 0.835 | 1.048 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41490       | 2680        | 20.35 | 21.30 | 1.245 | 62.9 | 1.006 | 0.07  | 0.855 | 1.070 |
|    | LTE Band 41C        | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41490+41292 | 2680+2660.2 | 20.21 | 21.30 | 1.285 | 62.9 | 1.006 | 0.09  | 0.750 | 0.970 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.37 | 21.30 | 1.239 | 62.9 | 1.006 | -0.1  | 0.697 | 0.869 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 39750       | 2506        | 20.36 | 21.30 | 1.242 | 62.9 | 1.006 | 0.12  | 0.637 | 0.796 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 40185       | 2549.5      | 20.03 | 21.30 | 1.340 | 62.9 | 1.006 | -0.11 | 0.658 | 0.887 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41055       | 2636.5      | 20.15 | 21.30 | 1.303 | 62.9 | 1.006 | -0.12 | 0.697 | 0.914 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41490       | 2680        | 20.06 | 21.30 | 1.330 | 62.9 | 1.006 | -0.1  | 0.677 | 0.906 |
|    | LTE Band 41         | 20M  | QPSK | 100 | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.35 | 21.30 | 1.245 | 62.9 | 1.006 | 0.16  | 0.684 | 0.856 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.48 | 21.30 | 1.208 | 62.9 | 1.006 | -0.09 | 0.038 | 0.046 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.37 | 21.30 | 1.239 | 62.9 | 1.006 | -0.09 | 0.030 | 0.037 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.48 | 21.30 | 1.208 | 62.9 | 1.006 | 0.08  | 0.197 | 0.239 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.37 | 21.30 | 1.239 | 62.9 | 1.006 | 0.06  | 0.166 | 0.207 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Bottom Side | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.48 | 21.30 | 1.208 | 62.9 | 1.006 | 0.1   | 0.045 | 0.055 |
|    | LTE Band 41         | 20M  | QPSK | 50  | 0  | -             | Bottom Side | 10mm | Ant 3 | DSI1 | 40620       | 2593        | 20.37 | 21.30 | 1.239 | 62.9 | 1.006 | 0.1   | 0.033 | 0.041 |
| 55 | LTE Band 41 HPUE    | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41490       | 2680        | 21.99 | 22.90 | 1.233 | 42.9 | 1.009 | 0.06  | 0.874 | 1.087 |
|    | LTE Band 41C HPUE   | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI1 | 41490+41292 | 2680+2660.2 | 21.61 | 22.90 | 1.346 | 42.9 | 1.009 | 0.02  | 0.722 | 0.980 |
|    | LTE Band 41         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI4 | 41490       | 2680        | 18.85 | 19.80 | 1.245 | 62.9 | 1.006 | 0.07  | 0.605 | 0.757 |
|    | LTE Band 41 HPUE    | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 3 | DSI4 | 41490       | 2680        | 20.49 | 21.40 | 1.233 | 42.9 | 1.009 | 0.06  | 0.619 | 0.770 |
|    | FR1 n7              | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.66 | 18.70 | 1.271 | -    | -     | -0.06 | 0.393 | 0.499 |
|    | FR1 n7              | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.63 | 18.70 | 1.279 | -    | -     | 0.07  | 0.377 | 0.482 |
|    | FR1 n7              | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.66 | 18.70 | 1.271 | -    | -     | -0.18 | 0.480 | 0.610 |
|    | FR1 n7              | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.63 | 18.70 | 1.279 | -    | -     | 0.11  | 0.464 | 0.594 |
|    | FR1 n7              | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.66 | 18.70 | 1.271 | -    | -     | -0.11 | 0.823 | 1.046 |
| 56 | FR1 n7              | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.63 | 18.70 | 1.279 | -    | -     | 0.02  | 0.842 | 1.077 |
|    | FR1 n7              | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.59 | 18.70 | 1.291 | -    | -     | 0.04  | 0.676 | 0.873 |
|    | FR1 n7              | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.66 | 18.70 | 1.271 | -    | -     | 0.16  | 0.330 | 0.419 |
|    | FR1 n7              | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.63 | 18.70 | 1.279 | -    | -     | 0.17  | 0.297 | 0.380 |
|    | FR1 n7 Other PA     | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI1 | 507000      | 2535        | 17.63 | 18.70 | 1.279 | -    | -     | 0.06  | 0.802 | 1.026 |
|    | FR1 n7              | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 10mm | Ant 3 | DSI4 | 507000      | 2535        | 16.13 | 17.20 | 1.279 | -    | -     | 0.09  | 0.596 | 0.763 |
|    | FR1 n41 PC2         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.66 | 18.90 | 1.330 | -    | -     | -0.18 | 0.351 | 0.467 |
|    | FR1 n41 PC2         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.61 | 18.90 | 1.346 | -    | -     | -0.13 | 0.274 | 0.369 |
|    | FR1 n41 PC2         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.66 | 18.90 | 1.330 | -    | -     | 0.02  | 0.452 | 0.601 |
|    | FR1 n41 PC2         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.61 | 18.90 | 1.346 | -    | -     | 0.02  | 0.392 | 0.528 |
|    | FR1 n41 PC2         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.66 | 18.90 | 1.330 | -    | -     | 0.09  | 0.822 | 1.094 |
|    | FR1 n41 PC2         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.61 | 18.90 | 1.346 | -    | -     | -0.17 | 0.696 | 0.937 |
|    | FR1 n41 PC2         | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.40 | 18.90 | 1.413 | -    | -     | -0.04 | 0.676 | 0.955 |
|    | FR1 n41 PC2         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.66 | 18.90 | 1.330 | -    | -     | -0.17 | 0.264 | 0.351 |
|    | FR1 n41 PC2         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.61 | 18.90 | 1.346 | -    | -     | -0.07 | 0.173 | 0.233 |
|    | FR1 n41 PC2         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.66 | 18.90 | 1.330 | -    | -     | 0.01  | 0.025 | 0.033 |
|    | FR1 n41 PC2         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 3 | DSI1 | 518598      | 2592.99     | 17.61 | 18.90 | 1.346 | -    | -     | 0.04  | 0.027 | 0.036 |



# FCC SAR Test Report

Report No. : FA460505

|         |                         |      |      |     |    |               |             |      |       |      |                 |                 |       |       |       |      |       |       |       |       |
|---------|-------------------------|------|------|-----|----|---------------|-------------|------|-------|------|-----------------|-----------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | FR1 n41 PC2<br>Other PA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 518598          | 2592.99         | 17.66 | 18.90 | 1.330 | -    | -     | 0.02  | 0.755 | 1.004 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI4 | 518598          | 2592.99         | 16.16 | 17.40 | 1.330 | -    | -     | 0.09  | 0.582 | 0.774 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | -0.15 | 0.678 | 0.813 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | 0.02  | 0.616 | 0.754 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front       | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 20.90 | 22.00 | 1.288 | -    | -     | 0.12  | 0.481 | 0.620 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | -0.16 | 0.893 | 1.071 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 0 | DSI1 | 509202          | 2546.01         | 21.13 | 22.00 | 1.222 | -    | -     | 0.09  | 0.833 | 1.018 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 0 | DSI1 | 528000          | 2640            | 21.12 | 22.00 | 1.225 | -    | -     | 0.02  | 0.815 | 0.998 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | -0.16 | 0.846 | 1.036 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back        | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 20.90 | 22.00 | 1.288 | -    | -     | -0.02 | 0.732 | 0.943 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | 0.08  | 0.152 | 0.182 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | 0     | 0.319 | 0.391 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | -0.04 | 0.000 | 0.000 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | 0.17  | 0.031 | 0.038 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | 0.18  | 0.150 | 0.180 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 0 | DSI1 | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | 0.03  | 0.160 | 0.196 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 0 | DSI4 | 518598          | 2592.99         | 19.71 | 20.50 | 1.199 | -    | -     | -0.16 | 0.632 | 0.758 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.33 | 21.40 | 1.279 | -    | -     | -0.02 | 0.434 | 0.555 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.24 | 21.40 | 1.306 | -    | -     | 0.15  | 0.347 | 0.453 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.33 | 21.40 | 1.279 | -    | -     | 0.06  | 0.656 | 0.839 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.24 | 21.40 | 1.306 | -    | -     | 0.15  | 0.566 | 0.739 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back        | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.06 | 21.40 | 1.361 | -    | -     | 0.03  | 0.526 | 0.716 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.33 | 21.40 | 1.279 | -    | -     | -0.05 | 0.106 | 0.136 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.24 | 21.40 | 1.306 | -    | -     | -0.18 | 0.094 | 0.123 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.33 | 21.40 | 1.279 | -    | -     | -0.08 | 0.136 | 0.174 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.24 | 21.40 | 1.306 | -    | -     | 0.18  | 0.124 | 0.162 |
| 57      | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.33 | 21.40 | 1.279 | -    | -     | 0.05  | 0.856 | 1.095 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.24 | 21.40 | 1.306 | -    | -     | 0.1   | 0.811 | 1.059 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 5 | DSI1 | 518598          | 2592.99         | 20.06 | 21.40 | 1.361 | -    | -     | 0.03  | 0.621 | 0.845 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 5 | DSI4 | 518598          | 2592.99         | 18.83 | 19.90 | 1.279 | -    | -     | -0.01 | 0.606 | 0.775 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.75 | 20.10 | 1.365 | -    | -     | 0.12  | 0.341 | 0.465 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.61 | 20.10 | 1.409 | -    | -     | -0.07 | 0.254 | 0.358 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.75 | 20.10 | 1.365 | -    | -     | -0.04 | 0.508 | 0.693 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.61 | 20.10 | 1.409 | -    | -     | 0.13  | 0.405 | 0.571 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.75 | 20.10 | 1.365 | -    | -     | 0.06  | 0.798 | 1.089 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.61 | 20.10 | 1.409 | -    | -     | 0.09  | 0.656 | 0.924 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.50 | 20.10 | 1.445 | -    | -     | 0.06  | 0.537 | 0.776 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.75 | 20.10 | 1.365 | -    | -     | -0.04 | 0.155 | 0.212 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 518598          | 2592.99         | 18.61 | 20.10 | 1.409 | -    | -     | 0.17  | 0.177 | 0.249 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI4 | 518598          | 2592.99         | 17.25 | 18.30 | 1.274 | -    | -     | 0.01  | 0.565 | 0.720 |
| 3500MHz |                         |      |      |     |    |               |             |      |       |      |                 |                 |       |       |       |      |       |       |       |       |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 55830           | 3609            | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | 0.13  | 0.582 | 0.754 |
| 58      | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 55340           | 3560            | 21.79 | 23.00 | 1.321 | 62.9 | 1.006 | 0.06  | 0.691 | 0.918 |
|         | LTE Band 48C            | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 55340+<br>55538 | 3560+<br>3579.8 | 21.66 | 23.00 | 1.361 | 62.9 | 1.006 | 0.09  | 0.641 | 0.878 |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 56150           | 3641            | 21.86 | 23.00 | 1.300 | 62.9 | 1.006 | -0.03 | 0.548 | 0.717 |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 56640           | 3690            | 21.85 | 23.00 | 1.303 | 62.9 | 1.006 | 0.12  | 0.520 | 0.682 |
|         | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 55830           | 3609            | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | 0.19  | 0.523 | 0.643 |
|         | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 55340           | 3560            | 20.97 | 22.00 | 1.268 | 62.9 | 1.006 | 0.14  | 0.499 | 0.636 |
|         | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 56150           | 3641            | 20.86 | 22.00 | 1.300 | 62.9 | 1.006 | 0.11  | 0.480 | 0.628 |
|         | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 56640           | 3690            | 20.99 | 22.00 | 1.262 | 62.9 | 1.006 | -0.05 | 0.479 | 0.608 |
|         | LTE Band 48             | 20M  | QPSK | 100 | 0  | -             | Front       | 10mm | Ant 4 | DSI1 | 55830           | 3609            | 21.07 | 22.00 | 1.239 | 62.9 | 1.006 | -0.09 | 0.445 | 0.555 |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 4 | DSI1 | 55830           | 3609            | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | -0.12 | 0.571 | 0.740 |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 4 | DSI1 | 55340           | 3560            | 21.79 | 23.00 | 1.321 | 62.9 | 1.006 | 0.07  | 0.609 | 0.809 |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 4 | DSI1 | 56150           | 3641            | 21.86 | 23.00 | 1.300 | 62.9 | 1.006 | -0.18 | 0.466 | 0.610 |
|         | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Back        | 10mm | Ant 4 | DSI1 | 56640           | 3690            | 21.85 | 23.00 | 1.303 | 62.9 | 1.006 | -0.06 | 0.461 | 0.604 |
|         | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Back        | 10mm | Ant 4 | DSI1 | 55830           | 3609            | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | 0.07  | 0.466 | 0.573 |



# FCC SAR Test Report

Report No. : FA460505

|    |                         |      |      |     |    |               |             |      |       |      |        |         |       |       |       |      |       |       |       |       |
|----|-------------------------|------|------|-----|----|---------------|-------------|------|-------|------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
|    | LTE Band 48             | 20M  | QPSK | 100 | 0  | -             | Back        | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.07 | 22.00 | 1.239 | 62.9 | 1.006 | -0.15 | 0.430 | 0.536 |
|    | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Left Side   | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | -0.15 | 0.085 | 0.110 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Left Side   | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | -0.08 | 0.066 | 0.081 |
|    | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Right Side  | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | -0.04 | 0.289 | 0.375 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Right Side  | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | 0.02  | 0.234 | 0.288 |
|    | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Top Side    | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | -0.07 | 0.079 | 0.102 |
|    | LTE Band 48             | 20M  | QPSK | 50  | 0  | -             | Top Side    | 10mm | Ant 4 | DSI1 | 55830  | 3609    | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | -0.08 | 0.066 | 0.081 |
|    | LTE Band 48             | 20M  | QPSK | 1   | 0  | -             | Front       | 10mm | Ant 4 | DSI4 | 55340  | 3560    | 21.38 | 22.50 | 1.294 | 62.9 | 1.006 | 0.06  | 0.612 | 0.797 |
| 59 | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.22 | 22.30 | 1.282 | -    | -     | 0.03  | 0.839 | 1.076 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 638000 | 3570    | 21.14 | 22.30 | 1.306 | -    | -     | 0.06  | 0.802 | 1.048 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 645332 | 3679.98 | 21.11 | 22.30 | 1.315 | -    | -     | 0.01  | 0.785 | 1.032 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.09 | 22.30 | 1.321 | -    | -     | 0.13  | 0.775 | 1.024 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 638000 | 3570    | 21.07 | 22.30 | 1.327 | -    | -     | 0.03  | 0.623 | 0.827 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 645332 | 3679.98 | 21.07 | 22.30 | 1.327 | -    | -     | -0.02 | 0.618 | 0.820 |
|    | FR1 n48                 | 40M  | QPSK | 100 | 0  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 20.91 | 22.30 | 1.377 | -    | -     | -0.02 | 0.651 | 0.897 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.22 | 22.30 | 1.282 | -    | -     | 0     | 0.760 | 0.975 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 638000 | 3570    | 21.14 | 22.30 | 1.306 | -    | -     | -0.05 | 0.635 | 0.829 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 645332 | 3679.98 | 21.11 | 22.30 | 1.315 | -    | -     | -0.13 | 0.618 | 0.813 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.09 | 22.30 | 1.321 | -    | -     | 0.1   | 0.636 | 0.840 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 638000 | 3570    | 21.07 | 22.30 | 1.327 | -    | -     | 0.08  | 0.622 | 0.826 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 645332 | 3679.98 | 21.07 | 22.30 | 1.327 | -    | -     | 0.16  | 0.609 | 0.808 |
|    | FR1 n48                 | 40M  | QPSK | 100 | 0  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 20.91 | 22.30 | 1.377 | -    | -     | 0.13  | 0.654 | 0.901 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.22 | 22.30 | 1.282 | -    | -     | -0.05 | 0.094 | 0.121 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.09 | 22.30 | 1.321 | -    | -     | 0.03  | 0.077 | 0.102 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.22 | 22.30 | 1.282 | -    | -     | -0.06 | 0.328 | 0.421 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.09 | 22.30 | 1.321 | -    | -     | 0.01  | 0.309 | 0.408 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.22 | 22.30 | 1.282 | -    | -     | -0.03 | 0.107 | 0.137 |
|    | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.09 | 22.30 | 1.321 | -    | -     | 0.03  | 0.105 | 0.139 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.22 | 22.30 | 1.282 | -    | -     | -0.17 | 0.107 | 0.137 |
|    | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI4 | 641666 | 3624.99 | 19.72 | 20.80 | 1.282 | -    | -     | 0.08  | 0.594 | 0.762 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.26 | 23.20 | 1.242 | -    | -     | 0.12  | 0.435 | 0.540 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.19 | 23.20 | 1.262 | -    | -     | -0.08 | 0.562 | 0.709 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.26 | 23.20 | 1.242 | -    | -     | -0.15 | 0.448 | 0.556 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.19 | 23.20 | 1.262 | -    | -     | -0.19 | 0.454 | 0.573 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.26 | 23.20 | 1.242 | -    | -     | -0.05 | 0.047 | 0.058 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.19 | 23.20 | 1.262 | -    | -     | -0.12 | 0.051 | 0.064 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.26 | 23.20 | 1.242 | -    | -     | 0.18  | 0.240 | 0.298 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.19 | 23.20 | 1.262 | -    | -     | 0.14  | 0.248 | 0.313 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.26 | 23.20 | 1.242 | -    | -     | 0.09  | 0.067 | 0.083 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.19 | 23.20 | 1.262 | -    | -     | -0.13 | 0.070 | 0.088 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.26 | 23.20 | 1.242 | -    | -     | -0.09 | 0.018 | 0.022 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 4 | DSI1 | 656000 | 3840    | 22.19 | 23.20 | 1.262 | -    | -     | -0.18 | 0.019 | 0.024 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | -    | -     | -0.12 | 0.663 | 0.913 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | -    | -     | 0.04  | 0.685 | 0.952 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front       | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.50 | 23.20 | 1.479 | -    | -     | -0.07 | 0.655 | 0.969 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | -    | -     | -0.03 | 0.636 | 0.876 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | -    | -     | -0.13 | 0.614 | 0.853 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back        | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.50 | 23.20 | 1.479 | -    | -     | 0.05  | 0.524 | 0.775 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | -    | -     | -0.15 | 0.107 | 0.147 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | -    | -     | -0.11 | 0.081 | 0.113 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | -    | -     | 0.07  | 0.305 | 0.420 |
|    | FR1 n77                 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | -    | -     | 0     | 0.335 | 0.466 |



# FCC SAR Test Report

Report No. : FA460505

|  |                         |      |      |     |    |               |            |      |       |      |        |         |       |       |       |   |   |       |       |       |
|--|-------------------------|------|------|-----|----|---------------|------------|------|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
|  | Part 27Q PC2            |      |      |     |    |               |            |      |       |      |        |         |       |       |       |   |   |       |       |       |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Side | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.50 | 23.20 | 1.479 | - | - | -0.12 | 0.232 | 0.343 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side   | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | - | - | 0.19  | 0.161 | 0.222 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side   | 10mm | Ant 4 | DSI1 | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | - | - | -0.01 | 0.151 | 0.210 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front      | 10mm | Ant 4 | DSI4 | 633334 | 3500.01 | 20.27 | 21.70 | 1.390 | - | - | 0.01  | 0.485 | 0.674 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front      | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 22.02 | 23.20 | 1.312 | - | - | 0.18  | 0.728 | 0.955 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front      | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | -0.16 | 0.620 | 0.827 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front      | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.74 | 23.20 | 1.400 | - | - | 0.15  | 0.621 | 0.869 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back       | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 22.02 | 23.20 | 1.312 | - | - | -0.15 | 0.646 | 0.848 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back       | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | 0.06  | 0.606 | 0.808 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back       | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.74 | 23.20 | 1.400 | - | - | 0.15  | 0.606 | 0.848 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side  | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 22.02 | 23.20 | 1.312 | - | - | -0.1  | 0.087 | 0.114 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side  | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | 0.17  | 0.076 | 0.101 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 22.02 | 23.20 | 1.312 | - | - | 0.13  | 0.348 | 0.457 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | -0.02 | 0.298 | 0.397 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side   | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 22.02 | 23.20 | 1.312 | - | - | 0     | 0.129 | 0.169 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side   | 10mm | Ant 4 | DSI1 | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | 0.1   | 0.106 | 0.141 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front      | 10mm | Ant 4 | DSI4 | 641666 | 3624.99 | 20.52 | 21.70 | 1.312 | - | - | 0.02  | 0.515 | 0.676 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | -0.09 | 0.584 | 0.683 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | -0.03 | 0.529 | 0.627 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | 0.17  | 0.578 | 0.676 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | 0.11  | 0.436 | 0.517 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | -0.04 | 0.338 | 0.395 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | -0.18 | 0.273 | 0.324 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | -0.13 | 0.077 | 0.090 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | 0     | 0.046 | 0.055 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side   | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | -0.04 | 0.042 | 0.049 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side   | 10mm | Ant 2 | DSI1 | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | -0.15 | 0.030 | 0.036 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | 0.14  | 0.590 | 0.820 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | -0.07 | 0.632 | 0.889 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 21.92 | 23.60 | 1.472 | - | - | 0.11  | 0.538 | 0.792 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | -0.17 | 0.610 | 0.848 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | 0.01  | 0.640 | 0.900 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 21.92 | 23.60 | 1.472 | - | - | 0.1   | 0.512 | 0.754 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | -0.05 | 0.652 | 0.906 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | 0.11  | 0.588 | 0.827 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 21.92 | 23.60 | 1.472 | - | - | -0.07 | 0.498 | 0.733 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | 0.18  | 0.051 | 0.071 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | 0.12  | 0.056 | 0.079 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side   | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | 0.07  | 0.052 | 0.072 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side   | 10mm | Ant 2 | DSI1 | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | 0.15  | 0.043 | 0.060 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI4 | 633334 | 3500.01 | 20.67 | 22.10 | 1.390 | - | - | -0.05 | 0.462 | 0.642 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | 0.16  | 0.466 | 0.611 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front      | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | 0.06  | 0.434 | 0.587 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | -0.03 | 0.514 | 0.674 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back       | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | -0.02 | 0.443 | 0.599 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side  | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | -0.17 | 0.354 | 0.465 |





# FCC SAR Test Report

Report No. : FA460505

|                         |      |      |     |    |               |             |      |       |      |        |         |       |       |       |   |   |       |              |       |
|-------------------------|------|------|-----|----|---------------|-------------|------|-------|------|--------|---------|-------|-------|-------|---|---|-------|--------------|-------|
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | 0.1   | 0.334        | 0.452 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | 0.08  | 0.038        | 0.050 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | 0     | 0.040        | 0.054 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | -0.13 | 0.030        | 0.039 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 2 | DSI1 | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | -0.1  | 0.036        | 0.049 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0     | 0.120        | 0.137 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | 0.07  | 0.073        | 0.085 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0.15  | 0.337        | 0.386 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | -0.05 | 0.300        | 0.350 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0.06  | 0.342        | 0.392 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | -0.08 | 0.214        | 0.250 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0.01  | 0.036        | 0.041 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | -0.11 | 0.029        | 0.034 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0.03  | 0.046        | 0.053 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | -0.05 | 0.045        | 0.053 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.12  | 0.120        | 0.147 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | 0.07  | 0.101        | 0.127 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.19  | 0.202        | 0.248 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | -0.06 | 0.177        | 0.222 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.06  | 0.342        | 0.420 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | -0.03 | 0.296        | 0.372 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | -0.12 | 0.012        | 0.015 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | -0.03 | 0.012        | 0.015 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.02  | 0.049        | 0.060 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | 0.12  | 0.039        | 0.049 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.17  | 0.266        | 0.316 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.15 | 0.191        | 0.232 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.05  | 0.465        | 0.553 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.06 | 0.384        | 0.467 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.08  | <b>0.675</b> | 0.802 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.01 | 0.603        | 0.733 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 17.78 | 18.90 | 1.294 | - | - | 0.09  | 0.601        | 0.778 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.19  | 0.026        | 0.031 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.14 | 0.029        | 0.035 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | -0.18 | 0.096        | 0.114 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 10mm | Ant 3 | DSI1 | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.06 | 0.069        | 0.084 |
| FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 3 | DSI4 | 641666 | 3624.99 | 16.65 | 17.40 | 1.189 | - | - | 0.08  | 0.478        | 0.568 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.56 | 21.30 | 1.186 | - | - | -0.09 | 0.286        | 0.339 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.51 | 21.30 | 1.199 | - | - | 0.05  | 0.265        | 0.318 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.56 | 21.30 | 1.186 | - | - | -0.13 | 0.433        | 0.513 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.51 | 21.30 | 1.199 | - | - | 0.17  | 0.405        | 0.486 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.56 | 21.30 | 1.186 | - | - | 0.05  | 0.753        | 0.893 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.51 | 21.30 | 1.199 | - | - | 0     | 0.737        | 0.884 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.25 | 21.30 | 1.274 | - | - | -0.04 | 0.548        | 0.698 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.56 | 21.30 | 1.186 | - | - | -0.15 | 0.185        | 0.219 |
| FR1 n77<br>Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 656000 | 3840    | 20.51 | 21.30 | 1.199 | - | - | 0.11  | 0.169        | 0.203 |
| FR1 n77                 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI4 | 656000 | 3840    | 19.06 | 19.80 | 1.186 | - | - | 0.05  | 0.533        | 0.632 |



# FCC SAR Test Report

Report No. : FA460505

|    |                         |      |      |     |    |               |             |      |       |      |        |         |       |       |       |   |   |       |       |       |
|----|-------------------------|------|------|-----|----|---------------|-------------|------|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
|    | Part 270 PC2            |      |      |     |    |               |             |      |       |      |        |         |       |       |       |   |   |       |       |       |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.58 | 21.30 | 1.180 | - | - | 0     | 0.335 | 0.395 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.51 | 21.30 | 1.199 | - | - | 0.01  | 0.351 | 0.421 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.58 | 21.30 | 1.180 | - | - | -0.06 | 0.431 | 0.509 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.51 | 21.30 | 1.199 | - | - | -0.04 | 0.489 | 0.587 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.58 | 21.30 | 1.180 | - | - | -0.17 | 0.793 | 0.936 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.51 | 21.30 | 1.199 | - | - | 0.02  | 0.855 | 1.026 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.30 | 21.30 | 1.259 | - | - | -0.1  | 0.740 | 0.932 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.58 | 21.30 | 1.180 | - | - | 0.18  | 0.215 | 0.254 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 633334 | 3500.01 | 20.51 | 21.30 | 1.199 | - | - | -0.17 | 0.233 | 0.279 |
|    | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI4 | 633334 | 3500.01 | 19.01 | 19.80 | 1.199 | - | - | -0.05 | 0.605 | 0.726 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 20.03 | 21.30 | 1.340 | - | - | 0.05  | 0.326 | 0.437 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 19.90 | 21.30 | 1.380 | - | - | -0.03 | 0.337 | 0.465 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 20.03 | 21.30 | 1.340 | - | - | 0.02  | 0.457 | 0.612 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 19.90 | 21.30 | 1.380 | - | - | 0.07  | 0.447 | 0.617 |
| 60 | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 20.03 | 21.30 | 1.340 | - | - | 0.13  | 0.810 | 1.085 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 19.90 | 21.30 | 1.380 | - | - | -0.18 | 0.772 | 1.066 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 19.70 | 21.30 | 1.445 | - | - | 0.13  | 0.720 | 1.041 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 20.03 | 21.30 | 1.340 | - | - | 0.02  | 0.212 | 0.284 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 10mm | Ant 6 | DSI1 | 641666 | 3624.99 | 19.90 | 21.30 | 1.380 | - | - | 0.16  | 0.205 | 0.283 |
|    | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 10mm | Ant 6 | DSI4 | 641666 | 3624.99 | 18.53 | 19.80 | 1.340 | - | - | 0.05  | 0.573 | 0.768 |





| Plot No.       | Band       | Mode                | Test Position | Gap (mm) | Antenna      | Power State          | Ch  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------------|------------|---------------------|---------------|----------|--------------|----------------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| <b>2450MHz</b> |            |                     |               |          |              |                      |     |             |                     |                     |                        |              |                           |                  |                        |                        |
| 61             | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 10mm     | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 18.54               | 20.00               | 1.400                  | 98.35        | 1.017                     | 0.11             | 0.298                  | 0.424                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Back          | 10mm     | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 18.54               | 20.00               | 1.400                  | 98.35        | 1.017                     | -0.05            | 0.456                  | 0.649                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Left Side     | 10mm     | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 18.54               | 20.00               | 1.400                  | 98.35        | 1.017                     | -0.17            | 0.103                  | 0.147                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 18.54               | 20.00               | 1.400                  | 98.35        | 1.017                     | 0.17             | 0.515                  | 0.733                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 10mm     | Ant 7+9(9)   | Standalone Non DBS   | 11  | 2462        | 18.54               | 20.00               | 1.400                  | 98.35        | 1.017                     | 0.04             | 0.757                  | 1.077                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 10mm     | Ant 7+9(9)   | Standalone Non DBS   | 1   | 2412        | 18.30               | 20.00               | 1.479                  | 98.35        | 1.017                     | 0.1              | 0.706                  | 1.062                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 10mm     | Ant 7+9(7)   | Standalone Non DBS   | 6   | 2437        | 17.70               | 19.00               | 1.349                  | 98.35        | 1.017                     | 0.01             | 0.591                  | 0.811                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 10mm     | Ant 7+9(7)   | Standalone DBS only  | 11  | 2462        | 15.64               | 17.00               | 1.368                  | 98.35        | 1.017                     | 0.08             | 0.388                  | 0.540                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 10mm     | Ant 7+9(7)   | Simultaneous Non DBS | 11  | 2462        | 14.18               | 15.50               | 1.355                  | 98.35        | 1.017                     | 0.01             | 0.268                  | 0.369                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 10mm     | Ant 7+9(9)   | Simultaneous DBS     | 11  | 2462        | 11.92               | 13.50               | 1.439                  | 98.35        | 1.017                     | 0.03             | 0.134                  | 0.196                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 10mm     | Ant 9        | Full Power           | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | 0.04             | 0.219                  | 0.312                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Back          | 10mm     | Ant 9        | Full Power           | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | 0.02             | 0.359                  | 0.511                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Left Side     | 10mm     | Ant 9        | Full Power           | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | -0.08            | 0.079                  | 0.112                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 9        | Full Power           | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | 0.05             | 0.477                  | 0.679                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Bottom Side   | 10mm     | Ant 9        | Full Power           | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | 0.06             | 0.001                  | 0.001                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 9        | Full Power           | 1   | 2412        | 18.30               | 20.00               | 1.479                  | 98.35        | 1.017                     | -0.09            | 0.412                  | 0.620                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 9        | Full Power           | 6   | 2437        | 17.71               | 19.50               | 1.510                  | 98.35        | 1.017                     | -0.08            | 0.410                  | 0.630                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 9        | Standalone DBS only  | 11  | 2462        | 18.54               | 20.00               | 1.400                  | 98.35        | 1.017                     | -0.04            | 0.411                  | 0.585                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 9        | Simultaneous Non DBS | 11  | 2462        | 17.13               | 18.50               | 1.371                  | 98.35        | 1.017                     | -0.09            | 0.277                  | 0.386                  |
|                | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 10mm     | Ant 9        | Simultaneous DBS     | 11  | 2462        | 14.29               | 15.50               | 1.321                  | 98.35        | 1.017                     | -0.17            | 0.141                  | 0.189                  |
| 62             | Bluetooth  | 1Mbps               | Front         | 10mm     | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.13             | 0.001                  | 0.002                  |
|                | Bluetooth  | 1Mbps               | Back          | 10mm     | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.09             | 0.012                  | 0.020                  |
|                | Bluetooth  | 1Mbps               | Left Side     | 10mm     | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.12             | 0.001                  | 0.002                  |
|                | Bluetooth  | 1Mbps               | Right Side    | 10mm     | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.03             | 0.001                  | 0.002                  |
|                | Bluetooth  | 1Mbps               | Top Side      | 10mm     | Ant 7        | Full Power           | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.01             | 0.025                  | 0.041                  |
|                | Bluetooth  | 1Mbps               | Top Side      | 10mm     | Ant 7        | Full Power           | 0   | 2402        | 9.12                | 11.00               | 1.543                  | 76.78        | 1.085                     | 0.09             | 0.020                  | 0.033                  |
|                | Bluetooth  | 1Mbps               | Top Side      | 10mm     | Ant 7        | Full Power           | 78  | 2480        | 9.04                | 11.00               | 1.571                  | 76.78        | 1.085                     | 0.02             | 0.019                  | 0.032                  |
|                | Bluetooth  | 1Mbps               | Top Side      | 10mm     | Ant 7        | Full Power           | 78  | 2480        | 9.04                | 11.00               | 1.571                  | 76.78        | 1.085                     | 0.02             | 0.019                  | 0.032                  |
| <b>5000MHz</b> |            |                     |               |          |              |                      |     |             |                     |                     |                        |              |                           |                  |                        |                        |
| 63             | WLAN5.2GHz | 802.11a 6Mbps       | Front         | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 40  | 5200        | 18.36               | 20.00               | 1.459                  | 99.32        | 1.007                     | 0.08             | 0.333                  | 0.489                  |
|                | WLAN5.2GHz | 802.11a 6Mbps       | Back          | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 40  | 5200        | 18.36               | 20.00               | 1.459                  | 99.32        | 1.007                     | 0.01             | 0.660                  | 0.970                  |
|                | WLAN5.2GHz | 802.11a 6Mbps       | Back          | 10mm     | Ant 8+10(10) | Standalone Non DBS   | 44  | 5220        | 17.88               | 19.50               | 1.452                  | 99.32        | 1.007                     | -0.08            | 0.736                  | 1.076                  |
|                | WLAN5.2GHz | 802.11a 6Mbps       | Left Side     | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 40  | 5200        | 18.36               | 20.00               | 1.459                  | 99.32        | 1.007                     | -0.08            | 0.128                  | 0.188                  |
|                | WLAN5.2GHz | 802.11a 6Mbps       | Right Side    | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 40  | 5200        | 18.36               | 20.00               | 1.459                  | 99.32        | 1.007                     | 0.1              | 0.439                  | 0.645                  |
|                | WLAN5.2GHz | 802.11a 6Mbps       | Top Side      | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 40  | 5200        | 18.36               | 20.00               | 1.459                  | 99.32        | 1.007                     | -0.18            | 0.364                  | 0.535                  |
|                | WLAN5.2GHz | 802.11ax-HE80 MCS0  | Back          | 10mm     | Ant 8+10(10) | Standalone DBS only  | 42  | 5210        | 14.56               | 16.00               | 1.393                  | 100          | 1.000                     | -0.09            | 0.414                  | 0.577                  |
|                | WLAN5.2GHz | 802.11ax-HE80 MCS0  | Back          | 10mm     | Ant 8+10(10) | Simultaneous Non DBS | 42  | 5210        | 12.98               | 14.50               | 1.419                  | 100          | 1.000                     | -0.08            | 0.266                  | 0.377                  |
| 64             | WLAN5.2GHz | 802.11ax-HE80 MCS0  | Back          | 10mm     | Ant 8+10(10) | Simultaneous DBS     | 42  | 5210        | 10.09               | 11.50               | 1.384                  | 100          | 1.000                     | -0.08            | 0.129                  | 0.178                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Front         | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 165 | 5825        | 18.61               | 20.50               | 1.543                  | 99.32        | 1.007                     | -0.08            | 0.311                  | 0.483                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Back          | 10mm     | Ant 8+10(10) | Standalone Non DBS   | 165 | 5825        | 18.61               | 20.50               | 1.543                  | 99.32        | 1.007                     | -0.17            | 0.678                  | 1.054                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Back          | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 149 | 5745        | 17.78               | 19.50               | 1.486                  | 99.32        | 1.007                     | 0.03             | 0.782                  | 1.170                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Back          | 10mm     | Ant 8+10(10) | Standalone Non DBS   | 157 | 5785        | 17.12               | 19.00               | 1.542                  | 99.32        | 1.007                     | 0.01             | 0.750                  | 1.164                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Left Side     | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 165 | 5825        | 18.61               | 20.50               | 1.543                  | 99.32        | 1.007                     | -0.04            | 0.077                  | 0.120                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Right Side    | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 165 | 5825        | 18.61               | 20.50               | 1.543                  | 99.32        | 1.007                     | -0.08            | 0.291                  | 0.452                  |
|                | WLAN5.8GHz | 802.11a 6Mbps       | Top Side      | 10mm     | Ant 8+10(8)  | Standalone Non DBS   | 165 | 5825        | 18.61               | 20.50               | 1.543                  | 99.32        | 1.007                     | 0.17             | 0.429                  | 0.667                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 10mm     | Ant 8+10(8)  | Standalone DBS only  | 155 | 5775        | 14.75               | 16.50               | 1.496                  | 100          | 1.000                     | 0.01             | 0.398                  | 0.596                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 10mm     | Ant 8+10(8)  | Simultaneous Non DBS | 155 | 5775        | 12.81               | 14.50               | 1.476                  | 100          | 1.000                     | 0.18             | 0.262                  | 0.387                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 10mm     | Ant 8+10(10) | Simultaneous DBS     | 155 | 5775        | 9.55                | 11.50               | 1.567                  | 100          | 1.000                     | -0.06            | 0.122                  | 0.191                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 10mm     | Ant 8+10(10) | Simultaneous DBS     | 155 | 5775        | 9.55                | 11.50               | 1.567                  | 100          | 1.000                     | -0.06            | 0.122                  | 0.191                  |



## 15.3 Body Worn Accessory SAR

| Plot No. | Band        | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power State | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 750MHz   |             |          |            |         |           |               |               |          |         |             |        |             |                     |                     |                        |              |                           |                  |                        |                        |
| 65       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | 0.08             | 0.181                  | 0.241                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | 0.01             | 0.157                  | 0.213                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 133297 | 680.5       | 22.76               | 24.00               | 1.330                  | -            | -                         | -0.05            | 0.208                  | 0.277                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 133297 | 680.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | 0.03             | 0.177                  | 0.240                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | 0.08             | 0.114                  | 0.161                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | 0.01             | 0.094                  | 0.129                  |
|          | LTE Band 71 | 20M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 133297 | 680.5       | 21.99               | 23.50               | 1.416                  | -            | -                         | 0.03             | 0.119                  | 0.168                  |
|          | LTE Band 71 | 20M      | QPSK       | 50      | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 133297 | 680.5       | 21.12               | 22.50               | 1.374                  | -            | -                         | -0.08            | 0.094                  | 0.129                  |
| 66       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | -0.08            | 0.252                  | 0.325                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | 0.1              | 0.216                  | 0.281                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 23095  | 707.5       | 23.89               | 25.00               | 1.291                  | -            | -                         | -0.08            | 0.280                  | 0.362                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 23095  | 707.5       | 22.85               | 24.00               | 1.303                  | -            | -                         | -0.18            | 0.231                  | 0.301                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | 0.1              | 0.142                  | 0.200                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | -0.18            | 0.118                  | 0.160                  |
|          | LTE Band 12 | 10M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 23095  | 707.5       | 22.52               | 24.00               | 1.406                  | -            | -                         | 0.02             | 0.169                  | 0.238                  |
|          | LTE Band 12 | 10M      | QPSK       | 25      | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 23095  | 707.5       | 21.68               | 23.00               | 1.355                  | -            | -                         | 0.1              | 0.140                  | 0.190                  |
| 67       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | 0.12             | 0.232                  | 0.312                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | 0.08             | 0.200                  | 0.269                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 23230  | 782         | 23.71               | 25.00               | 1.346                  | -            | -                         | -0.03            | 0.258                  | 0.347                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 23230  | 782         | 22.71               | 24.00               | 1.346                  | -            | -                         | -0.17            | 0.214                  | 0.288                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 23230  | 782         | 22.45               | 24.00               | 1.429                  | -            | -                         | 0.08             | 0.140                  | 0.200                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 23230  | 782         | 21.62               | 23.00               | 1.374                  | -            | -                         | -0.17            | 0.111                  | 0.153                  |
|          | LTE Band 13 | 10M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 23230  | 782         | 22.45               | 24.00               | 1.429                  | -            | -                         | -0.03            | 0.176                  | 0.251                  |
|          | LTE Band 13 | 10M      | QPSK       | 25      | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 23230  | 782         | 21.62               | 23.00               | 1.374                  | -            | -                         | 0.14             | 0.141                  | 0.194                  |
| 68       | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 23330  | 793         | 23.83               | 25.00               | 1.309                  | -            | -                         | 0.14             | 0.277                  | 0.363                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Front         | 15mm     | Ant 0   | DS10        | 23330  | 793         | 22.82               | 24.00               | 1.312                  | -            | -                         | 0.11             | 0.235                  | 0.308                  |
|          | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 23330  | 793         | 23.83               | 25.00               | 1.309                  | -            | -                         | -0.01            | 0.304                  | 0.398                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Back          | 15mm     | Ant 0   | DS10        | 23330  | 793         | 22.82               | 24.00               | 1.312                  | -            | -                         | -0.05            | 0.252                  | 0.331                  |
|          | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 23330  | 793         | 22.47               | 24.00               | 1.422                  | -            | -                         | -0.05            | 0.114                  | 0.162                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Front         | 15mm     | Ant 1   | DS10        | 23330  | 793         | 21.54               | 23.00               | 1.400                  | -            | -                         | 0.18             | 0.094                  | 0.132                  |
|          | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 23330  | 793         | 22.47               | 24.00               | 1.422                  | -            | -                         | 0.14             | 0.142                  | 0.202                  |
|          | LTE Band 14 | 10M      | QPSK       | 25      | 0         | -             | Back          | 15mm     | Ant 1   | DS10        | 23330  | 793         | 21.54               | 23.00               | 1.400                  | -            | -                         | -0.17            | 0.117                  | 0.164                  |
| 69       | FR1 n71     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 15mm     | Ant 0   | DS10        | 136100 | 680.5       | 22.65               | 24.00               | 1.365                  | -            | -                         | 0.14             | 0.161                  | 0.220                  |
|          | FR1 n71     | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Front         | 15mm     | Ant 0   | DS10        | 136100 | 680.5       | 22.48               | 24.00               | 1.419                  | -            | -                         | -0.17            | 0.200                  | 0.284                  |
|          | FR1 n71     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 15mm     | Ant 0   | DS10        | 136100 | 680.5       | 22.65               | 24.00               | 1.365                  | -            | -                         | 0.17             | 0.184                  | 0.251                  |
|          | FR1 n71     | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Back          | 15mm     | Ant 0   | DS10        | 136100 | 680.5       | 22.48               | 24.00               | 1.419                  | -            | -                         | -0.01            | 0.223                  | 0.316                  |
|          | FR1 n71     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 15mm     | Ant 1   | DS15        | 136100 | 680.5       | 22.53               | 24.00               | 1.403                  | -            | -                         | -0.05            | 0.175                  | 0.245                  |
|          | FR1 n71     | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Front         | 15mm     | Ant 1   | DS15        | 136100 | 680.5       | 22.23               | 24.00               | 1.503                  | -            | -                         | 0.01             | 0.153                  | 0.230                  |
|          | FR1 n71     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 15mm     | Ant 1   | DS15        | 136100 | 680.5       | 22.53               | 24.00               | 1.403                  | -            | -                         | 0.1              | 0.190                  | 0.267                  |
|          | FR1 n71     | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Back          | 15mm     | Ant 1   | DS15        | 136100 | 680.5       | 22.23               | 24.00               | 1.503                  | -            | -                         | -0.17            | 0.166                  | 0.250                  |
| 70       | FR1 n12     | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 15mm     | Ant 0   | DS10        | 141500 | 707.5       | 23.79               | 25.00               | 1.321                  | -            | -                         | 0.01             | 0.212                  | 0.280                  |
|          | FR1 n12     | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Front         | 15mm     | Ant 0   | DS10        | 141500 | 707.5       | 23.67               | 25.00               | 1.358                  | -            | -                         | 0.1              | 0.246                  | 0.334                  |
|          | FR1 n12     | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 15mm     | Ant 0   | DS10        | 141500 | 707.5       | 23.79               | 25.00               | 1.321                  | -            | -                         | -0.17            | 0.237                  | 0.313                  |
|          | FR1 n12     | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Back          | 15mm     | Ant 0   | DS10        | 141500 | 707.5       | 23.67               | 25.00               | 1.358                  | -            | -                         | -0.01            | 0.266                  | 0.361                  |
|          | FR1 n12     | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 15mm     | Ant 1   | DS15        | 141500 | 707.5       | 22.49               | 24.00               | 1.416                  | -            | -                         | -0.01            | 0.200                  | 0.283                  |
|          | FR1 n12     | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Front         | 15mm     | Ant 1   | DS15        | 141500 | 707.5       | 22.32               | 24.00               | 1.472                  | -            | -                         | -0.08            | 0.191                  | 0.281                  |
|          | FR1 n12     | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 15mm     | Ant 1   | DS15        | 141500 | 707.5       | 22.49               | 24.00               | 1.416                  | -            | -                         | 0.05             | 0.215                  | 0.304                  |
|          | FR1 n12     | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Back          | 15mm     | Ant 1   | DS15        | 141500 | 707.5       | 22.32               | 24.00               | 1.472                  | -            | -                         | 0.06             | 0.201                  | 0.296                  |
|          | FR1 n13     | 10M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 15mm     | Ant 0   | DS10        | 156400 | 782         | 23.72               | 25.00               | 1.343                  | -            | -                         | -0.01            | 0.227                  | 0.305                  |
|          | FR1 n13     | 10M      | QPSK       | 25      | 14        | DFT-SCS-15KHz | Front         | 15mm     | Ant 0   | DS10        | 156400 | 782         | 23.55               | 25.00               | 1.396                  | -            | -                         | -0.08            | 0.254                  | 0.355                  |



# FCC SAR Test Report

Report No. : FA460505

|         |              |     |      |    |    |               |       |      |       |      |               |             |       |       |       |       |       |       |       |       |
|---------|--------------|-----|------|----|----|---------------|-------|------|-------|------|---------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | FR1 n13      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 0 | DS10 | 156400        | 782         | 23.72 | 25.00 | 1.343 | -     | -     | 0.05  | 0.239 | 0.321 |
| 71      | FR1 n13      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back  | 15mm | Ant 0 | DS10 | 156400        | 782         | 23.55 | 25.00 | 1.396 | -     | -     | 0.01  | 0.260 | 0.363 |
|         | FR1 n13      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 1 | DS15 | 156400        | 782         | 22.42 | 24.00 | 1.439 | -     | -     | -0.08 | 0.182 | 0.262 |
|         | FR1 n13      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front | 15mm | Ant 1 | DS15 | 156400        | 782         | 22.17 | 24.00 | 1.524 | -     | -     | 0.13  | 0.161 | 0.245 |
|         | FR1 n13      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 1 | DS15 | 156400        | 782         | 22.42 | 24.00 | 1.439 | -     | -     | 0.12  | 0.201 | 0.289 |
|         | FR1 n13      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back  | 15mm | Ant 1 | DS15 | 156400        | 782         | 22.17 | 24.00 | 1.524 | -     | -     | 0.03  | 0.199 | 0.303 |
|         | FR1 n14      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 0 | DS10 | 158600        | 793         | 23.69 | 25.00 | 1.352 | -     | -     | -0.09 | 0.273 | 0.369 |
|         | FR1 n14      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front | 15mm | Ant 0 | DS10 | 158600        | 793         | 23.51 | 25.00 | 1.409 | -     | -     | -0.08 | 0.277 | 0.390 |
|         | FR1 n14      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 0 | DS10 | 158600        | 793         | 23.69 | 25.00 | 1.352 | -     | -     | 0.13  | 0.290 | 0.392 |
| 72      | FR1 n14      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back  | 15mm | Ant 0 | DS10 | 158600        | 793         | 23.51 | 25.00 | 1.409 | -     | -     | 0.01  | 0.304 | 0.428 |
|         | FR1 n14      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 1 | DS15 | 158600        | 793         | 22.54 | 24.00 | 1.400 | -     | -     | 0.16  | 0.164 | 0.230 |
|         | FR1 n14      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Front | 15mm | Ant 1 | DS15 | 158600        | 793         | 22.27 | 24.00 | 1.489 | -     | -     | -0.1  | 0.155 | 0.231 |
|         | FR1 n14      | 10M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 1 | DS15 | 158600        | 793         | 22.54 | 24.00 | 1.400 | -     | -     | 0.07  | 0.199 | 0.279 |
|         | FR1 n14      | 10M | QPSK | 25 | 14 | DFT-SCS-15KHz | Back  | 15mm | Ant 1 | DS15 | 158600        | 793         | 22.27 | 24.00 | 1.489 | -     | -     | 0.18  | 0.181 | 0.270 |
| 835MHz  |              |     |      |    |    |               |       |      |       |      |               |             |       |       |       |       |       |       |       |       |
|         | WCDMA V      | -   | -    | -  | -  | RMC 12.2Kbps  | Front | 15mm | Ant 0 | DS10 | 4182          | 836.4       | 23.98 | 25.00 | 1.265 | -     | -     | 0.18  | 0.381 | 0.482 |
| 73      | WCDMA V      | -   | -    | -  | -  | RMC 12.2Kbps  | Back  | 15mm | Ant 0 | DS10 | 4182          | 836.4       | 23.98 | 25.00 | 1.265 | -     | -     | -0.02 | 0.440 | 0.556 |
|         | WCDMA V      | -   | -    | -  | -  | RMC 12.2Kbps  | Front | 15mm | Ant 1 | DS15 | 4182          | 836.4       | 22.71 | 24.00 | 1.346 | -     | -     | -0.01 | 0.116 | 0.156 |
|         | WCDMA V      | -   | -    | -  | -  | RMC 12.2Kbps  | Back  | 15mm | Ant 1 | DS15 | 4182          | 836.4       | 22.71 | 24.00 | 1.346 | -     | -     | -0.09 | 0.126 | 0.170 |
|         | LTE Band 26  | 15M | QPSK | 1  | 0  | -             | Front | 15mm | Ant 0 | DS10 | 26865         | 831.5       | 23.62 | 25.00 | 1.374 | -     | -     | -0.1  | 0.299 | 0.411 |
|         | LTE Band 26  | 15M | QPSK | 36 | 0  | -             | Front | 15mm | Ant 0 | DS10 | 26865         | 831.5       | 22.75 | 24.00 | 1.334 | -     | -     | 0.07  | 0.268 | 0.357 |
| 74      | LTE Band 26  | 15M | QPSK | 1  | 0  | -             | Back  | 15mm | Ant 0 | DS10 | 26865         | 831.5       | 23.62 | 25.00 | 1.374 | -     | -     | -0.05 | 0.342 | 0.470 |
|         | LTE Band 5B  | 10M | QPSK | 1  | 49 | -             | Back  | 15mm | Ant 0 | DS10 | 20476+20575   | 826.6+836.5 | 23.47 | 25.00 | 1.422 | -     | -     | 0.02  | 0.311 | 0.442 |
|         | LTE Band 26  | 15M | QPSK | 36 | 0  | -             | Back  | 15mm | Ant 0 | DS10 | 26865         | 831.5       | 22.75 | 24.00 | 1.334 | -     | -     | 0.18  | 0.295 | 0.393 |
|         | LTE Band 26  | 15M | QPSK | 1  | 0  | -             | Front | 15mm | Ant 1 | DS15 | 26865         | 831.5       | 22.34 | 24.00 | 1.466 | -     | -     | -0.17 | 0.136 | 0.199 |
|         | LTE Band 26  | 15M | QPSK | 36 | 0  | -             | Front | 15mm | Ant 1 | DS15 | 26865         | 831.5       | 21.49 | 23.00 | 1.416 | -     | -     | -0.01 | 0.109 | 0.154 |
|         | LTE Band 26  | 15M | QPSK | 1  | 0  | -             | Back  | 15mm | Ant 1 | DS15 | 26865         | 831.5       | 22.34 | 24.00 | 1.466 | -     | -     | -0.11 | 0.158 | 0.232 |
|         | LTE Band 5B  | 10M | QPSK | 1  | 49 | -             | Back  | 15mm | Ant 1 | DS15 | 20476+20575   | 826.6+836.5 | 22.21 | 23.60 | 1.377 | -     | -     | 0.02  | 0.133 | 0.183 |
|         | LTE Band 26  | 15M | QPSK | 36 | 0  | -             | Back  | 15mm | Ant 1 | DS15 | 26865         | 831.5       | 21.49 | 23.00 | 1.416 | -     | -     | 0.14  | 0.126 | 0.178 |
|         | FR1 n26      | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 0 | DS10 | 166300        | 831.5       | 23.73 | 25.00 | 1.340 | -     | -     | 0.01  | 0.270 | 0.362 |
|         | FR1 n26      | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Front | 15mm | Ant 0 | DS10 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | -0.15 | 0.311 | 0.443 |
|         | FR1 n26      | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 0 | DS10 | 166300        | 831.5       | 23.73 | 25.00 | 1.340 | -     | -     | 0.19  | 0.313 | 0.419 |
| 75      | FR1 n26      | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Back  | 15mm | Ant 0 | DS10 | 166300        | 831.5       | 23.46 | 25.00 | 1.426 | -     | -     | -0.09 | 0.350 | 0.499 |
|         | FR1 n26      | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 1 | DS15 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | 0.1   | 0.140 | 0.202 |
|         | FR1 n26      | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Front | 15mm | Ant 1 | DS15 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | 0.16  | 0.161 | 0.252 |
|         | FR1 n26      | 20M | QPSK | 1  | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 1 | DS15 | 166300        | 831.5       | 22.01 | 23.60 | 1.442 | -     | -     | -0.06 | 0.169 | 0.244 |
|         | FR1 n26      | 20M | QPSK | 50 | 28 | DFT-SCS-15KHz | Back  | 15mm | Ant 1 | DS15 | 166300        | 831.5       | 21.65 | 23.60 | 1.567 | -     | -     | 0.02  | 0.187 | 0.293 |
| 900MHz  |              |     |      |    |    |               |       |      |       |      |               |             |       |       |       |       |       |       |       |       |
|         | RFID         | -   | -    | -  | -  | -             | Front | 15mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | -0.05 | 0.327 | 0.133 |
|         | RFID         | -   | -    | -  | -  | -             | Back  | 15mm | -     | -    | -             | 927.25      | 24.29 | 25.00 | 1.178 | 86.92 | 0.345 | 0.18  | 0.231 | 0.094 |
|         | RFID         | -   | -    | -  | -  | -             | Front | 15mm | -     | -    | -             | 902.75      | 23.84 | 25.00 | 1.307 | 86.92 | 0.345 | 0.14  | 0.252 | 0.114 |
| 76      | RFID         | -   | -    | -  | -  | -             | Front | 15mm | -     | -    | -             | 914.75      | 24.12 | 25.00 | 1.225 | 86.92 | 0.345 | 0.01  | 0.328 | 0.139 |
| 1750MHz |              |     |      |    |    |               |       |      |       |      |               |             |       |       |       |       |       |       |       |       |
|         | WCDMA IV     | -   | -    | -  | -  | RMC 12.2Kbps  | Front | 15mm | Ant 2 | DS10 | 1413          | 1732.6      | 22.78 | 23.20 | 1.102 | -     | -     | 0.08  | 0.317 | 0.349 |
| 77      | WCDMA IV     | -   | -    | -  | -  | RMC 12.2Kbps  | Back  | 15mm | Ant 2 | DS10 | 1413          | 1732.6      | 22.78 | 23.20 | 1.102 | -     | -     | -0.05 | 0.434 | 0.478 |
|         | WCDMA IV     | -   | -    | -  | -  | RMC 12.2Kbps  | Back  | 15mm | Ant 2 | DS10 | 1312          | 1712.4      | 22.65 | 23.20 | 1.135 | -     | -     | 0.01  | 0.392 | 0.445 |
|         | WCDMA IV     | -   | -    | -  | -  | RMC 12.2Kbps  | Back  | 15mm | Ant 2 | DS10 | 1513          | 1752.6      | 22.75 | 23.20 | 1.109 | -     | -     | 0.03  | 0.430 | 0.477 |
|         | LTE Band 66  | 20M | QPSK | 1  | 0  | -             | Front | 15mm | Ant 2 | DS10 | 132322        | 1745        | 22.95 | 23.60 | 1.161 | -     | -     | -0.08 | 0.379 | 0.440 |
|         | LTE Band 66  | 20M | QPSK | 50 | 0  | -             | Front | 15mm | Ant 2 | DS10 | 132322        | 1745        | 22.65 | 23.60 | 1.245 | -     | -     | -0.17 | 0.310 | 0.386 |
|         | LTE Band 66  | 20M | QPSK | 1  | 0  | -             | Back  | 15mm | Ant 2 | DS10 | 132322        | 1745        | 22.95 | 23.60 | 1.161 | -     | -     | 0.02  | 0.480 | 0.557 |
|         | LTE Band 66C | 20M | QPSK | 1  | 99 | -             | Back  | 15mm | Ant 2 | DS10 | 132322+132520 | 1745+1764.8 | 22.81 | 23.60 | 1.199 | -     | -     | 0.09  | 0.455 | 0.546 |
|         | LTE Band 66  | 20M | QPSK | 50 | 0  | -             | Back  | 15mm | Ant 2 | DS10 | 132322        | 1745        | 22.65 | 23.60 | 1.245 | -     | -     | -0.08 | 0.392 | 0.488 |
|         | LTE Band 66  | 20M | QPSK | 1  | 0  | -             | Front | 15mm | Ant 5 | DS10 | 132322        | 1745        | 23.45 | 25.00 | 1.429 | -     | -     | -0.08 | 0.409 | 0.584 |
|         | LTE Band 66  | 20M | QPSK | 50 | 0  | -             | Front | 15mm | Ant 5 | DS10 | 132322        | 1745        | 22.36 | 24.00 | 1.459 | -     | -     | 0.17  | 0.324 | 0.473 |
| 78      | LTE Band 66  | 20M | QPSK | 1  | 0  | -             | Back  | 15mm | Ant 5 | DS10 | 132322        | 1745        | 23.45 | 25.00 | 1.429 | -     | -     | -0.02 | 0.434 | 0.620 |



# FCC SAR Test Report

Report No. : FA460505

|         |                      |     |      |     |    |               |       |      |       |      |                 |                 |       |       |       |      |       |       |       |       |
|---------|----------------------|-----|------|-----|----|---------------|-------|------|-------|------|-----------------|-----------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | LTE Band 66          | 20M | QPSK | 50  | 0  | -             | Back  | 15mm | Ant 5 | DSi0 | 132322          | 1745            | 22.36 | 24.00 | 1.459 | -    | -     | 0.18  | 0.348 | 0.508 |
|         | FR1 n66              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 2 | DSi0 | 349000          | 1745            | 22.74 | 23.60 | 1.219 | -    | -     | -0.08 | 0.333 | 0.406 |
|         | FR1 n66              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 15mm | Ant 2 | DSi0 | 349000          | 1745            | 22.67 | 23.60 | 1.239 | -    | -     | -0.13 | 0.348 | 0.431 |
|         | FR1 n66              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 2 | DSi0 | 349000          | 1745            | 22.74 | 23.60 | 1.219 | -    | -     | -0.13 | 0.427 | 0.521 |
| 79      | FR1 n66              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 15mm | Ant 2 | DSi0 | 349000          | 1745            | 22.67 | 23.60 | 1.239 | -    | -     | -0.06 | 0.442 | 0.548 |
|         | FR1 n66              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 5 | DSi0 | 349000          | 1745            | 24.36 | 25.00 | 1.159 | -    | -     | -0.03 | 0.373 | 0.432 |
|         | FR1 n66              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 15mm | Ant 5 | DSi0 | 349000          | 1745            | 24.26 | 25.00 | 1.186 | -    | -     | -0.03 | 0.366 | 0.434 |
|         | FR1 n66              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 5 | DSi0 | 349000          | 1745            | 24.36 | 25.00 | 1.159 | -    | -     | 0.06  | 0.406 | 0.470 |
|         | FR1 n66              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 15mm | Ant 5 | DSi0 | 349000          | 1745            | 24.26 | 25.00 | 1.186 | -    | -     | 0.08  | 0.400 | 0.474 |
| 1900MHz |                      |     |      |     |    |               |       |      |       |      |                 |                 |       |       |       |      |       |       |       |       |
|         | WCDMA II             | -   | -    | -   | -  | RMC 12.2Kbps  | Front | 15mm | Ant 2 | DSi0 | 9400            | 1880            | 22.92 | 23.20 | 1.067 | -    | -     | 0.08  | 0.330 | 0.352 |
| 80      | WCDMA II             | -   | -    | -   | -  | RMC 12.2Kbps  | Back  | 15mm | Ant 2 | DSi0 | 9400            | 1880            | 22.92 | 23.20 | 1.067 | -    | -     | -0.05 | 0.389 | 0.415 |
|         | LTE Band 2           | 20M | QPSK | 1   | 0  | -             | Front | 15mm | Ant 5 | DSi0 | 18900           | 1880            | 23.62 | 24.40 | 1.197 | -    | -     | 0.03  | 0.417 | 0.499 |
|         | LTE Band 2           | 20M | QPSK | 50  | 0  | -             | Front | 15mm | Ant 5 | DSi0 | 18900           | 1880            | 22.51 | 24.00 | 1.409 | -    | -     | -0.08 | 0.344 | 0.485 |
| 81      | LTE Band 2           | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 5 | DSi0 | 18900           | 1880            | 23.62 | 24.40 | 1.197 | -    | -     | -0.07 | 0.476 | 0.570 |
|         | LTE Band 2           | 20M | QPSK | 50  | 0  | -             | Back  | 15mm | Ant 5 | DSi0 | 18900           | 1880            | 22.51 | 24.00 | 1.409 | -    | -     | -0.08 | 0.397 | 0.559 |
|         | LTE Band 25          | 20M | QPSK | 1   | 0  | -             | Front | 15mm | Ant 2 | DSi0 | 26340           | 1880            | 22.53 | 23.20 | 1.167 | -    | -     | -0.18 | 0.305 | 0.356 |
|         | LTE Band 25          | 20M | QPSK | 50  | 0  | -             | Front | 15mm | Ant 2 | DSi0 | 26340           | 1880            | 22.46 | 23.20 | 1.186 | -    | -     | 0.1   | 0.249 | 0.295 |
| 82      | LTE Band 25          | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 2 | DSi0 | 26340           | 1880            | 22.53 | 23.20 | 1.167 | -    | -     | -0.02 | 0.375 | 0.438 |
|         | LTE Band 25          | 20M | QPSK | 50  | 0  | -             | Back  | 15mm | Ant 2 | DSi0 | 26340           | 1880            | 22.46 | 23.20 | 1.186 | -    | -     | 0.12  | 0.302 | 0.358 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 2 | DSi0 | 376500          | 1882.5          | 22.26 | 23.20 | 1.242 | -    | -     | -0.17 | 0.268 | 0.333 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 15mm | Ant 2 | DSi0 | 376500          | 1882.5          | 22.11 | 23.20 | 1.285 | -    | -     | -0.03 | 0.243 | 0.312 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 2 | DSi0 | 376500          | 1882.5          | 22.26 | 23.20 | 1.242 | -    | -     | 0.09  | 0.333 | 0.413 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 15mm | Ant 2 | DSi0 | 376500          | 1882.5          | 22.11 | 23.20 | 1.285 | -    | -     | 0.14  | 0.311 | 0.400 |
|         | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 5 | DSi0 | 376500          | 1882.5          | 23.38 | 24.40 | 1.265 | -    | -     | -0.05 | 0.308 | 0.390 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 15mm | Ant 5 | DSi0 | 376500          | 1882.5          | 23.28 | 24.40 | 1.294 | -    | -     | 0.18  | 0.315 | 0.408 |
| 83      | FR1 n25              | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 5 | DSi0 | 376500          | 1882.5          | 23.38 | 24.40 | 1.265 | -    | -     | 0.03  | 0.365 | 0.462 |
|         | FR1 n25              | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 15mm | Ant 5 | DSi0 | 376500          | 1882.5          | 23.28 | 24.40 | 1.294 | -    | -     | 0.14  | 0.340 | 0.440 |
| 2300MHz |                      |     |      |     |    |               |       |      |       |      |                 |                 |       |       |       |      |       |       |       |       |
|         | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Front | 15mm | Ant 3 | DSi0 | 27710           | 2310            | 19.51 | 20.40 | 1.227 | -    | -     | -0.17 | 0.197 | 0.242 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Front | 15mm | Ant 3 | DSi0 | 27710           | 2310            | 19.46 | 20.40 | 1.242 | -    | -     | 0.17  | 0.160 | 0.199 |
| 84      | LTE Band 30          | 10M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 27710           | 2310            | 19.51 | 20.40 | 1.227 | -    | -     | -0.14 | 0.210 | 0.258 |
|         | LTE Band 30          | 10M | QPSK | 25  | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 27710           | 2310            | 19.46 | 20.40 | 1.242 | -    | -     | -0.05 | 0.168 | 0.209 |
|         | LTE Band 30 Other PA | 10M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 27710           | 2310            | 19.51 | 20.40 | 1.227 | -    | -     | 0.01  | 0.195 | 0.239 |
| 85      | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 3 | DSi0 | 462000          | 2310            | 19.54 | 20.70 | 1.306 | -    | -     | 0.09  | 0.195 | 0.255 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front | 15mm | Ant 3 | DSi0 | 462000          | 2310            | 19.51 | 20.70 | 1.315 | -    | -     | -0.06 | 0.191 | 0.251 |
|         | FR1 n30              | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 3 | DSi0 | 462000          | 2310            | 19.54 | 20.70 | 1.306 | -    | -     | -0.04 | 0.155 | 0.202 |
|         | FR1 n30              | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back  | 15mm | Ant 3 | DSi0 | 462000          | 2310            | 19.51 | 20.70 | 1.315 | -    | -     | -0.09 | 0.152 | 0.200 |
|         | FR1 n30 Other PA     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 3 | DSi0 | 462000          | 2310            | 19.54 | 20.70 | 1.306 | -    | -     | 0.03  | 0.175 | 0.229 |
| 2600MHz |                      |     |      |     |    |               |       |      |       |      |                 |                 |       |       |       |      |       |       |       |       |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Front | 15mm | Ant 3 | DSi0 | 21100           | 2535            | 20.36 | 20.90 | 1.132 | -    | -     | 0.01  | 0.394 | 0.446 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Front | 15mm | Ant 3 | DSi0 | 21100           | 2535            | 20.29 | 20.90 | 1.151 | -    | -     | 0.1   | 0.323 | 0.372 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 21100           | 2535            | 20.36 | 20.90 | 1.132 | -    | -     | -0.17 | 0.498 | 0.564 |
| 86      | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 20850           | 2510            | 20.28 | 20.90 | 1.153 | -    | -     | -0.05 | 0.535 | 0.617 |
|         | LTE Band 7C          | 20M | QPSK | 1   | 99 | -             | Back  | 15mm | Ant 3 | DSi0 | 20850+<br>21048 | 2510+<br>2529.8 | 20.22 | 20.90 | 1.169 | -    | -     | 0.09  | 0.504 | 0.589 |
|         | LTE Band 7           | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 21350           | 2560            | 20.27 | 20.90 | 1.156 | -    | -     | 0.04  | 0.456 | 0.527 |
|         | LTE Band 7           | 20M | QPSK | 50  | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 21100           | 2535            | 20.29 | 20.90 | 1.151 | -    | -     | -0.01 | 0.409 | 0.471 |
|         | LTE Band 7           | 20M | QPSK | 100 | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 21100           | 2535            | 20.26 | 20.90 | 1.159 | -    | -     | -0.08 | 0.391 | 0.453 |
|         | LTE Band 7 Other PA  | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 20850           | 2510            | 20.28 | 20.90 | 1.153 | -    | -     | 0.03  | 0.486 | 0.561 |
|         | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Front | 15mm | Ant 3 | DSi0 | 40620           | 2593            | 22.25 | 22.80 | 1.135 | 62.9 | 1.006 | 0.05  | 0.231 | 0.264 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Front | 15mm | Ant 3 | DSi0 | 40620           | 2593            | 21.83 | 22.80 | 1.250 | 62.9 | 1.006 | 0.06  | 0.184 | 0.231 |
| 87      | LTE Band 41          | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 40620           | 2593            | 22.25 | 22.80 | 1.135 | 62.9 | 1.006 | -0.06 | 0.313 | 0.357 |
|         | LTE Band 41C         | 20M | QPSK | 1   | 99 | -             | Back  | 15mm | Ant 3 | DSi0 | 40620+<br>40818 | 2593+<br>2612.8 | 22.19 | 22.80 | 1.151 | 62.9 | 1.006 | 0.02  | 0.299 | 0.346 |
|         | LTE Band 41          | 20M | QPSK | 50  | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 40620           | 2593            | 21.83 | 22.80 | 1.250 | 62.9 | 1.006 | -0.09 | 0.259 | 0.326 |
|         | LTE Band 41_HPUE     | 20M | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 3 | DSi0 | 40620           | 2593            | 23.88 | 24.40 | 1.127 | 42.9 | 1.009 | -0.14 | 0.286 | 0.325 |



# FCC SAR Test Report

Report No. : FA460505

|         |                      |      |      |     |    |               |       |      |       |      |             |             |       |       |       |      |       |       |       |       |
|---------|----------------------|------|------|-----|----|---------------|-------|------|-------|------|-------------|-------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | LTE Band 41C_HPUE    | 20M  | QPSK | 1   | 99 | -             | Back  | 15mm | Ant 3 | DS10 | 40620+40818 | 2593+2612.8 | 23.75 | 24.40 | 1.161 | 42.9 | 1.009 | -0.08 | 0.275 | 0.322 |
|         | FR1 n7               | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.77 | 21.80 | 1.268 | -    | -     | -0.08 | 0.373 | 0.473 |
|         | FR1 n7               | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.65 | 21.80 | 1.303 | -    | -     | 0.13  | 0.337 | 0.439 |
|         | FR1 n7               | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Front | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.36 | 21.80 | 1.393 | -    | -     | 0.12  | 0.276 | 0.385 |
| 88      | FR1 n7               | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.77 | 21.80 | 1.268 | -    | -     | -0.05 | 0.461 | 0.584 |
|         | FR1 n7               | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.65 | 21.80 | 1.303 | -    | -     | 0.03  | 0.447 | 0.583 |
|         | FR1 n7               | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Back  | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.36 | 21.80 | 1.393 | -    | -     | 0.18  | 0.348 | 0.485 |
|         | FR1 n7 Other PA      | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 15mm | Ant 3 | DS10 | 507000      | 2535        | 20.77 | 21.80 | 1.268 | -    | -     | 0.02  | 0.423 | 0.536 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.78 | 20.80 | 1.265 | -    | -     | 0.16  | 0.279 | 0.353 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.61 | 20.80 | 1.315 | -    | -     | -0.1  | 0.213 | 0.280 |
|         | FR1 n41 PC2          | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.37 | 20.80 | 1.390 | -    | -     | 0.07  | 0.209 | 0.291 |
| 89      | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.78 | 20.80 | 1.265 | -    | -     | -0.09 | 0.381 | 0.482 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.61 | 20.80 | 1.315 | -    | -     | 0.18  | 0.317 | 0.417 |
|         | FR1 n41 PC2          | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.37 | 20.80 | 1.390 | -    | -     | -0.1  | 0.278 | 0.386 |
|         | FR1 n41 PC2 Other PA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DS10 | 518598      | 2592.99     | 19.78 | 20.80 | 1.265 | -    | -     | 0.09  | 0.355 | 0.449 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 0 | DS10 | 518598      | 2592.99     | 21.21 | 22.00 | 1.199 | -    | -     | 0.01  | 0.149 | 0.179 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 0 | DS10 | 518598      | 2592.99     | 21.12 | 22.00 | 1.225 | -    | -     | -0.15 | 0.160 | 0.196 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 0 | DS10 | 518598      | 2592.99     | 21.21 | 22.00 | 1.199 | -    | -     | 0.19  | 0.182 | 0.218 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 0 | DS10 | 518598      | 2592.99     | 21.12 | 22.00 | 1.225 | -    | -     | -0.04 | 0.201 | 0.246 |
|         | FR1 n41 PC2          | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 0 | DS10 | 518598      | 2592.99     | 20.90 | 22.00 | 1.288 | -    | -     | 0.07  | 0.155 | 0.200 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 5 | DS10 | 518598      | 2592.99     | 19.35 | 20.40 | 1.274 | -    | -     | -0.18 | 0.117 | 0.149 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 5 | DS10 | 518598      | 2592.99     | 19.32 | 20.40 | 1.282 | -    | -     | 0.03  | 0.085 | 0.109 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 5 | DS10 | 518598      | 2592.99     | 19.35 | 20.40 | 1.274 | -    | -     | 0.07  | 0.169 | 0.215 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 5 | DS10 | 518598      | 2592.99     | 19.32 | 20.40 | 1.282 | -    | -     | -0.15 | 0.135 | 0.173 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 5 | DS15 | 518598      | 2592.99     | 17.35 | 18.40 | 1.274 | -    | -     | 0.07  | 0.107 | 0.136 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DS10 | 518598      | 2592.99     | 19.22 | 20.30 | 1.282 | -    | -     | -0.15 | 0.166 | 0.213 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DS10 | 518598      | 2592.99     | 19.17 | 20.30 | 1.297 | -    | -     | 0.11  | 0.145 | 0.188 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DS10 | 518598      | 2592.99     | 19.22 | 20.30 | 1.282 | -    | -     | -0.01 | 0.249 | 0.319 |
|         | FR1 n41 PC2          | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DS10 | 518598      | 2592.99     | 19.17 | 20.30 | 1.297 | -    | -     | -0.08 | 0.222 | 0.288 |
|         | FR1 n41 PC2          | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DS15 | 518598      | 2592.99     | 17.25 | 18.30 | 1.274 | -    | -     | -0.01 | 0.157 | 0.200 |
| 3500MHz |                      |      |      |     |    |               |       |      |       |      |             |             |       |       |       |      |       |       |       |       |
| 90      | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Front | 15mm | Ant 4 | DS10 | 55830       | 3609        | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | -0.08 | 0.434 | 0.562 |
|         | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Front | 15mm | Ant 4 | DS10 | 55830       | 3609        | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | -0.17 | 0.350 | 0.430 |
|         | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Back  | 15mm | Ant 4 | DS10 | 55830       | 3609        | 21.90 | 23.00 | 1.288 | 62.9 | 1.006 | -0.08 | 0.409 | 0.530 |
|         | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Back  | 15mm | Ant 4 | DS10 | 55830       | 3609        | 21.13 | 22.00 | 1.222 | 62.9 | 1.006 | -0.04 | 0.322 | 0.396 |
|         | LTE Band 48C         | 20M  | QPSK | 1   | 0  | -             | Front | 15mm | Ant 4 | DS10 | 55830+56028 | 3609+3628.8 | 21.82 | 23.00 | 1.312 | 62.9 | 1.006 | 0.09  | 0.402 | 0.531 |
| 91      | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 21.22 | 22.30 | 1.282 | -    | -     | 0.07  | 0.393 | 0.504 |
|         | FR1 n48              | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 21.09 | 22.30 | 1.321 | -    | -     | -0.08 | 0.376 | 0.497 |
|         | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 21.22 | 22.30 | 1.282 | -    | -     | 0.17  | 0.383 | 0.491 |
|         | FR1 n48              | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 21.09 | 22.30 | 1.321 | -    | -     | 0.18  | 0.373 | 0.493 |
|         | FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 656000      | 3840        | 22.26 | 23.20 | 1.242 | -    | -     | -0.02 | 0.332 | 0.412 |
|         | FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 656000      | 3840        | 22.19 | 23.20 | 1.262 | -    | -     | -0.04 | 0.301 | 0.380 |
|         | FR1 n77 Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 656000      | 3840        | 21.97 | 23.20 | 1.327 | -    | -     | -0.08 | 0.250 | 0.332 |
|         | FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 656000      | 3840        | 22.26 | 23.20 | 1.242 | -    | -     | -0.13 | 0.306 | 0.380 |
|         | FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 656000      | 3840        | 22.19 | 23.20 | 1.262 | -    | -     | -0.13 | 0.326 | 0.411 |
|         | FR1 n77 Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 656000      | 3840        | 21.97 | 23.20 | 1.327 | -    | -     | 0.06  | 0.237 | 0.315 |
|         | FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 633334      | 3500.01     | 21.81 | 23.20 | 1.377 | -    | -     | 0.03  | 0.424 | 0.584 |
|         | FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 633334      | 3500.01     | 21.77 | 23.20 | 1.390 | -    | -     | -0.03 | 0.405 | 0.563 |
|         | FR1 n77 Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 633334      | 3500.01     | 21.50 | 23.20 | 1.479 | -    | -     | -0.03 | 0.296 | 0.438 |
|         | FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 633334      | 3500.01     | 21.81 | 23.20 | 1.377 | -    | -     | 0.08  | 0.327 | 0.450 |
|         | FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 633334      | 3500.01     | 21.77 | 23.20 | 1.390 | -    | -     | -0.07 | 0.337 | 0.468 |
|         | FR1 n77 Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 633334      | 3500.01     | 21.50 | 23.20 | 1.479 | -    | -     | 0.05  | 0.275 | 0.407 |
| 92      | FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 22.02 | 23.20 | 1.312 | -    | -     | 0.07  | 0.464 | 0.609 |
|         | FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 21.95 | 23.20 | 1.334 | -    | -     | -0.11 | 0.361 | 0.481 |
|         | FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DS10 | 641666      | 3624.99     | 22.02 | 23.20 | 1.312 | -    | -     | -0.12 | 0.364 | 0.478 |





# FCC SAR Test Report

Report No. : FA460505

|                      |      |      |     |    |               |       |      |       |      |        |         |       |       |       |   |   |       |       |       |
|----------------------|------|------|-----|----|---------------|-------|------|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 4 | DSIO | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | 0.03  | 0.347 | 0.463 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 15mm | Ant 4 | DSIO | 641666 | 3624.99 | 21.74 | 23.20 | 1.400 | - | - | -0.16 | 0.411 | 0.575 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | -0.03 | 0.299 | 0.350 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | 0.11  | 0.280 | 0.332 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 2 | DSIO | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | -0.02 | 0.293 | 0.343 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 2 | DSIO | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | 0.1   | 0.217 | 0.257 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 656000 | 3840    | 22.64 | 23.60 | 1.247 | - | - | 0.04  | 0.262 | 0.327 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | 0.13  | 0.144 | 0.200 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | -0.03 | 0.165 | 0.232 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 2 | DSIO | 633334 | 3500.01 | 22.17 | 23.60 | 1.390 | - | - | -0.18 | 0.145 | 0.202 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 2 | DSIO | 633334 | 3500.01 | 22.12 | 23.60 | 1.406 | - | - | -0.11 | 0.159 | 0.224 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | -0.14 | 0.284 | 0.373 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 2 | DSIO | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | -0.16 | 0.256 | 0.346 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 2 | DSIO | 641666 | 3624.99 | 21.82 | 23.00 | 1.312 | - | - | -0.15 | 0.259 | 0.340 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 2 | DSIO | 641666 | 3624.99 | 21.69 | 23.00 | 1.352 | - | - | -0.06 | 0.244 | 0.330 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DSIO | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | -0.14 | 0.051 | 0.058 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DSIO | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | -0.19 | 0.029 | 0.034 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | -0.07 | 0.138 | 0.158 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | 0.01  | 0.123 | 0.144 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 656000 | 3840    | 17.99 | 18.90 | 1.233 | - | - | 0.06  | 0.101 | 0.125 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DSIO | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.02  | 0.091 | 0.112 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DSIO | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | 0.12  | 0.079 | 0.099 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | -0.09 | 0.161 | 0.198 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | -0.16 | 0.139 | 0.175 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | -0.12 | 0.074 | 0.088 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | 0.07  | 0.058 | 0.071 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.05  | 0.137 | 0.163 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.02 | 0.120 | 0.146 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.09 | 0.195 | 0.221 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.06 | 0.156 | 0.178 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 656000 | 3840    | 19.30 | 20.10 | 1.202 | - | - | -0.17 | 0.141 | 0.170 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.04 | 0.304 | 0.345 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.01 | 0.236 | 0.269 |
| FR1 n77 Part 270 PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 656000 | 3840    | 19.30 | 20.10 | 1.202 | - | - | -0.11 | 0.222 | 0.267 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | 0.14  | 0.136 | 0.152 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | 0.03  | 0.145 | 0.165 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | 0.1   | 0.190 | 0.212 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | -0.13 | 0.203 | 0.231 |
| FR1 n77 Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.44 | 20.10 | 1.164 | - | - | 0.16  | 0.186 | 0.217 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 641666 | 3624.99 | 19.01 | 20.10 | 1.285 | - | - | -0.06 | 0.131 | 0.168 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 15mm | Ant 6 | DSIO | 641666 | 3624.99 | 18.95 | 20.10 | 1.303 | - | - | 0.02  | 0.132 | 0.172 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 641666 | 3624.99 | 19.01 | 20.10 | 1.285 | - | - | -0.16 | 0.181 | 0.233 |
| FR1 n77 Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 15mm | Ant 6 | DSIO | 641666 | 3624.99 | 18.95 | 20.10 | 1.303 | - | - | -0.02 | 0.196 | 0.255 |





| Plot No.       | Band       | Mode                 | Test Position | Gap (mm) | Antenna      | Power State | Ch. | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------------|------------|----------------------|---------------|----------|--------------|-------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| <b>2450MHz</b> |            |                      |               |          |              |             |     |             |                     |                     |                        |              |                           |                  |                        |                        |
|                | WLAN2.4GHz | 802.11b 1Mbps        | Front         | 15mm     | Ant 7+9(7)   | Full Power  | 11  | 2462        | 19.46               | 21.00               | 1.426                  | 98.35        | 1.017                     | 0.01             | 0.260                  | 0.377                  |
| 93             | WLAN2.4GHz | 802.11b 1Mbps        | Back          | 15mm     | Ant 7+9(7)   | Full Power  | 11  | 2462        | 19.46               | 21.00               | 1.426                  | 98.35        | 1.017                     | -0.16            | 0.299                  | <b>0.434</b>           |
|                | WLAN2.4GHz | 802.11b 1Mbps        | Back          | 15mm     | Ant 7+9(9)   | DBS only    | 11  | 2462        | 16.64               | 18.00               | 1.368                  | 98.35        | 1.017                     | 0.03             | 0.142                  | 0.198                  |
|                | WLAN2.4GHz | 802.11b 1Mbps        | Front         | 15mm     | Ant 9        | Full Power  | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | 0.01             | 0.139                  | 0.198                  |
|                | WLAN2.4GHz | 802.11b 1Mbps        | Back          | 15mm     | Ant 9        | Full Power  | 11  | 2462        | 19.54               | 21.00               | 1.400                  | 98.35        | 1.017                     | 0.07             | 0.217                  | 0.309                  |
|                | WLAN2.4GHz | 802.11b 1Mbps        | Back          | 15mm     | Ant 9        | DBS         | 11  | 2462        | 17.65               | 19.00               | 1.365                  | 98.35        | 1.017                     | -0.18            | 0.131                  | 0.182                  |
|                | Bluetooth  | 1Mbps                | Front         | 15mm     | Ant 7        | Full Power  | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | 0.06             | 0.002                  | 0.004                  |
| 94             | Bluetooth  | 1Mbps                | Back          | 15mm     | Ant 7        | Full Power  | 39  | 2441        | 9.23                | 11.00               | 1.504                  | 76.78        | 1.085                     | -0.06            | 0.007                  | <b>0.011</b>           |
| <b>5000MHz</b> |            |                      |               |          |              |             |     |             |                     |                     |                        |              |                           |                  |                        |                        |
|                | WLAN5.3GHz | 802.11a 6Mbps        | Front         | 15mm     | Ant 8+10(10) | Full Power  | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | 0.08             | 0.338                  | 0.518                  |
| 95             | WLAN5.3GHz | 802.11a 6Mbps        | Back          | 15mm     | Ant 8+10(10) | Full Power  | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | -0.01            | 0.692                  | <b>1.060</b>           |
|                | WLAN5.3GHz | 802.11a 6Mbps        | Back          | 15mm     | Ant 8+10(8)  | Full Power  | 56  | 5280        | 19.56               | 21.50               | 1.561                  | 99.32        | 1.007                     | 0.09             | 0.591                  | 0.929                  |
|                | WLAN5.2GHz | 802.11ac-VHT160 MCS0 | Back          | 15mm     | Ant 8+10(8)  | DBS only    | 42  | 5210        | 16.91               | 18.50               | 1.442                  | 100          | 1.000                     | 0.02             | 0.396                  | 0.571                  |
|                | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Back          | 15mm     | Ant 8+10(10) | Non DBS     | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | 0.01             | 0.258                  | 0.382                  |
|                | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Back          | 15mm     | Ant 8+10(10) | DBS         | 50  | 5250        | 11.96               | 13.50               | 1.426                  | 100          | 1.000                     | 0.09             | 0.131                  | 0.187                  |
|                | WLAN5.5GHz | 802.11a 6Mbps        | Front         | 15mm     | Ant 8+10(8)  | Full Power  | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | 0.01             | 0.215                  | 0.333                  |
| 96             | WLAN5.5GHz | 802.11a 6Mbps        | Back          | 15mm     | Ant 8+10(8)  | Full Power  | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | -0.06            | 0.694                  | <b>1.074</b>           |
|                | WLAN5.5GHz | 802.11a 6Mbps        | Back          | 15mm     | Ant 8+10(10) | Full Power  | 116 | 5580        | 18.73               | 20.50               | 1.503                  | 99.32        | 1.007                     | 0.09             | 0.502                  | 0.760                  |
|                | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Back          | 15mm     | Ant 8+10(8)  | DBS only    | 114 | 5570        | 16.93               | 18.50               | 1.435                  | 100          | 1.000                     | 0.01             | 0.388                  | 0.557                  |
|                | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Back          | 15mm     | Ant 8+10(10) | Non DBS     | 114 | 5570        | 14.78               | 16.50               | 1.486                  | 100          | 1.000                     | 0.09             | 0.244                  | 0.363                  |
|                | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Back          | 15mm     | Ant 8+10(8)  | DBS         | 114 | 5570        | 12.50               | 14.00               | 1.413                  | 100          | 1.000                     | -0.05            | 0.129                  | 0.182                  |
|                | WLAN5.8GHz | 802.11a 6Mbps        | Front         | 15mm     | Ant 8+10(8)  | Full Power  | 149 | 5745        | 19.62               | 21.50               | 1.540                  | 99.32        | 1.007                     | 0.03             | 0.256                  | 0.397                  |
| 97             | WLAN5.8GHz | 802.11a 6Mbps        | Back          | 15mm     | Ant 8+10(8)  | Full Power  | 149 | 5745        | 19.62               | 21.50               | 1.540                  | 99.32        | 1.007                     | -0.05            | 0.742                  | <b>1.151</b>           |
|                | WLAN5.8GHz | 802.11a 6Mbps        | Back          | 15mm     | Ant 8+10(8)  | Full Power  | 165 | 5825        | 19.64               | 21.50               | 1.533                  | 99.32        | 1.007                     | 0.06             | 0.665                  | 1.026                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Back          | 15mm     | Ant 8+10(8)  | DBS only    | 155 | 5775        | 15.81               | 17.50               | 1.476                  | 100          | 1.000                     | 0.01             | 0.389                  | 0.574                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Back          | 15mm     | Ant 8+10(8)  | Non DBS     | 155 | 5775        | 14.75               | 16.50               | 1.496                  | 100          | 1.000                     | -0.05            | 0.255                  | 0.382                  |
|                | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Back          | 15mm     | Ant 8+10(8)  | DBS         | 155 | 5775        | 11.43               | 13.00               | 1.435                  | 100          | 1.000                     | 0.02             | 0.135                  | 0.194                  |



## 15.4 Product specific 10g SAR

| Plot No. | Band         | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power State | Ch.           | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|--------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-------------|---------------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
| 900MHz   |              |          |            |         |           |               |               |          |         |             |               |             |                     |                     |                        |              |                           |                  |                         |                         |
|          | RFID         | -        | -          | -       | -         | -             | Front         | 0mm      | -       | -           | -             | 927.25      | 24.29               | 25.00               | 1.178                  | 86.92        | 0.345                     | 0.1              | 1.030                   | 0.419                   |
|          | RFID         | -        | -          | -       | -         | -             | Back          | 0mm      | -       | -           | -             | 927.25      | 24.29               | 25.00               | 1.178                  | 86.92        | 0.345                     | 0.12             | 0.858                   | 0.349                   |
|          | RFID         | -        | -          | -       | -         | -             | Left Side     | 0mm      | -       | -           | -             | 927.25      | 24.29               | 25.00               | 1.178                  | 86.92        | 0.345                     | 0.08             | 0.805                   | 0.327                   |
|          | RFID         | -        | -          | -       | -         | -             | Right Side    | 0mm      | -       | -           | -             | 927.25      | 24.29               | 25.00               | 1.178                  | 86.92        | 0.345                     | -0.17            | 0.042                   | 0.017                   |
|          | RFID         | -        | -          | -       | -         | -             | Top Side      | 0mm      | -       | -           | -             | 927.25      | 24.29               | 25.00               | 1.178                  | 86.92        | 0.345                     | -0.03            | 0.648                   | 0.263                   |
|          | RFID         | -        | -          | -       | -         | -             | Bottom Side   | 0mm      | -       | -           | -             | 927.25      | 24.29               | 25.00               | 1.178                  | 86.92        | 0.345                     | 0.14             | 0.027                   | 0.011                   |
| 98       | RFID         | -        | -          | -       | -         | -             | Front         | 0mm      | -       | -           | -             | 902.75      | 23.84               | 25.00               | 1.307                  | 86.92        | 0.345                     | 0.04             | 1.220                   | 0.550                   |
|          | RFID         | -        | -          | -       | -         | -             | Front         | 0mm      | -       | -           | -             | 914.75      | 24.12               | 25.00               | 1.225                  | 86.92        | 0.345                     | 0.11             | 1.140                   | 0.482                   |
| 1750MHz  |              |          |            |         |           |               |               |          |         |             |               |             |                     |                     |                        |              |                           |                  |                         |                         |
|          | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Back          | 0mm      | Ant 2   | DSIO        | 1413          | 1732.6      | 22.78               | 23.20               | 1.102                  | -            | -                         | -0.03            | 1.870                   | 2.060                   |
|          | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Back          | 0mm      | Ant 2   | DSIO        | 1312          | 1712.4      | 22.65               | 23.20               | 1.135                  | -            | -                         | 0.17             | 1.770                   | 2.009                   |
|          | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Back          | 0mm      | Ant 2   | DSIO        | 1513          | 1752.6      | 22.75               | 23.20               | 1.109                  | -            | -                         | -0.14            | 1.970                   | 2.185                   |
| 99       | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSIO        | 1413          | 1732.6      | 22.78               | 23.20               | 1.102                  | -            | -                         | 0.06             | 2.190                   | 2.412                   |
|          | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSIO        | 1312          | 1712.4      | 22.65               | 23.20               | 1.135                  | -            | -                         | -0.06            | 2.100                   | 2.384                   |
|          | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSIO        | 1513          | 1752.6      | 22.75               | 23.20               | 1.109                  | -            | -                         | 0.09             | 2.100                   | 2.329                   |
|          | WCDMA IV     | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSI5        | 1413          | 1732.6      | 21.78               | 22.20               | 1.102                  | -            | -                         | 0.09             | 1.680                   | 1.851                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132322        | 1745        | 22.95               | 23.60               | 1.161                  | -            | -                         | 0.01             | 2.330                   | 2.706                   |
|          | LTE Band 66C | 20M      | QPSK       | 1       | 99        | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132322+132520 | 1745+1764.8 | 22.81               | 23.60               | 1.199                  | -            | -                         | 0.09             | 2.150                   | 2.579                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132072        | 1720        | 22.79               | 23.60               | 1.205                  | -            | -                         | -0.04            | 2.070                   | 2.494                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132572        | 1770        | 22.78               | 23.60               | 1.208                  | -            | -                         | 0.15             | 2.140                   | 2.585                   |
|          | LTE Band 66  | 20M      | QPSK       | 50      | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132322        | 1745        | 22.65               | 23.60               | 1.245                  | -            | -                         | 0.09             | 1.840                   | 2.290                   |
|          | LTE Band 66  | 20M      | QPSK       | 50      | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132072        | 1720        | 22.56               | 23.60               | 1.271                  | -            | -                         | -0.16            | 1.740                   | 2.211                   |
|          | LTE Band 66  | 20M      | QPSK       | 50      | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132572        | 1770        | 22.57               | 23.60               | 1.268                  | -            | -                         | 0.05             | 1.740                   | 2.206                   |
|          | LTE Band 66  | 20M      | QPSK       | 100     | 0         | -             | Left Side     | 0mm      | Ant 2   | DSIO        | 132322        | 1745        | 22.61               | 23.60               | 1.256                  | -            | -                         | 0.08             | 1.900                   | 2.386                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 2   | DSI5        | 132322        | 1745        | 21.45               | 22.10               | 1.161                  | -            | -                         | 0.01             | 1.650                   | 1.916                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132322        | 1745        | 23.45               | 25.00               | 1.429                  | -            | -                         | 0.05             | 1.700                   | 2.429                   |
| 100      | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132072        | 1720        | 23.19               | 25.00               | 1.517                  | -            | -                         | 0.08             | 1.900                   | 2.882                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132572        | 1770        | 23.24               | 25.00               | 1.500                  | -            | -                         | 0                | 1.810                   | 2.714                   |
|          | LTE Band 66  | 20M      | QPSK       | 50      | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132322        | 1745        | 22.36               | 24.00               | 1.459                  | -            | -                         | 0.07             | 1.400                   | 2.042                   |
|          | LTE Band 66  | 20M      | QPSK       | 50      | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132072        | 1720        | 22.24               | 24.00               | 1.500                  | -            | -                         | 0.15             | 1.470                   | 2.205                   |
|          | LTE Band 66  | 20M      | QPSK       | 50      | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132572        | 1770        | 22.27               | 24.00               | 1.489                  | -            | -                         | -0.05            | 1.370                   | 2.040                   |
|          | LTE Band 66  | 20M      | QPSK       | 100     | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSIO        | 132322        | 1745        | 22.28               | 24.00               | 1.486                  | -            | -                         | -0.08            | 1.470                   | 2.184                   |
|          | LTE Band 66  | 20M      | QPSK       | 1       | 0         | -             | Bottom Side   | 0mm      | Ant 5   | DSI5        | 132072        | 1720        | 21.78               | 23.50               | 1.486                  | -            | -                         | 0.08             | 1.340                   | 1.991                   |
|          | FR1 n66      | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.74               | 23.60               | 1.219                  | -            | -                         | -0.03            | 2.180                   | 2.657                   |
| 101      | FR1 n66      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.67               | 23.60               | 1.239                  | -            | -                         | 0.09             | 2.280                   | 2.824                   |
|          | FR1 n66      | 40M      | QPSK       | 216     | 0         | DFT-SCS-15KHz | Front         | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.44               | 23.60               | 1.306                  | -            | -                         | 0.17             | 1.840                   | 2.403                   |
|          | FR1 n66      | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.74               | 23.60               | 1.219                  | -            | -                         | -0.15            | 1.690                   | 2.060                   |
|          | FR1 n66      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Back          | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.67               | 23.60               | 1.239                  | -            | -                         | 0.16             | 1.730                   | 2.143                   |
|          | FR1 n66      | 40M      | QPSK       | 216     | 0         | DFT-SCS-15KHz | Back          | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.44               | 23.60               | 1.306                  | -            | -                         | 0.05             | 1.430                   | 1.868                   |
|          | FR1 n66      | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Left Side     | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.74               | 23.60               | 1.219                  | -            | -                         | -0.06            | 1.950                   | 2.377                   |
|          | FR1 n66      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Left Side     | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.67               | 23.60               | 1.239                  | -            | -                         | -0.13            | 2.090                   | 2.589                   |
|          | FR1 n66      | 40M      | QPSK       | 216     | 0         | DFT-SCS-15KHz | Left Side     | 0mm      | Ant 2   | DSIO        | 349000        | 1745        | 22.44               | 23.60               | 1.306                  | -            | -                         | -0.01            | 1.580                   | 2.064                   |
|          | FR1 n66      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 0mm      | Ant 2   | DSI5        | 349000        | 1745        | 21.68               | 22.60               | 1.236                  | -            | -                         | 0.09             | 1.610                   | 1.990                   |
|          | FR1 n66      | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Bottom Side   | 0mm      | Ant 5   | DSIO        | 349000        | 1745        | 24.36               | 25.00               | 1.159                  | -            | -                         | -0.13            | 1.860                   | 2.155                   |
|          | FR1 n66      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Bottom Side   | 0mm      | Ant 5   | DSIO        | 349000        | 1745        | 24.26               | 25.00               | 1.186                  | -            | -                         | 0.02             | 1.950                   | 2.312                   |
|          | FR1 n66      | 40M      | QPSK       | 216     | 0         | DFT-SCS-15KHz | Bottom Side   | 0mm      | Ant 5   | DSIO        | 349000        | 1745        | 23.07               | 24.00               | 1.239                  | -            | -                         | 0.16             | 1.460                   | 1.809                   |
|          | FR1 n66      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Bottom Side   | 0mm      | Ant 5   | DSI5        | 349000        | 1745        | 23.36               | 24.00               | 1.159                  | -            | -                         | 0.02             | 1.550                   | 1.796                   |
| 1900MHz  |              |          |            |         |           |               |               |          |         |             |               |             |                     |                     |                        |              |                           |                  |                         |                         |
|          | WCDMA II     | -        | -          | -       | -         | RMC 12.2Kbps  | Back          | 0mm      | Ant 2   | DSIO        | 9400          | 1880        | 22.92               | 23.20               | 1.067                  | -            | -                         | 0.11             | 1.640                   | 1.749                   |
|          | WCDMA II     | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSIO        | 9400          | 1880        | 22.92               | 23.20               | 1.067                  | -            | -                         | -0.01            | 2.310                   | 2.464                   |



# FCC SAR Test Report

Report No. : FA460505

|         |                         |     |      |     |    |               |             |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
|---------|-------------------------|-----|------|-----|----|---------------|-------------|-----|-------|------|-----------------|-----------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | WCDMA II                | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 0mm | Ant 2 | DSIO | 9262            | 1852.4          | 22.81 | 23.20 | 1.094 | -    | -     | -0.09 | 2.190 | 2.396 |
| 102     | WCDMA II                | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 0mm | Ant 2 | DSIO | 9538            | 1907.6          | 22.90 | 23.20 | 1.072 | -    | -     | 0.07  | 2.500 | 2.679 |
|         | WCDMA II                | -   | -    | -   | -  | RMC 12.2Kbps  | Left Side   | 0mm | Ant 2 | DSI5 | 9538            | 1907.6          | 21.37 | 21.70 | 1.079 | -    | -     | 0.07  | 1.770 | 1.910 |
|         | LTE Band 2              | 20M | QPSK | 1   | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 18900           | 1880            | 23.62 | 24.40 | 1.197 | -    | -     | 0.02  | 2.170 | 2.597 |
|         | LTE Band 2              | 20M | QPSK | 1   | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 18700           | 1860            | 23.46 | 24.40 | 1.242 | -    | -     | 0.12  | 2.110 | 2.620 |
| 103     | LTE Band 2              | 20M | QPSK | 1   | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 19100           | 1900            | 23.50 | 24.40 | 1.230 | -    | -     | 0.06  | 2.210 | 2.719 |
|         | LTE Band 2              | 20M | QPSK | 50  | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 18900           | 1880            | 22.51 | 24.00 | 1.409 | -    | -     | -0.16 | 1.820 | 2.565 |
|         | LTE Band 2              | 20M | QPSK | 50  | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 18700           | 1860            | 22.46 | 24.00 | 1.426 | -    | -     | -0.12 | 1.900 | 2.709 |
|         | LTE Band 2              | 20M | QPSK | 50  | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 19100           | 1900            | 22.46 | 24.00 | 1.426 | -    | -     | 0.07  | 1.880 | 2.680 |
|         | LTE Band 2              | 20M | QPSK | 100 | 0  | -             | Bottom Side | 0mm | Ant 5 | DSIO | 18900           | 1880            | 22.54 | 24.00 | 1.400 | -    | -     | -0.02 | 1.830 | 2.561 |
|         | LTE Band 2              | 20M | QPSK | 1   | 0  | -             | Bottom Side | 0mm | Ant 5 | DSI5 | 19100           | 1900            | 22.00 | 22.90 | 1.230 | -    | -     | 0.01  | 1.570 | 1.932 |
|         | LTE Band 25             | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26340           | 1880            | 22.53 | 23.20 | 1.167 | -    | -     | -0.17 | 2.270 | 2.649 |
|         | LTE Band 25             | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26140           | 1860            | 22.37 | 23.20 | 1.211 | -    | -     | -0.1  | 2.140 | 2.591 |
| 104     | LTE Band 25             | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26590           | 1905            | 22.48 | 23.20 | 1.180 | -    | -     | 0.08  | 2.360 | 2.786 |
|         | LTE Band 25             | 20M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26340           | 1880            | 22.46 | 23.20 | 1.186 | -    | -     | 0.18  | 1.880 | 2.229 |
|         | LTE Band 25             | 20M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26140           | 1860            | 22.23 | 23.20 | 1.250 | -    | -     | -0.17 | 1.820 | 2.275 |
|         | LTE Band 25             | 20M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26590           | 1905            | 22.41 | 23.20 | 1.199 | -    | -     | -0.04 | 2.020 | 2.423 |
|         | LTE Band 25             | 20M | QPSK | 100 | 0  | -             | Left Side   | 0mm | Ant 2 | DSIO | 26340           | 1880            | 22.48 | 23.20 | 1.180 | -    | -     | -0.05 | 2.030 | 2.396 |
|         | LTE Band 25             | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 2 | DSI5 | 26590           | 1905            | 20.98 | 21.70 | 1.180 | -    | -     | 0.02  | 1.670 | 1.971 |
|         | FR1 n25                 | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 2 | DSIO | 376500          | 1882.5          | 22.26 | 23.20 | 1.242 | -    | -     | -0.02 | 2.280 | 2.831 |
| 105     | FR1 n25                 | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 0mm | Ant 2 | DSIO | 376500          | 1882.5          | 22.11 | 23.20 | 1.285 | -    | -     | 0.06  | 2.370 | 3.046 |
|         | FR1 n25                 | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 2 | DSIO | 376500          | 1882.5          | 21.86 | 23.20 | 1.361 | -    | -     | 0.15  | 1.970 | 2.682 |
|         | FR1 n25                 | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 0mm | Ant 2 | DSI5 | 376500          | 1882.5          | 20.11 | 21.20 | 1.285 | -    | -     | 0.02  | 1.500 | 1.928 |
|         | FR1 n25                 | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 0mm | Ant 5 | DSIO | 376500          | 1882.5          | 23.38 | 24.40 | 1.265 | -    | -     | 0.07  | 2.380 | 3.010 |
|         | FR1 n25                 | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 0mm | Ant 5 | DSIO | 376500          | 1882.5          | 23.28 | 24.40 | 1.294 | -    | -     | -0.08 | 2.310 | 2.990 |
|         | FR1 n25                 | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Bottom Side | 0mm | Ant 5 | DSIO | 376500          | 1882.5          | 23.21 | 24.00 | 1.199 | -    | -     | 0.17  | 1.940 | 2.327 |
|         | FR1 n25                 | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 0mm | Ant 5 | DSI5 | 376500          | 1882.5          | 21.88 | 22.90 | 1.265 | -    | -     | -0.08 | 1.580 | 1.998 |
| 2300MHz |                         |     |      |     |    |               |             |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
| 106     | LTE Band 30             | 10M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 27710           | 2310            | 19.51 | 20.40 | 1.227 | -    | -     | 0.01  | 2.490 | 3.056 |
|         | LTE Band 30             | 10M | QPSK | 25  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 27710           | 2310            | 19.46 | 20.40 | 1.242 | -    | -     | 0.18  | 2.020 | 2.508 |
|         | LTE Band 30             | 10M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 27710           | 2310            | 19.17 | 20.40 | 1.327 | -    | -     | -0.1  | 2.070 | 2.748 |
|         | LTE Band 30<br>Other PA | 10M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 27710           | 2310            | 19.51 | 20.40 | 1.227 | -    | -     | 0.09  | 2.290 | 2.811 |
|         | LTE Band 30             | 10M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSI5 | 27710           | 2310            | 17.51 | 18.40 | 1.227 | -    | -     | -0.09 | 1.570 | 1.927 |
|         | FR1 n30                 | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.54 | 20.60 | 1.276 | -    | -     | 0.14  | 1.630 | 2.081 |
|         | FR1 n30                 | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front       | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.51 | 20.60 | 1.285 | -    | -     | 0.11  | 1.290 | 1.658 |
|         | FR1 n30                 | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Front       | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.44 | 20.60 | 1.306 | -    | -     | 0.03  | 1.330 | 1.737 |
|         | FR1 n30                 | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.54 | 20.60 | 1.276 | -    | -     | -0.05 | 1.000 | 1.276 |
|         | FR1 n30                 | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back        | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.51 | 20.60 | 1.285 | -    | -     | 0.18  | 0.807 | 1.037 |
| 107     | FR1 n30                 | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.54 | 20.60 | 1.276 | -    | -     | 0.14  | 2.340 | 2.987 |
|         | FR1 n30                 | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.51 | 20.60 | 1.285 | -    | -     | -0.17 | 1.890 | 2.429 |
|         | FR1 n30                 | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.44 | 20.60 | 1.306 | -    | -     | 0.03  | 1.770 | 2.312 |
|         | FR1 n30 Other PA        | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSI1 | 462000          | 2310            | 19.54 | 20.60 | 1.276 | -    | -     | 0.09  | 2.260 | 2.885 |
|         | FR1 n30                 | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSI5 | 462000          | 2310            | 17.54 | 18.70 | 1.306 | -    | -     | 0.05  | 1.480 | 1.933 |
| 2600MHz |                         |     |      |     |    |               |             |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
| 108     | LTE Band 7              | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 21100           | 2535            | 20.36 | 20.90 | 1.132 | -    | -     | 0.01  | 2.590 | 2.933 |
|         | LTE Band 7C             | 20M | QPSK | 1   | 99 | -             | Left Side   | 0mm | Ant 3 | DSIO | 21100+<br>21298 | 2535+<br>2554.8 | 20.22 | 20.90 | 1.169 | -    | -     | 0.07  | 2.340 | 2.737 |
|         | LTE Band 7              | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 20850           | 2510            | 20.28 | 20.90 | 1.153 | -    | -     | -0.16 | 2.470 | 2.849 |
|         | LTE Band 7              | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 21350           | 2560            | 20.27 | 20.90 | 1.156 | -    | -     | 0     | 2.530 | 2.925 |
|         | LTE Band 7              | 20M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 21100           | 2535            | 20.29 | 20.90 | 1.151 | -    | -     | -0.02 | 2.150 | 2.474 |
|         | LTE Band 7              | 20M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 20850           | 2510            | 20.18 | 20.90 | 1.180 | -    | -     | 0.04  | 2.110 | 2.490 |
|         | LTE Band 7              | 20M | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 21350           | 2560            | 20.21 | 20.90 | 1.172 | -    | -     | -0.18 | 2.150 | 2.520 |
|         | LTE Band 7              | 20M | QPSK | 100 | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 21100           | 2535            | 20.26 | 20.90 | 1.159 | -    | -     | -0.07 | 2.050 | 2.375 |
|         | LTE Band 7<br>Other PA  | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 21100           | 2535            | 20.36 | 20.90 | 1.132 | -    | -     | 0.01  | 2.440 | 2.763 |
|         | LTE Band 7              | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSI5 | 21100           | 2535            | 18.86 | 19.40 | 1.132 | -    | -     | 0.09  | 1.760 | 1.993 |
|         | LTE Band 41             | 20M | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 40620           | 2593            | 22.25 | 22.80 | 1.135 | 62.9 | 1.006 | -0.07 | 2.250 | 2.569 |



# FCC SAR Test Report

Report No. : FA460505

|         |                         |      |      |     |    |               |             |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
|---------|-------------------------|------|------|-----|----|---------------|-------------|-----|-------|------|-----------------|-----------------|-------|-------|-------|------|-------|-------|-------|-------|
|         | LTE Band 41             | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 39750           | 2506            | 22.04 | 22.80 | 1.191 | 62.9 | 1.006 | 0.08  | 2.020 | 2.421 |
|         | LTE Band 41             | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 40185           | 2549.5          | 22.07 | 22.80 | 1.183 | 62.9 | 1.006 | 0.15  | 2.070 | 2.464 |
|         | LTE Band 41             | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41055           | 2636.5          | 22.17 | 22.80 | 1.156 | 62.9 | 1.006 | -0.11 | 2.340 | 2.722 |
| 109     | LTE Band 41             | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41490           | 2680            | 22.16 | 22.80 | 1.159 | 62.9 | 1.006 | 0.01  | 2.630 | 3.066 |
|         | LTE Band 41C            | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41490+<br>41292 | 2680+<br>2660.2 | 22.02 | 22.80 | 1.197 | 62.9 | 1.006 | 0.01  | 2.410 | 2.901 |
|         | LTE Band 41             | 20M  | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 40620           | 2593            | 21.83 | 22.80 | 1.250 | 62.9 | 1.006 | -0.05 | 1.880 | 2.365 |
|         | LTE Band 41             | 20M  | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 39750           | 2506            | 22.13 | 22.80 | 1.167 | 62.9 | 1.006 | -0.05 | 1.710 | 2.007 |
|         | LTE Band 41             | 20M  | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 40185           | 2549.5          | 21.76 | 22.80 | 1.271 | 62.9 | 1.006 | -0.11 | 1.740 | 2.224 |
|         | LTE Band 41             | 20M  | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41055           | 2636.5          | 21.74 | 22.80 | 1.276 | 62.9 | 1.006 | 0.03  | 1.960 | 2.517 |
|         | LTE Band 41             | 20M  | QPSK | 50  | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41490           | 2680            | 21.71 | 22.80 | 1.285 | 62.9 | 1.006 | 0.05  | 2.150 | 2.780 |
|         | LTE Band 41             | 20M  | QPSK | 100 | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 40620           | 2593            | 21.73 | 22.80 | 1.279 | 62.9 | 1.006 | -0.14 | 1.880 | 2.420 |
|         | LTE Band 41<br>HPUE     | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41490           | 2680            | 23.85 | 24.40 | 1.135 | 42.9 | 1.009 | 0.07  | 2.580 | 2.955 |
|         | LTE Band 41C<br>HPUE    | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSIO | 41490+<br>41292 | 2680+<br>2660.2 | 23.59 | 24.40 | 1.205 | 42.9 | 1.009 | 0.07  | 2.410 | 2.930 |
|         | LTE Band 41             | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSI5 | 41490           | 2680            | 20.16 | 20.80 | 1.159 | 62.9 | 1.006 | -0.05 | 1.660 | 1.935 |
|         | LTE Band 41<br>HPUE     | 20M  | QPSK | 1   | 0  | -             | Left Side   | 0mm | Ant 3 | DSI5 | 41490           | 2680            | 21.85 | 22.40 | 1.135 | 42.9 | 1.009 | 0.06  | 1.630 | 1.867 |
|         | FR1 n7                  | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.77 | 21.80 | 1.268 | -    | -     | -0.19 | 1.330 | 1.686 |
|         | FR1 n7                  | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.65 | 21.80 | 1.303 | -    | -     | 0.17  | 1.300 | 1.694 |
| 110     | FR1 n7                  | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.77 | 21.80 | 1.268 | -    | -     | 0.08  | 2.400 | 3.042 |
|         | FR1 n7                  | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.65 | 21.80 | 1.303 | -    | -     | 0.03  | 2.310 | 3.010 |
|         | FR1 n7                  | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.36 | 21.80 | 1.393 | -    | -     | 0.12  | 1.920 | 2.675 |
|         | FR1 n7                  | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.77 | 21.80 | 1.268 | -    | -     | -0.17 | 0.884 | 1.121 |
|         | FR1 n7                  | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.65 | 21.80 | 1.303 | -    | -     | -0.17 | 0.902 | 1.175 |
|         | FR1 n7 Other PA         | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSIO | 507000          | 2535            | 20.77 | 21.80 | 1.268 | -    | -     | 0.09  | 2.260 | 2.865 |
|         | FR1 n7                  | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 0mm | Ant 3 | DSI5 | 507000          | 2535            | 18.80 | 19.80 | 1.259 | -    | -     | -0.01 | 1.510 | 1.901 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 3 | DSIO | 518598          | 2592.99         | 19.78 | 20.80 | 1.265 | -    | -     | 0.06  | 2.400 | 3.035 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 0mm | Ant 3 | DSIO | 518598          | 2592.99         | 19.61 | 20.80 | 1.315 | -    | -     | -0.13 | 2.090 | 2.749 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 3 | DSIO | 518598          | 2592.99         | 19.37 | 20.80 | 1.390 | -    | -     | -0.17 | 1.720 | 2.391 |
|         | FR1 n41 PC2<br>Other PA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 3 | DSIO | 518598          | 2592.99         | 19.78 | 20.80 | 1.265 | -    | -     | 0.06  | 2.220 | 2.808 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 3 | DSI5 | 518598          | 2592.99         | 17.78 | 18.80 | 1.265 | -    | -     | 0.06  | 1.510 | 1.910 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 0mm | Ant 0 | DSIO | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | 0.02  | 1.220 | 1.463 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 0mm | Ant 0 | DSIO | 509202          | 2546.01         | 21.13 | 22.00 | 1.222 | -    | -     | 0.01  | 1.020 | 1.246 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 0mm | Ant 0 | DSIO | 528000          | 2640            | 21.12 | 22.00 | 1.225 | -    | -     | 0.09  | 1.090 | 1.335 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 0mm | Ant 0 | DSIO | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | 0.01  | 1.130 | 1.384 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 0mm | Ant 0 | DSIO | 518598          | 2592.99         | 21.21 | 22.00 | 1.199 | -    | -     | -0.16 | 0.994 | 1.192 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 0mm | Ant 0 | DSIO | 518598          | 2592.99         | 21.12 | 22.00 | 1.225 | -    | -     | -0.12 | 0.929 | 1.138 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 0mm | Ant 5 | DSIO | 518598          | 2592.99         | 19.35 | 20.40 | 1.274 | -    | -     | 0.04  | 1.790 | 2.280 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 0mm | Ant 5 | DSIO | 518598          | 2592.99         | 19.32 | 20.40 | 1.282 | -    | -     | -0.09 | 1.800 | 2.308 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back        | 0mm | Ant 5 | DSIO | 518598          | 2592.99         | 19.21 | 20.40 | 1.315 | -    | -     | 0     | 1.370 | 1.802 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 0mm | Ant 5 | DSIO | 518598          | 2592.99         | 19.35 | 20.40 | 1.274 | -    | -     | 0.09  | 2.410 | 3.069 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 0mm | Ant 5 | DSIO | 518598          | 2592.99         | 19.32 | 20.40 | 1.282 | -    | -     | 0.11  | 2.310 | 2.962 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Bottom Side | 0mm | Ant 5 | DSIO | 518598          | 2592.99         | 19.21 | 20.40 | 1.315 | -    | -     | 0.14  | 1.790 | 2.354 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 0mm | Ant 5 | DSI5 | 518598          | 2592.99         | 17.35 | 18.40 | 1.274 | -    | -     | 0.06  | 1.520 | 1.936 |
| 111     | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 6 | DSIO | 518598          | 2592.99         | 19.22 | 20.30 | 1.282 | -    | -     | 0.01  | 2.400 | 3.078 |
|         | FR1 n41 PC2             | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 0mm | Ant 6 | DSIO | 518598          | 2592.99         | 19.17 | 20.30 | 1.297 | -    | -     | 0.03  | 2.010 | 2.607 |
|         | FR1 n41 PC2             | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 6 | DSIO | 518598          | 2592.99         | 19.08 | 20.30 | 1.324 | -    | -     | 0.09  | 1.880 | 2.490 |
|         | FR1 n41 PC2             | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 0mm | Ant 6 | DSI5 | 518598          | 2592.99         | 17.25 | 18.30 | 1.274 | -    | -     | -0.08 | 1.510 | 1.923 |
| 3500MHz |                         |      |      |     |    |               |             |     |       |      |                 |                 |       |       |       |      |       |       |       |       |
| 112     | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 641666          | 3624.99         | 21.22 | 22.30 | 1.282 | -    | -     | -0.01 | 2.050 | 2.629 |
|         | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 638000          | 3570            | 21.14 | 22.30 | 1.306 | -    | -     | 0.12  | 1.920 | 2.508 |
|         | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 645332          | 3679.98         | 21.11 | 22.30 | 1.315 | -    | -     | 0.08  | 1.880 | 2.473 |
|         | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 641666          | 3624.99         | 21.09 | 22.30 | 1.321 | -    | -     | 0.02  | 1.920 | 2.537 |
|         | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 638000          | 3570            | 21.07 | 22.30 | 1.327 | -    | -     | -0.17 | 1.750 | 2.323 |
|         | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 645332          | 3679.98         | 21.07 | 22.30 | 1.327 | -    | -     | -0.03 | 1.710 | 2.270 |
|         | FR1 n48                 | 40M  | QPSK | 100 | 0  | DFT-SCS-30KHz | Front       | 0mm | Ant 4 | DSIO | 641666          | 3624.99         | 20.91 | 22.30 | 1.377 | -    | -     | -0.11 | 1.850 | 2.548 |
|         | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 0mm | Ant 4 | DSIO | 641666          | 3624.99         | 21.22 | 22.30 | 1.282 | -    | -     | 0.18  | 1.530 | 1.962 |



# FCC SAR Test Report

Report No. : FA460505

|     |                         |      |      |     |    |               |           |     |       |      |        |         |       |       |       |   |   |       |       |       |
|-----|-------------------------|------|------|-----|----|---------------|-----------|-----|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
|     | FR1 n48                 | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back      | 0mm | Ant 4 | DSIO | 641666 | 3624.99 | 21.09 | 22.30 | 1.321 | - | - | 0.16  | 1.440 | 1.903 |
|     | FR1 n48                 | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSI5 | 641666 | 3624.99 | 19.72 | 20.80 | 1.282 | - | - | 0.06  | 1.450 | 1.859 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 656000 | 3840    | 22.26 | 23.20 | 1.242 | - | - | 0.12  | 1.180 | 1.465 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 656000 | 3840    | 22.19 | 23.20 | 1.262 | - | - | -0.03 | 1.660 | 2.095 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 656000 | 3840    | 21.97 | 23.20 | 1.327 | - | - | 0.11  | 1.210 | 1.606 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 4 | DSIO | 656000 | 3840    | 22.26 | 23.20 | 1.242 | - | - | 0.11  | 1.610 | 1.999 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 4 | DSIO | 656000 | 3840    | 22.19 | 23.20 | 1.262 | - | - | -0.06 | 1.120 | 1.413 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSI5 | 656000 | 3840    | 20.69 | 21.70 | 1.262 | - | - | 0.02  | 1.180 | 1.489 |
| 113 | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | - | - | -0.04 | 2.040 | 2.810 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | - | - | -0.19 | 1.830 | 2.544 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 633334 | 3500.01 | 21.50 | 23.20 | 1.479 | - | - | -0.03 | 1.500 | 2.219 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 4 | DSIO | 633334 | 3500.01 | 21.81 | 23.20 | 1.377 | - | - | -0.08 | 1.540 | 2.121 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 4 | DSIO | 633334 | 3500.01 | 21.77 | 23.20 | 1.390 | - | - | 0.1   | 1.420 | 1.974 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Back      | 0mm | Ant 4 | DSIO | 633334 | 3500.01 | 21.50 | 23.20 | 1.479 | - | - | 0.15  | 1.100 | 1.627 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSI5 | 633334 | 3500.01 | 20.31 | 21.70 | 1.377 | - | - | 0.06  | 1.450 | 1.997 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 641666 | 3624.99 | 22.02 | 23.20 | 1.312 | - | - | 0.07  | 1.920 | 2.519 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 641666 | 3624.99 | 21.95 | 23.20 | 1.334 | - | - | 0.13  | 1.750 | 2.334 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSIO | 641666 | 3624.99 | 21.74 | 23.20 | 1.400 | - | - | -0.04 | 1.630 | 2.281 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 4 | DSI5 | 641666 | 3624.99 | 20.52 | 21.70 | 1.312 | - | - | 0.06  | 1.360 | 1.785 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 2 | DSIO | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | 0.01  | 1.710 | 2.000 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front     | 0mm | Ant 2 | DSIO | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | -0.09 | 1.410 | 1.672 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front     | 0mm | Ant 2 | DSIO | 656000 | 3840    | 22.64 | 23.60 | 1.247 | - | - | 0.05  | 1.210 | 1.509 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 2 | DSIO | 656000 | 3840    | 22.92 | 23.60 | 1.169 | - | - | 0.13  | 1.390 | 1.626 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 2 | DSIO | 656000 | 3840    | 22.86 | 23.60 | 1.186 | - | - | 0     | 1.090 | 1.292 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 3 | DSIO | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0.14  | 0.639 | 0.732 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 3 | DSIO | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | -0.01 | 0.580 | 0.677 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 656000 | 3840    | 18.31 | 18.90 | 1.146 | - | - | 0.09  | 1.190 | 1.363 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 656000 | 3840    | 18.23 | 18.90 | 1.167 | - | - | 0.07  | 0.827 | 0.965 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 3 | DSIO | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.02  | 0.490 | 0.601 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 3 | DSIO | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | -0.03 | 0.425 | 0.534 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 633334 | 3500.01 | 18.01 | 18.90 | 1.227 | - | - | 0.09  | 1.190 | 1.461 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 633334 | 3500.01 | 17.91 | 18.90 | 1.256 | - | - | -0.1  | 0.868 | 1.090 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.02  | 0.949 | 1.128 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | 0.16  | 0.857 | 1.042 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.15 | 18.90 | 1.189 | - | - | 0.01  | 2.100 | 2.496 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 641666 | 3624.99 | 18.05 | 18.90 | 1.216 | - | - | -0.04 | 1.690 | 2.055 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSIO | 641666 | 3624.99 | 17.78 | 18.90 | 1.294 | - | - | 0.13  | 1.770 | 2.291 |
|     | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 3 | DSI5 | 641666 | 3624.99 | 16.65 | 17.40 | 1.189 | - | - | 0.09  | 1.490 | 1.771 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front     | 0mm | Ant 6 | DSIO | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | 0.1   | 0.910 | 1.033 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front     | 0mm | Ant 6 | DSIO | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | 0.04  | 0.721 | 0.822 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 6 | DSIO | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.18 | 1.010 | 1.146 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 6 | DSIO | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.11 | 0.886 | 1.010 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 656000 | 3840    | 19.55 | 20.10 | 1.135 | - | - | -0.04 | 1.670 | 1.895 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 656000 | 3840    | 19.53 | 20.10 | 1.140 | - | - | -0.15 | 1.450 | 1.653 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back      | 0mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | -0.04 | 1.050 | 1.173 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back      | 0mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | -0.05 | 1.170 | 1.331 |
|     | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.62 | 20.10 | 1.117 | - | - | 0.08  | 2.300 | 2.569 |





# FCC SAR Test Report

Report No. : FA460505

|  |                         |      |      |     |    |               |           |     |       |      |        |         |       |       |       |   |   |       |       |       |
|--|-------------------------|------|------|-----|----|---------------|-----------|-----|-------|------|--------|---------|-------|-------|-------|---|---|-------|-------|-------|
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.54 | 20.10 | 1.138 | - | - | -0.13 | 2.010 | 2.287 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 633334 | 3500.01 | 19.44 | 20.10 | 1.164 | - | - | -0.01 | 1.730 | 2.014 |
|  | FR1 n77<br>Part 27Q PC2 | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSI5 | 633334 | 3500.01 | 17.62 | 18.10 | 1.117 | - | - | 0.02  | 1.450 | 1.619 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 641666 | 3624.99 | 19.01 | 20.10 | 1.285 | - | - | 0.07  | 2.180 | 2.802 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 641666 | 3624.99 | 18.95 | 20.10 | 1.303 | - | - | -0.03 | 1.880 | 2.450 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSIO | 641666 | 3624.99 | 18.88 | 20.10 | 1.324 | - | - | 0.07  | 1.910 | 2.529 |
|  | FR1 n77<br>Part 96 PC3  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side | 0mm | Ant 6 | DSI5 | 641666 | 3624.99 | 17.01 | 18.10 | 1.285 | - | - | 0.01  | 1.380 | 1.774 |

| Plot No. | Band       | Mode                 | Test Position | Gap (mm) | Antenna      | Power State          | Ch. | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|------------|----------------------|---------------|----------|--------------|----------------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
| 2450MHz  |            |                      |               |          |              |                      |     |             |                     |                     |                        |              |                           |                  |                         |                         |
| 114      | WLAN2.4GHz | 802.11b 1Mbps        | Top Side      | 0mm      | Ant 7+9(7)   | Full Power           | 11  | 2462        | 19.46               | 21.00               | 1.426                  | 98.35        | 1.017                     | 0.06             | 1.950                   | 2.827                   |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Top Side      | 0mm      | Ant 7+9(9)   | Full Power           | 1   | 2412        | 18.30               | 20.00               | 1.479                  | 98.35        | 1.017                     | 0.01             | 1.650                   | 2.482                   |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Top Side      | 0mm      | Ant 7+9(9)   | Full Power           | 6   | 2437        | 17.70               | 19.50               | 1.514                  | 98.35        | 1.017                     | -0.18            | 1.440                   | 2.217                   |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Top Side      | 0mm      | Ant 7+9(9)   | Standalone DBS only  | 11  | 2462        | 16.64               | 18.00               | 1.368                  | 98.35        | 1.017                     | 0.1              | 1.030                   | 1.433                   |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Top Side      | 0mm      | Ant 7+9(7)   | Simultaneous Non DBS | 11  | 2462        | 14.18               | 15.50               | 1.355                  | 98.35        | 1.017                     | 0.12             | 0.618                   | 0.852                   |
|          | WLAN2.4GHz | 802.11b 1Mbps        | Top Side      | 0mm      | Ant 7+9(9)   | Simultaneous DBS     | 11  | 2462        | 11.92               | 13.50               | 1.439                  | 98.35        | 1.017                     | 0.08             | 0.301                   | 0.440                   |
| 5000MHz  |            |                      |               |          |              |                      |     |             |                     |                     |                        |              |                           |                  |                         |                         |
| 115      | WLAN5.2GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(10) | Full Power           | 48  | 5240        | 19.21               | 21.00               | 1.510                  | 99.32        | 1.007                     | 0.02             | 1.810                   | 2.753                   |
|          | WLAN5.2GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(10) | Full Power           | 36  | 5180        | 18.75               | 20.50               | 1.496                  | 99.32        | 1.007                     | 0.02             | 1.610                   | 2.426                   |
|          | WLAN5.2GHz | 802.11ac-VHT160 MCS0 | Back          | 0mm      | Ant 8+10(8)  | Standalone DBS only  | 42  | 5210        | 16.91               | 18.50               | 1.442                  | 100          | 1.000                     | 0.01             | 1.090                   | 1.572                   |
|          | WLAN5.2GHz | 802.11ac-VHT160 MCS0 | Back          | 0mm      | Ant 8+10(10) | Simultaneous Non DBS | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | 0.01             | 0.662                   | 0.979                   |
|          | WLAN5.2GHz | 802.11ac-VHT160 MCS0 | Back          | 0mm      | Ant 8+10(10) | Simultaneous DBS     | 50  | 5250        | 11.96               | 13.50               | 1.426                  | 100          | 1.000                     | -0.03            | 0.339                   | 0.483                   |
|          | WLAN5.3GHz | 802.11a 6Mbps        | Front         | 0mm      | Ant 8+10(10) | Full Power           | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | 0.01             | 0.707                   | 1.083                   |
|          | WLAN5.3GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(10) | Full Power           | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | 0.1              | 1.320                   | 2.021                   |
|          | WLAN5.3GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(8)  | Full Power           | 56  | 5280        | 19.56               | 21.50               | 1.561                  | 99.32        | 1.007                     | -0.17            | 1.170                   | 1.840                   |
|          | WLAN5.3GHz | 802.11a 6Mbps        | Left Side     | 0mm      | Ant 8+10(10) | Full Power           | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | -0.08            | 0.143                   | 0.219                   |
| 116      | WLAN5.3GHz | 802.11a 6Mbps        | Right Side    | 0mm      | Ant 8+10(10) | Full Power           | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | -0.02            | 1.790                   | 2.741                   |
|          | WLAN5.3GHz | 802.11a 6Mbps        | Right Side    | 0mm      | Ant 8+10(8)  | Full Power           | 56  | 5280        | 19.56               | 21.50               | 1.561                  | 99.32        | 1.007                     | 0.05             | 1.310                   | 2.060                   |
|          | WLAN5.3GHz | 802.11a 6Mbps        | Top Side      | 0mm      | Ant 8+10(10) | Full Power           | 64  | 5320        | 18.68               | 20.50               | 1.521                  | 99.32        | 1.007                     | -0.08            | 1.190                   | 1.822                   |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Right Side    | 0mm      | Ant 8+10(8)  | Standalone DBS only  | 50  | 5250        | 16.58               | 18.50               | 1.556                  | 100          | 1.000                     | -0.05            | 0.955                   | 1.486                   |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Right Side    | 0mm      | Ant 8+10(10) | Simultaneous Non DBS | 50  | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | -0.08            | 0.665                   | 0.984                   |
|          | WLAN5.3GHz | 802.11ac-VHT160 MCS0 | Right Side    | 0mm      | Ant 8+10(10) | Simultaneous DBS     | 50  | 5250        | 11.96               | 13.50               | 1.426                  | 100          | 1.000                     | 0.16             | 0.342                   | 0.488                   |
|          | WLAN5.5GHz | 802.11a 6Mbps        | Front         | 0mm      | Ant 8+10(8)  | Full Power           | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | 0.07             | 0.553                   | 0.856                   |
| 117      | WLAN5.5GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(8)  | Full Power           | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | -0.08            | 1.580                   | 2.445                   |
|          | WLAN5.5GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(10) | Full Power           | 116 | 5580        | 18.73               | 20.50               | 1.503                  | 99.32        | 1.007                     | 0.02             | 1.390                   | 2.104                   |
|          | WLAN5.5GHz | 802.11a 6Mbps        | Left Side     | 0mm      | Ant 8+10(8)  | Full Power           | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | 0.07             | 0.099                   | 0.153                   |
|          | WLAN5.5GHz | 802.11a 6Mbps        | Right Side    | 0mm      | Ant 8+10(8)  | Full Power           | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | -0.18            | 0.574                   | 0.888                   |
|          | WLAN5.5GHz | 802.11a 6Mbps        | Top Side      | 0mm      | Ant 8+10(8)  | Full Power           | 144 | 5720        | 19.63               | 21.50               | 1.536                  | 99.32        | 1.007                     | 0.03             | 0.891                   | 1.379                   |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Back          | 0mm      | Ant 8+10(8)  | Standalone DBS only  | 114 | 5570        | 16.93               | 18.50               | 1.435                  | 100          | 1.000                     | -0.15            | 0.891                   | 1.279                   |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Back          | 0mm      | Ant 8+10(10) | Simultaneous Non DBS | 114 | 5570        | 14.78               | 16.50               | 1.486                  | 100          | 1.000                     | 0.11             | 0.622                   | 0.924                   |
|          | WLAN5.5GHz | 802.11ac-VHT160 MCS0 | Back          | 0mm      | Ant 8+10(8)  | Simultaneous DBS     | 114 | 5570        | 12.50               | 14.00               | 1.413                  | 100          | 1.000                     | -0.15            | 0.317                   | 0.448                   |
| 118      | WLAN5.8GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(8)  | Full Power           | 149 | 5745        | 19.62               | 21.50               | 1.540                  | 99.32        | 1.007                     | 0.06             | 1.670                   | 2.590                   |
|          | WLAN5.8GHz | 802.11a 6Mbps        | Back          | 0mm      | Ant 8+10(8)  | Full Power           | 165 | 5825        | 19.64               | 21.50               | 1.533                  | 99.32        | 1.007                     | -0.13            | 1.390                   | 2.146                   |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Back          | 0mm      | Ant 8+10(8)  | Standalone DBS only  | 155 | 5775        | 15.81               | 17.50               | 1.476                  | 100          | 1.000                     | 0.18             | 0.845                   | 1.247                   |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Back          | 0mm      | Ant 8+10(8)  | Simultaneous Non DBS | 155 | 5775        | 14.75               | 16.50               | 1.496                  | 100          | 1.000                     | -0.04            | 0.601                   | 0.899                   |
|          | WLAN5.8GHz | 802.11ac-VHT80 MCS0  | Back          | 0mm      | Ant 8+10(8)  | Simultaneous DBS     | 155 | 5775        | 11.43               | 13.00               | 1.435                  | 100          | 1.000                     | -0.08            | 0.315                   | 0.452                   |





## 15.5 Repeated SAR Measurement

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| Plot No. | Band        | BW (MHz) | Modulation | RB Size | RB offset | Mode                 | Test Position | Gap (mm) | Antenna      | Power State        | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Ratio | Reported 1g SAR (W/kg) |
|----------|-------------|----------|------------|---------|-----------|----------------------|---------------|----------|--------------|--------------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|-------|------------------------|
| 1st      | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -                    | Right Cheek   | 0mm      | Ant 0        | DSI2               | 23330  | 793         | 21.72               | 22.40               | 1.169                  | -            | -                         | -0.03            | 0.903                  | 1     | 1.056                  |
| 2nd      | LTE Band 14 | 10M      | QPSK       | 1       | 0         | -                    | Right Cheek   | 0mm      | Ant 0        | DSI2               | 23330  | 793         | 21.72               | 22.40               | 1.169                  | -            | -                         | 0.01             | 0.812                  | 1.112 | 0.950                  |
| 1st      | FR1 n26     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz        | Right Cheek   | 0mm      | Ant 0        | DSI2               | 166300 | 831.5       | 20.86               | 22.00               | 1.300                  | -            | -                         | -0.18            | 0.833                  | 1     | 1.083                  |
| 2nd      | FR1 n26     | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz        | Right Cheek   | 0mm      | Ant 0        | DSI2               | 166300 | 831.5       | 20.86               | 22.00               | 1.300                  | -            | -                         | -0.03            | 0.824                  | 1.011 | 1.071                  |
| 1st      | FR1 n25     | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz        | Left Cheek    | 0mm      | Ant 2        | DSI2               | 376500 | 1882.5      | 18.79               | 19.60               | 1.205                  | -            | -                         | -0.03            | 0.868                  | 1     | 1.046                  |
| 2nd      | FR1 n25     | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz        | Left Cheek    | 0mm      | Ant 2        | DSI2               | 376500 | 1882.5      | 18.79               | 19.60               | 1.205                  | -            | -                         | 0.09             | 0.852                  | 1.019 | 1.027                  |
| 1st      | LTE Band 30 | 10M      | QPSK       | 1       | 0         | -                    | Right Cheek   | 0mm      | Ant 3        | DSI2               | 27710  | 2310        | 15.48               | 16.20               | 1.180                  | -            | -                         | -0.01            | 0.895                  | 1     | 1.056                  |
| 2nd      | LTE Band 30 | 10M      | QPSK       | 1       | 0         | -                    | Right Cheek   | 0mm      | Ant 3        | DSI2               | 27710  | 2310        | 15.48               | 16.20               | 1.180                  | -            | -                         | 0.06             | 0.867                  | 1.032 | 1.023                  |
| 1st      | FR1 n41 PC2 | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz        | Right Cheek   | 0mm      | Ant 3        | DSI2               | 518598 | 2592.99     | 16.29               | 17.10               | 1.205                  | -            | -                         | 0.02             | 0.900                  | 1     | 1.085                  |
| 2nd      | FR1 n41 PC2 | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz        | Right Cheek   | 0mm      | Ant 3        | DSI2               | 518598 | 2592.99     | 16.29               | 17.10               | 1.205                  | -            | -                         | 0.06             | 0.879                  | 1.024 | 1.059                  |
| 1st      | FR1 n48     | 40M      | QPSK       | 1       | 1         | DFT-SCS-30KHz        | Left Cheek    | 0mm      | Ant 4        | DSI2               | 641666 | 3624.99     | 15.21               | 15.90               | 1.172                  | -            | -                         | 0.02             | 0.852                  | 1     | 0.999                  |
| 2nd      | FR1 n48     | 40M      | QPSK       | 1       | 1         | DFT-SCS-30KHz        | Left Cheek    | 0mm      | Ant 4        | DSI2               | 641666 | 3624.99     | 15.21               | 15.90               | 1.172                  | -            | -                         | 0.04             | 0.822                  | 1.036 | 0.964                  |
| 1st      | FR1 n48     | 40M      | QPSK       | 1       | 1         | DFT-SCS-30KHz        | Left Cheek    | 0mm      | Ant 4        | DSI2               | 638000 | 3570        | 15.15               | 15.90               | 1.189                  | -            | -                         | -0.06            | 0.908                  | 1     | 1.079                  |
| 2nd      | FR1 n48     | 40M      | QPSK       | 1       | 1         | DFT-SCS-30KHz        | Left Cheek    | 0mm      | Ant 4        | DSI2               | 638000 | 3570        | 15.15               | 15.90               | 1.189                  | -            | -                         | 0.07             | 0.869                  | 1.045 | 1.033                  |
| 1st      | WLAN5.3GHz  | -        | -          | -       | -         | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone Non DBS | 50     | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | -0.01            | 0.801                  | 1     | 1.185                  |
| 2nd      | WLAN5.3GHz  | -        | -          | -       | -         | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone Non DBS | 50     | 5250        | 14.80               | 16.50               | 1.479                  | 100          | 1.000                     | 0.03             | 0.789                  | 1.015 | 1.167                  |
| 1st      | WLAN5.5GHz  | -        | -          | -       | -         | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone Non DBS | 114    | 5570        | 15.37               | 17.00               | 1.455                  | 100          | 1.000                     | -0.06            | 0.823                  | 1     | 1.198                  |
| 2nd      | WLAN5.5GHz  | -        | -          | -       | -         | 802.11ac-VHT160 MCS0 | Left Cheek    | 0mm      | Ant 8+10(10) | Standalone Non DBS | 114    | 5570        | 15.37               | 17.00               | 1.455                  | 100          | 1.000                     | -0.01            | 0.814                  | 1.011 | 1.185                  |
| 1st      | LTE Band 66 | 20M      | QPSK       | 1       | 0         | -                    | Left Side     | 10mm     | Ant 2        | DSI1               | 132572 | 1770        | 21.32               | 22.10               | 1.197                  | -            | -                         | 0.05             | 0.896                  | 1     | 1.072                  |
| 2nd      | LTE Band 66 | 20M      | QPSK       | 1       | 0         | -                    | Left Side     | 10mm     | Ant 2        | DSI1               | 132572 | 1770        | 21.32               | 22.10               | 1.197                  | -            | -                         | 0.07             | 0.859                  | 1.043 | 1.028                  |

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| Plot No. | Band                 | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power State | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Ratio | Reported 10g SAR (W/kg) |
|----------|----------------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------|-------------------------|
| 1st      | LTE Band 66          | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 2   | DSI0        | 132322 | 1745        | 22.95               | 23.60               | 1.161                  | -            | -                         | 0.01             | 2.330                   | 1     | 2.706                   |
| 2nd      | LTE Band 66          | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 2   | DSI0        | 132322 | 1745        | 22.95               | 23.60               | 1.161                  | -            | -                         | 0.07             | 2.260                   | 1.031 | 2.625                   |
| 1st      | WCDMA II             | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSI0        | 9538   | 1907.6      | 22.90               | 23.20               | 1.072                  | -            | -                         | 0.07             | 2.500                   | 1     | 2.679                   |
| 2nd      | WCDMA II             | -        | -          | -       | -         | RMC 12.2Kbps  | Left Side     | 0mm      | Ant 2   | DSI0        | 9538   | 1907.6      | 22.90               | 23.20               | 1.072                  | -            | -                         | 0.01             | 2.420                   | 1.033 | 2.593                   |
| 1st      | LTE Band 30          | 10M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 3   | DSI0        | 27710  | 2310        | 19.51               | 20.40               | 1.227                  | -            | -                         | 0.01             | 2.490                   | 1     | 3.056                   |
| 2nd      | LTE Band 30          | 10M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 3   | DSI0        | 27710  | 2310        | 19.51               | 20.40               | 1.227                  | -            | -                         | 0.08             | 2.370                   | 1.051 | 2.909                   |
| 1st      | LTE Band 41          | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 3   | DSI0        | 41490  | 2680        | 22.16               | 22.80               | 1.159                  | 62.9         | 1.006                     | 0.01             | 2.630                   | 1     | 3.066                   |
| 2nd      | LTE Band 41          | 20M      | QPSK       | 1       | 0         | -             | Left Side     | 0mm      | Ant 3   | DSI0        | 41490  | 2680        | 22.16               | 22.80               | 1.159                  | 62.9         | 1.006                     | -0.03            | 2.540                   | 1.035 | 2.961                   |
| 1st      | FR1 n77 Part 27Q PC2 | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz | Left Side     | 0mm      | Ant 6   | DSI0        | 633334 | 3500.01     | 19.62               | 20.10               | 1.117                  | -            | -                         | 0.08             | 2.300                   | 1     | 2.569                   |
| 2nd      | FR1 n77 Part 27Q PC2 | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz | Left Side     | 0mm      | Ant 6   | DSI0        | 633334 | 3500.01     | 19.62               | 20.10               | 1.117                  | -            | -                         | 0.02             | 2.230                   | 1.031 | 2.491                   |
| 1st      | FR1 n77 Part 96 PC3  | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz | Left Side     | 0mm      | Ant 6   | DSI0        | 641666 | 3624.99     | 19.01               | 20.10               | 1.285                  | -            | -                         | 0.07             | 2.180                   | 1     | 2.802                   |
| 2nd      | FR1 n77 Part 96 PC3  | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz | Left Side     | 0mm      | Ant 6   | DSI0        | 641666 | 3624.99     | 19.01               | 20.10               | 1.285                  | -            | -                         | 0.07             | 1.950                   | 1.118 | 2.506                   |

## General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
- Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45$ W/kg, only one repeated measurement is required.
- Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
- The ratio is the difference in percentage between original and repeated *measured SAR*.
- All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

## 15.6 TDD LTE Linearity Data Analysis

### General Note:

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

| LTE B41-Linearity Data for Head Ant 3_DS12    |                            |                            |
|-----------------------------------------------|----------------------------|----------------------------|
|                                               | LTE B41<br>(Power Class 3) | LTE B41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                   | 18.70                      | 20.30                      |
| Reported 1g SAR (W/kg)                        | 1.020                      | 1.073                      |
| Duty Cycle                                    | 63.30%                     | 43.30%                     |
| Frame Averaged (mW)                           | 46.92                      | 46.40                      |
| Linearity SAR (W/kg)                          | 1.009                      |                            |
| % deviation from expected linearity           |                            | 6.39%                      |
| LTE B41-Linearity Data for Body-worn Ant 3    |                            |                            |
|                                               | LTE B41<br>(Power Class 3) | LTE B41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                   | 22.80                      | 24.40                      |
| Reported 1g SAR (W/kg)                        | 0.357                      | 0.325                      |
| Duty Cycle                                    | 63.30%                     | 43.30%                     |
| Frame Averaged (mW)                           | 120.62                     | 119.26                     |
| Linearity SAR (W/kg)                          | 0.353                      |                            |
| % deviation from expected linearity           |                            | -7.93%                     |
| LTE B41-Linearity Data for Hotspot Ant 3_DS11 |                            |                            |
|                                               | LTE B41<br>(Power Class 3) | LTE B41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                   | 21.30                      | 22.90                      |
| Reported 1g SAR (W/kg)                        | 1.070                      | 1.087                      |
| Duty Cycle                                    | 63.30%                     | 43.30%                     |
| Frame Averaged (mW)                           | 85.39                      | 84.43                      |
| Linearity SAR (W/kg)                          | 1.058                      |                            |
| % deviation from expected linearity           |                            | 2.75%                      |
| LTE B41-Linearity Data for Hotspot Ant 3_DS14 |                            |                            |
|                                               | LTE B41<br>(Power Class 3) | LTE B41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                   | 19.80                      | 21.40                      |
| Reported 1g SAR (W/kg)                        | 0.757                      | 0.770                      |
| Duty Cycle                                    | 63.30%                     | 43.30%                     |
| Frame Averaged (mW)                           | 60.45                      | 59.77                      |
| Linearity SAR (W/kg)                          | 0.748                      |                            |
| % deviation from expected linearity           |                            | 2.88%                      |



| LTE B41-Linearity Data for Extremity Ant 3_DSI0 |                            |                            |
|-------------------------------------------------|----------------------------|----------------------------|
|                                                 | LTE B41<br>(Power Class 3) | LTE B41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                     | 22.80                      | 24.40                      |
| Reported 10g SAR (W/kg)                         | 3.066                      | 2.955                      |
| Duty Cycle                                      | 63.30%                     | 43.30%                     |
| Frame Averaged (mW)                             | 120.62                     | 119.26                     |
| Linearity SAR (W/kg)                            | 3.031                      |                            |
| % deviation from expected linearity             |                            | -2.52%                     |
| LTE B41-Linearity Data for Extremity Ant 3_DSI5 |                            |                            |
|                                                 | LTE B41<br>(Power Class 3) | LTE B41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                     | 20.80                      | 22.40                      |
| Reported 10g SAR (W/kg)                         | 1.935                      | 1.867                      |
| Duty Cycle                                      | 63.30%                     | 43.30%                     |
| Frame Averaged (mW)                             | 76.10                      | 75.25                      |
| Linearity SAR (W/kg)                            | 1.913                      |                            |
| % deviation from expected linearity             |                            | -2.42%                     |

## 16. Simultaneous Transmission Analysis

| No.       | Simultaneous Transmission Configurations       | Portable Handset |           |         |                          |
|-----------|------------------------------------------------|------------------|-----------|---------|--------------------------|
|           |                                                | Head             | Body-worn | Hotspot | Product specific 10g SAR |
| 1.        | WLAN2.4GHz+ Bluetooth                          | Yes              | Yes       | Yes     | Yes                      |
| 2.        | WLAN5GHz+ Bluetooth                            | Yes              | Yes       | Yes     | Yes                      |
| 3.        | WLAN6GHz+ Bluetooth                            | Yes              | Yes       |         | Yes                      |
| 4.        | WLAN2.4GHz+ WLAN5GHz                           | Yes              | Yes       | Yes     | Yes                      |
| 5.        | WLAN2.4GHz+ WLAN6GHz                           | Yes              | Yes       |         | Yes                      |
| 6.        | WLAN2.4GHz+ WLAN5GHz + Bluetooth               | Yes              | Yes       | Yes     | Yes                      |
| 7.        | WLAN2.4GHz+ WLAN6GHz + Bluetooth               | Yes              | Yes       |         | Yes                      |
| 8.        | WWAN + WLAN2.4GHz+ Bluetooth                   | Yes              | Yes       | Yes     | Yes                      |
| 9.        | WWAN + WLAN5GHz+ Bluetooth                     | Yes              | Yes       | Yes     | Yes                      |
| 10.       | WWAN + WLAN6GHz+ Bluetooth                     | Yes              | Yes       |         | Yes                      |
| 11.       | WWAN + WLAN2.4GHz+ WLAN5GHz                    | Yes              | Yes       | Yes     | Yes                      |
| 12.       | WWAN + WLAN2.4GHz+ WLAN6GHz                    | Yes              | Yes       |         | Yes                      |
| 13.       | WWAN + WLAN2.4GHz+ WLAN5GHz + Bluetooth        | Yes              | Yes       | Yes     | Yes                      |
| 14.       | WWAN + WLAN2.4GHz+ WLAN6GHz + Bluetooth        | Yes              | Yes       |         | Yes                      |
| 15.       | WLAN2.4GHz+ Bluetooth + NFC                    |                  |           |         | Yes                      |
| 16.       | WLAN5GHz+ Bluetooth + NFC                      |                  |           |         | Yes                      |
| 17.       | WLAN6GHz+ Bluetooth + NFC                      |                  |           |         | Yes                      |
| 18.       | WLAN2.4GHz+ WLAN5GHz + NFC                     |                  |           |         | Yes                      |
| 19.       | WLAN2.4GHz+ WLAN6GHz + NFC                     |                  |           |         | Yes                      |
| 20.       | WLAN2.4GHz+ WLAN5GHz + Bluetooth + NFC         |                  |           |         | Yes                      |
| 21.       | WLAN2.4GHz+ WLAN6GHz + Bluetooth + NFC         |                  |           |         | Yes                      |
| 22.       | WWAN + WLAN2.4GHz+ Bluetooth + NFC             |                  |           |         | Yes                      |
| 23.       | WWAN + WLAN5GHz+ Bluetooth + NFC               |                  |           |         | Yes                      |
| 24.       | WWAN + WLAN6GHz+ Bluetooth + NFC               |                  |           |         | Yes                      |
| 25.       | WWAN + WLAN2.4GHz+ WLAN5GHz + NFC              |                  |           |         | Yes                      |
| 26.       | WWAN + WLAN2.4GHz+ WLAN6GHz + NFC              |                  |           |         | Yes                      |
| 27.       | WWAN + WLAN2.4GHz+ WLAN5GHz + Bluetooth + NFC  |                  |           |         | Yes                      |
| 28.       | WWAN + WLAN2.4GHz+ WLAN6GHz + Bluetooth + NFC  |                  |           |         | Yes                      |
| 29.       | WLAN2.4GHz+ Bluetooth + NFC                    |                  |           |         | Yes                      |
| 30.       | WLAN5GHz+ Bluetooth + NFC                      |                  |           |         | Yes                      |
| With RFID |                                                |                  |           |         |                          |
| 31.       | RFID + WLAN2.4GHz+ Bluetooth                   |                  | Yes       | Yes     | Yes                      |
| 32.       | RFID + WLAN5GHz+ Bluetooth                     |                  | Yes       | Yes     | Yes                      |
| 33.       | RFID + WLAN6GHz+ Bluetooth                     |                  | Yes       |         | Yes                      |
| 34.       | RFID + WLAN2.4GHz+ WLAN5GHz                    |                  | Yes       | Yes     | Yes                      |
| 35.       | RFID + WLAN2.4GHz+ WLAN6GHz                    |                  | Yes       |         | Yes                      |
| 36.       | RFID + WLAN2.4GHz+ WLAN5GHz + Bluetooth        |                  | Yes       | Yes     | Yes                      |
| 37.       | RFID + WLAN2.4GHz+ WLAN6GHz + Bluetooth        |                  | Yes       |         | Yes                      |
| 38.       | WWAN + RFID + WLAN2.4GHz+ Bluetooth            |                  | Yes       | Yes     | Yes                      |
| 39.       | WWAN + RFID + WLAN5GHz+ Bluetooth              |                  | Yes       | Yes     | Yes                      |
| 40.       | WWAN + RFID + WLAN6GHz+ Bluetooth              |                  | Yes       |         | Yes                      |
| 41.       | WWAN + RFID + WLAN2.4GHz+ WLAN5GHz             |                  | Yes       | Yes     | Yes                      |
| 42.       | WWAN + RFID + WLAN2.4GHz+ WLAN6GHz             |                  | Yes       |         | Yes                      |
| 43.       | WWAN + RFID + WLAN2.4GHz+ WLAN5GHz + Bluetooth |                  | Yes       | Yes     | Yes                      |
| 44.       | WWAN + RFID + WLAN2.4GHz+ WLAN6GHz + Bluetooth |                  | Yes       |         | Yes                      |
| 45.       | RFID + WLAN2.4GHz+ Bluetooth + NFC             |                  |           |         | Yes                      |
| 46.       | RFID + WLAN5GHz+ Bluetooth + NFC               |                  |           |         | Yes                      |
| 47.       | RFID + WLAN6GHz+ Bluetooth + NFC               |                  |           |         | Yes                      |
| 48.       | RFID + WLAN2.4GHz+ WLAN5GHz + NFC              |                  |           |         | Yes                      |
| 49.       | RFID + WLAN2.4GHz+ WLAN6GHz + NFC              |                  |           |         | Yes                      |

|     |                                                      |  |  |  |     |
|-----|------------------------------------------------------|--|--|--|-----|
| 50. | RFID + WLAN2.4GHz+ WLAN5GHz + Bluetooth + NFC        |  |  |  | Yes |
| 51. | RFID + WLAN2.4GHz+ WLAN6GHz + Bluetooth + NFC        |  |  |  | Yes |
| 52. | WWAN + RFID + WLAN2.4GHz+ Bluetooth + NFC            |  |  |  | Yes |
| 53. | WWAN + RFID + WLAN5GHz+ Bluetooth + NFC              |  |  |  | Yes |
| 54. | WWAN + RFID + WLAN6GHz+ Bluetooth + NFC              |  |  |  | Yes |
| 55. | WWAN + RFID + WLAN2.4GHz+ WLAN5GHz + NFC             |  |  |  | Yes |
| 56. | WWAN + RFID + WLAN2.4GHz+ WLAN6GHz + NFC             |  |  |  | Yes |
| 57. | WWAN + RFID + WLAN2.4GHz+ WLAN5GHz + Bluetooth + NFC |  |  |  | Yes |
| 58. | WWAN + RFID + WLAN2.4GHz+ WLAN6GHz + Bluetooth + NFC |  |  |  | Yes |

**General Note:**

- This device supports VoIP in WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO antenna mode and MIMO SAR can represent SISO SAR.
- EUT will choose each WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz WLAN supports WLAN Direct (GC only).
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- According to the EUT characteristic, WLAN 2.4GHz Chain 0 and Bluetooth share the same antenna path and cannot transmit simultaneously, WLAN 2.4GHz Chain 1 and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz can transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- For standalone WWAN, always choose the highest SAR among the selected WWAN bands within the selected antenna for head each exposure position to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each bands.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
  - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - If  $SPLSR \leq 0.04$  for 1g SAR and  $SPLSR \leq 0.10$  for 10g SAR, simultaneously transmission SAR measurement is not necessary.
  - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
- The WLAN6GHz Sim-Tx analysis guidance with other transmitters was based on SAR test results. The simultaneous transmission and test exemption analysis were compliant with KDB 447498 D01. For the device does not support FR2 or other MPE field measurement, therefore section 16 in the SAR report has no TER analysis according to KDB 987594 requirement.

### 16.1 5G NR + LTE + WLAN + BT Sim-Tx analysis

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR and LTE transmission are managed and controlled by Qualcomm® Smart Transmit, while the RF exposure from WLAN and BT radios is managed using legacy approach, i.e., through a fixed power back-off if needed.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values.

Smart Transmit current implementation assumes hotspots from 5G NR and LTE are collocated. Therefore, for a total of 100% exposure margin, if LTE uses x%, then the exposure margin left for 5G NR is capped to (100-x)%. Thus, the compliance equation for LTE + 5G NR is

$$x\% * A + (100-x)\% * B \leq 1.0,$$

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and  $A \leq 1.0$ ; B is normalized reported time-averaged exposure ratio from 5G NR (i.e. SAR exposure for 5G FR1), and  $B \leq 1.0$ .

Let C = normalized reported SAR exposure ratio from WLAN+BT, then for compliance,

$$x\% * A + (100-x)\% * B + C \leq 1.0 \quad (1)$$

$$x\% * A + (100-x)\% * B \leq x\% * \max(A, B) + (100-x)\% * \max(A, B) \leq \max(A, B)$$

$$x\% * A + (100-x)\% * B + C \leq \max(A, B) + C \leq 1.0 \quad (2)$$

If  $A + C \leq 1.0$  and  $B + C \leq 1.0$  can be proven, then " $x\% * A + (100-x)\% * B + C \leq 1.0$ ". Therefore simultaneous transmission analysis for 5G NR + LTE + WLAN + BT can be performed in two steps

Step 1: Prove total exposure ratio (TER) of LTE + WLAN + BT < 1

Step 2: Prove total exposure ratio (TER) of 5G NR + WLAN + BT < 1

Else, if  $A + C > 1.0$  and/or  $B + C > 1.0$ , then the followings need to hold true for compliance:

- i. A and C are decoupled based on the SPLSR criteria, and
- ii.  $(100-x)\% * B + C \leq 1.0$ , and
- iii.  $x\% * A + (100-x)\% * B \leq 1.0$

Note iii. is covered in Part 2 report; i. and ii. should be addressed in Part 2 report.

Above analysis is also apply to LTE inter-band uplink, LTE1 + LTE2 + WLAN + BT simultaneous transmission, so inter-band uplink CA no need to do additional simultaneously analysis again. Only required comply with total exposure ratio (TER) of LTE + WLAN + BT < 1.



## 16.2 MIMO SAR Test condition and verification

### General Note:

- Smart Transmit EFS v20 (or lower) uses SISO Plimit to calculate RF exposure from MIMO transmission scenario. Therefore, if MIMO is supported for WWAN technologies (including 5G sub6 NR), below procedure should be performed for validity of Smart Transmit operation:
  - Below procedure should also be performed for Smart Transmit EFS v21 (or higher) if MIMO Plimit is not populated in the EFS but MIMO operation is supported for antennas belonging to the same antenna group (refer to Section 4.2.5 of Qualcomm's document 80-W2112-4).
- Measure SAR for supported MIMO scenarios in FTM mode with each of the MIMO antennas set to transmit continuously at  $P_{test} = \text{minimum} \{P_{limit}(i), P_{max}(i); i=1 \text{ to } n \text{ MIMO antennas}\}$ , where  $P_{limit}(i)$  is the power level entered in the Smart Transmit EFS for antenna  $i$  under the corresponding tech/band/DSI. For Smart Transmit to ensure the compliance in MIMO transmission scenario, the below criteria should be met for measured MIMO SAR (i.e., highest peak spatial-average SAR from the measurement):

$$\text{reported } SAR_{MIMO} = \text{Measured MIMO } SAR_{MIMO} \text{ at } (P_{test} + \text{device total uncertainty}) \leq \text{calc. SAR}$$

$$\text{Where } \text{calc. SAR} = \sum_{i=1}^n \left[ SAR_{design\_target} * 10^{\left( \frac{\text{total uncertainty} + P_{test} - P_{limit}(i) - \text{backoff}(i)}{10} \right)} \right]$$

Here,

- $n$  is number of MIMO antennas (in case of 2x2MIMO,  $n=2$ ).
  - $P_{limit}(i)$  is EFS  $P_{limit}$  for antenna  $i \in$  MIMO for a given tech/band/DSI.  $P_{limit}$  corresponds to  $SAR_{design\_target}$ .
  - $\text{backoff}(i)$  is backoff from  $SAR_{design\_target}$  used for the  $i$ th antenna's  $P_{limit}$  to meet TER with external radios (i.e., radios outside of Smart Transmit control). If EFS  $P_{limit}$  of antenna  $i$  corresponds to  $SAR_{design\_target}$ , then  $\text{backoff}(i) = 0$  in the above equation.
  - $P_{test}$  (i.e., power level used for MIMO SAR measurement,  $\text{MIMO.SAR @ } P_{test}$ ) =  $\min \{P_{limit}(i), P_{max}(i), i = 1 \text{ to } n \text{ MIMO antenna}\}$ . To further clarify,  $P_{test} = \min \{P_{limit}(i), SISO.P_{max}(i), MIMO.P_{max}, i = 1 \text{ to } n \text{ antenna} \in \text{MIMO}\}$ , where,  $P_{limit}$  corresponds to  $SAR_{design\_target}$ ;  $SISO.P_{max}$  and  $MIMO.P_{max}$  correspond to the maximum output power (nominal levels without device uncertainty) that device is capable; here,  $P_{test}$  is nominal power level, not measured level.
- If the  $\text{reported } SAR_{MIMO}$  does not meet the above condition, then  $P_{limit}(i)$  for each of the MIMO antenna in the Smart Transmit EFS should be reduced by  $10 * \log_{10} [\text{reported } SAR_{MIMO} / \text{calc. SAR}]$  dB.
  - Per Qualcomm's document guideline, 5G NR FR1 MIMO Plimit is not populated in the EFS file, but MIMO operation is supported for antennas belonging to the same antenna group, the detail 5G NR FR1 MIMO analysis results please referred to appendix H.

### 16.3 Head Exposure Conditions

| WWAN Band | Exposure Position | 1             | 2                                   | 3                                        | 4                                     | 5                                     | 6                                     | 7                                          | 8                                       | 9                                       | 10                                   | 11                                        | 12                                     | 13                                     | 14              | 15                                   | 16                                        | 17                                     | 18                                     |
|-----------|-------------------|---------------|-------------------------------------|------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------------------|-------------------------------------------|----------------------------------------|----------------------------------------|-----------------|--------------------------------------|-------------------------------------------|----------------------------------------|----------------------------------------|
|           |                   | WWAN          | WLAN2.4GHz Ant 9 Standalone Non DBS | WLAN2.4GHz Ant 9 Standalone Non DBS only | WLAN2.4GHz Ant 9 Simultaneous Non DBS | WLAN2.4GHz Ant 9 Simultaneous Non DBS | WLAN2.4GHz Ant 7+9 Standalone Non DBS | WLAN2.4GHz Ant 7+9 Standalone Non DBS only | WLAN2.4GHz Ant 7+9 Simultaneous Non DBS | WLAN2.4GHz Ant 7+9 Simultaneous Non DBS | WLAN5GHz Ant 8+10 Standalone Non DBS | WLAN5GHz Ant 8+10 Standalone Non DBS only | WLAN5GHz Ant 8+10 Simultaneous Non DBS | WLAN5GHz Ant 8+10 Simultaneous Non DBS | Bluetooth Ant 7 | WLAN6GHz Ant 8+10 Standalone Non DBS | WLAN6GHz Ant 8+10 Standalone Non DBS only | WLAN6GHz Ant 8+10 Simultaneous Non DBS | WLAN6GHz Ant 8+10 Simultaneous Non DBS |
|           |                   | 1g SAR (W/kg) | 1g SAR (W/kg)                       | 1g SAR (W/kg)                            | 1g SAR (W/kg)                         | 1g SAR (W/kg)                         | 1g SAR (W/kg)                         | 1g SAR (W/kg)                              | 1g SAR (W/kg)                           | 1g SAR (W/kg)                           | 1g SAR (W/kg)                        | 1g SAR (W/kg)                             | 1g SAR (W/kg)                          | 1g SAR (W/kg)                          | 1g SAR (W/kg)   | 1g SAR (W/kg)                        | 1g SAR (W/kg)                             | 1g SAR (W/kg)                          | 1g SAR (W/kg)                          |
| All Bands | Right Cheek       | 1.095         | 1.092                               | 0.545                                    | 0.351                                 | 0.179                                 | 1.104                                 | 0.566                                      | 0.393                                   | 0.192                                   | 0.704                                | 0.596                                     | 0.381                                  | 0.198                                  | 0.062           | 0.533                                | 0.567                                     | 0.382                                  | 0.197                                  |
|           | Right Tilted      | 0.995         | 0.087                               | 0.545                                    | 0.351                                 | 0.179                                 | 0.886                                 | 0.566                                      | 0.393                                   | 0.192                                   | 0.458                                | 0.596                                     | 0.381                                  | 0.198                                  | 0.072           | 0.675                                | 0.567                                     | 0.382                                  | 0.197                                  |
|           | Left Cheek        | 1.092         | 0.441                               | 0.545                                    | 0.351                                 | 0.179                                 | 1.052                                 | 0.566                                      | 0.393                                   | 0.192                                   | 1.198                                | 0.596                                     | 0.381                                  | 0.198                                  | 0.113           | 0.978                                | 0.567                                     | 0.382                                  | 0.197                                  |
|           | Left Tilted       | 0.788         | 0.128                               | 0.545                                    | 0.351                                 | 0.179                                 | 1.045                                 | 0.566                                      | 0.393                                   | 0.192                                   | 0.873                                | 0.596                                     | 0.381                                  | 0.198                                  | 0.106           | 0.790                                | 0.567                                     | 0.382                                  | 0.197                                  |

| WWAN Band | Exposure Position | 2+14                 | 10+14                | 15+14                | 7+11                 | 7+16                 | 3+11+14              | 3+16+14              | 1+8                  | 1+12+14              | 1+17+14              | 1+4+14               | 1+9+13               | 1+9+18               | 1+5+13+14            | 1+5+18+14            |
|-----------|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|           |                   | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) |
| All Bands | Right Cheek       | 1.15                 | 0.77                 | 0.60                 | 1.16                 | 1.13                 | 1.20                 | 1.17                 | 1.49                 | 1.54                 | 1.54                 | 1.51                 | 1.49                 | 1.48                 | 1.53                 | 1.53                 |
|           | Right Tilted      | 0.16                 | 0.53                 | 0.75                 | 1.16                 | 1.13                 | 1.21                 | 1.18                 | 1.39                 | 1.45                 | 1.45                 | 1.42                 | 1.39                 | 1.38                 | 1.44                 | 1.44                 |
|           | Left Cheek        | 0.55                 | 1.31                 | 1.09                 | 1.16                 | 1.13                 | 1.25                 | 1.23                 | 1.49                 | 1.59                 | 1.56                 | 1.48                 | 1.48                 | 1.48                 | 1.58                 | 1.58                 |
|           | Left Tilted       | 0.23                 | 0.98                 | 0.90                 | 1.16                 | 1.13                 | 1.25                 | 1.22                 | 1.18                 | 1.28                 | 1.28                 | 1.25                 | 1.18                 | 1.18                 | 1.27                 | 1.27                 |

### 16.4 Hotspot Exposure Conditions

<RFID On>

| WWAN Band | Exposure Position | 1             | 2                                   | 3                                    | 4                                     | 5                                 | 6                                     | 7                                      | 8                                       | 9                                   | 10                                   | 11                                    | 12                                     | 13                                 | 14              | 15            |
|-----------|-------------------|---------------|-------------------------------------|--------------------------------------|---------------------------------------|-----------------------------------|---------------------------------------|----------------------------------------|-----------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|------------------------------------|-----------------|---------------|
|           |                   | WWAN          | WLAN2.4GHz Ant 9 Standalone Non DBS | WLAN2.4GHz Ant 9 Standalone DBS only | WLAN2.4GHz Ant 9 Simultaneous Non DBS | WLAN2.4GHz Ant 9 Simultaneous DBS | WLAN2.4GHz Ant 7+9 Standalone Non DBS | WLAN2.4GHz Ant 7+9 Standalone DBS only | WLAN2.4GHz Ant 7+9 Simultaneous Non DBS | WLAN2.4GHz Ant 7+9 Simultaneous DBS | WLAN5GHz Ant 8+10 Standalone Non DBS | WLAN5GHz Ant 8+10 Standalone DBS only | WLAN5GHz Ant 8+10 Simultaneous Non DBS | WLAN5GHz Ant 8+10 Simultaneous DBS | Bluetooth Ant 7 | RFID          |
|           |                   | 1g SAR (W/kg) | 1g SAR (W/kg)                       | 1g SAR (W/kg)                        | 1g SAR (W/kg)                         | 1g SAR (W/kg)                     | 1g SAR (W/kg)                         | 1g SAR (W/kg)                          | 1g SAR (W/kg)                           | 1g SAR (W/kg)                       | 1g SAR (W/kg)                        | 1g SAR (W/kg)                         | 1g SAR (W/kg)                          | 1g SAR (W/kg)                      | 1g SAR (W/kg)   | 1g SAR (W/kg) |
| All Bands | Front             | 0.797         | 0.312                               | 0.585                                | 0.386                                 | 0.189                             | 0.424                                 | 0.540                                  | 0.369                                   | 0.196                               | 0.489                                | 0.596                                 | 0.387                                  | 0.191                              | 0.002           | 0.284         |
|           | Back              | 0.797         | 0.511                               | 0.585                                | 0.386                                 | 0.189                             | 0.649                                 | 0.540                                  | 0.369                                   | 0.196                               | 1.170                                | 0.596                                 | 0.387                                  | 0.191                              | 0.020           | 0.171         |
|           | Left side         | 0.797         | 0.112                               | 0.585                                | 0.386                                 | 0.189                             | 0.147                                 | 0.540                                  | 0.369                                   | 0.196                               | 0.188                                | 0.596                                 | 0.387                                  | 0.191                              | 0.002           | 0.089         |
|           | Right side        | 0.797         | 0.679                               | 0.585                                | 0.386                                 | 0.189                             | 0.733                                 | 0.540                                  | 0.369                                   | 0.196                               | 0.645                                | 0.596                                 | 0.387                                  | 0.191                              | 0.002           | 0.032         |
|           | Top side          | 0.797         |                                     | 0.585                                | 0.386                                 | 0.189                             | 1.077                                 | 0.540                                  | 0.369                                   | 0.196                               | 0.667                                | 0.596                                 | 0.387                                  | 0.191                              | 0.041           | 0.228         |
|           | Bottom side       | 0.797         | 0.001                               | 0.585                                | 0.386                                 | 0.189                             |                                       |                                        |                                         |                                     |                                      |                                       |                                        |                                    |                 |               |

| WWAN Band | Exposure Position | 2+14+15              | 10+14+15             | 7+11+15              | 3+11+14+15           | 1+8+15               | 1+12+14+15           | 1+4+14+15            | 1+9+13+15            | 1+5+13+14+15         | 6+15                 | 1+14+15              |
|-----------|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|           |                   | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) | Summed 1g SAR (W/kg) |
| All Bands | Front             | 0.60                 | 0.78                 | 1.42                 | 1.47                 | 1.45                 | 1.47                 | 1.47                 | 1.47                 | 1.46                 | 0.71                 | 1.08                 |
|           | Back              | 0.70                 | 1.36                 | 1.31                 | 1.37                 | 1.34                 | 1.38                 | 1.37                 | 1.36                 | 1.37                 | 0.82                 | 0.99                 |
|           | Left side         | 0.20                 | 0.28                 | 1.23                 | 1.27                 | 1.26                 | 1.28                 | 1.27                 | 1.27                 | 1.27                 | 0.24                 | 0.89                 |
|           | Right side        | 0.71                 | 0.68                 | 1.17                 | 1.22                 | 1.20                 | 1.22                 | 1.22                 | 1.22                 | 1.21                 | 0.77                 | 0.83                 |
|           | Top side          | 0.27                 | 0.94                 | 1.36                 | 1.45                 | 1.39                 | 1.45                 | 1.45                 | 1.41                 | 1.45                 | 1.31                 | 1.07                 |
|           | Bottom side       | 0.00                 | 0.00                 | 0.00                 | 0.59                 | 0.80                 | 0.80                 | 1.18                 | 0.80                 | 0.99                 | 0.00                 | 0.80                 |



## &lt;RFID Off&gt;

| WWAN Band                 | Exposure Position | 1                                              | 2                                                     | 3                                                     | 4                                                     | 5                                                     | 6                                                       | 7                                                       | 8                                                       | 9                                                       | 10                                                      | 11                                                      | 12                                                      | 13                                                      | 14                                                      |
|---------------------------|-------------------|------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|
|                           |                   | WWAN Ant 9 Standalone Non DBS<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) |
| All Bands(Ant0&2&3&4&5&6) | Front             | 1.076                                          | 0.312                                                 | 0.585                                                 | 0.386                                                 | 0.189                                                 | 0.424                                                   | 0.540                                                   | 0.369                                                   | 0.196                                                   | 0.489                                                   | 0.596                                                   | 0.387                                                   | 0.191                                                   | 0.002                                                   |
|                           | Back              | 1.085                                          | 0.511                                                 | 0.585                                                 | 0.386                                                 | 0.189                                                 | 0.649                                                   | 0.540                                                   | 0.369                                                   | 0.196                                                   | 1.170                                                   | 0.596                                                   | 0.387                                                   | 0.191                                                   | 0.020                                                   |
|                           | Left side         | 1.094                                          | 0.112                                                 | 0.585                                                 | 0.386                                                 | 0.189                                                 | 0.147                                                   | 0.540                                                   | 0.369                                                   | 0.196                                                   | 0.188                                                   | 0.596                                                   | 0.387                                                   | 0.191                                                   | 0.002                                                   |
|                           | Right side        | 0.466                                          | 0.679                                                 | 0.585                                                 | 0.386                                                 | 0.189                                                 | 0.733                                                   | 0.540                                                   | 0.369                                                   | 0.196                                                   | 0.645                                                   | 0.596                                                   | 0.387                                                   | 0.191                                                   | 0.002                                                   |
|                           | Top side          | 1.026                                          |                                                       | 0.585                                                 | 0.386                                                 | 0.189                                                 | 1.077                                                   | 0.540                                                   | 0.369                                                   | 0.196                                                   | 0.667                                                   | 0.596                                                   | 0.387                                                   | 0.191                                                   | 0.041                                                   |
|                           | Bottom side       | 1.095                                          | 0.001                                                 | 0.585                                                 | 0.386                                                 | 0.189                                                 |                                                         |                                                         |                                                         |                                                         |                                                         |                                                         |                                                         |                                                         |                                                         |

| WWAN Band                 | Exposure Position | 2+14          | 10+14         | 7+11          | 3+11+14       | 1+8           | 1+12+14       | 1+4+14        | 1+9+13        | 1+5+13+14     | 1+14          |
|---------------------------|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                           |                   | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        | Summed        |
|                           |                   | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands(Ant0&2&3&4&5&6) | Front             | 0.31          | 0.49          | 1.14          | 1.18          | 1.45          | 1.47          | 1.46          | 1.46          | 1.46          | 1.36          |
|                           | Back              | 0.53          | 1.19          | 1.14          | 1.20          | 1.45          | 1.49          | 1.49          | 1.47          | 1.49          | 1.28          |
|                           | Left side         | 0.11          | 0.19          | 1.14          | 1.18          | 1.46          | 1.48          | 1.48          | 1.48          | 1.48          | 1.19          |
|                           | Right side        | 0.68          | 0.65          | 1.14          | 1.18          | 0.84          | 0.86          | 0.85          | 0.85          | 0.85          | 0.50          |
|                           | Top side          | 0.04          | 0.71          | 1.14          | 1.22          | 1.40          | 1.45          | 1.45          | 1.41          | 1.45          | 1.30          |
|                           | Bottom side       | 0.00          | 0.00          | 0.00          | 0.59          | 1.10          | 1.10          | 1.48          | 1.10          | 1.28          | 1.10          |

## 16.5 Body-Worn Accessory Exposure Conditions

| WWAN Band | Exposure Position | 1                                              | 2                                                     | 3                                                     | 4                                                     | 5                                                     | 6                                                       | 7                                                       | 8                                                       | 9                                                       | 10                                                      | 11                                                      | 12                                                      | 13                                                      | 14                                                      | 15                                                      | 16                                                      | 17                                                      | 18                                                      | 19                                                      |
|-----------|-------------------|------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|
|           |                   | WWAN Ant 9 Standalone Non DBS<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) | WLAN2.4GHz Ant 7+9 Standalone DBS only<br>1g SAR (W/kg) |
| All Bands | Front             | 0.609                                          | 0.198                                                 | 0.198                                                 | 0.198                                                 | 0.182                                                 | 0.377                                                   | 0.377                                                   | 0.377                                                   | 0.198                                                   | 0.518                                                   | 0.574                                                   | 0.382                                                   | 0.194                                                   | 0.004                                                   | 0.063                                                   | 0.063                                                   | 0.063                                                   | 0.063                                                   | 0.139                                                   |
|           | Back              | 0.620                                          | 0.309                                                 | 0.309                                                 | 0.309                                                 | 0.182                                                 | 0.434                                                   | 0.434                                                   | 0.434                                                   | 0.198                                                   | 1.151                                                   | 0.574                                                   | 0.382                                                   | 0.194                                                   | 0.011                                                   | 0.216                                                   | 0.216                                                   | 0.216                                                   | 0.216                                                   | 0.094                                                   |

| WWAN Band | Exposure Position | 2+14+19                 | 10+14+19                | 15+14+19                | 7+11+19                 | 7+16+19                 | 3+11+14+19              | 3+16+14+19              | 1+8+19                  | 1+12+14+19              | 1+17+14+19              | 1+4+14+19               | 1+9+13+19               | 1+9+18+19               | 1+5+13+14+19            | 1+5+18+14               | 6+19                    | 1+14+19                 | 1+5+18+19               |
|-----------|-------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|           |                   | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) | Summed<br>1g SAR (W/kg) |
| All Bands | Front             | 0.34                    | 0.66                    | 0.21                    | 1.09                    | 0.58                    | 0.92                    | 0.40                    | 1.13                    | 1.13                    | 0.82                    | 0.95                    | 1.14                    | 1.01                    | 1.13                    | 0.86                    | 0.52                    | 0.75                    | 0.99                    |
|           | Back              | 0.41                    | 1.26                    | 0.32                    | 1.10                    | 0.74                    | 0.99                    | 0.63                    | 1.15                    | 1.11                    | 0.94                    | 1.03                    | 1.11                    | 1.13                    | 1.10                    | 1.03                    | 0.53                    | 0.73                    | 1.11                    |

**16.6 Product specific 10g SAR Exposure Conditions****Remark:**

1. For Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

**<RFID On>**

| WWAN Band | Exposure Position | 1     | 2                                     | 3                                      | 4                                       | 5                                   | 6                                    | 7                                     | 8                                      | 9                                  | 10                                   | 11                                    | 12                                     | 13                                 | 14    | 15    |
|-----------|-------------------|-------|---------------------------------------|----------------------------------------|-----------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|------------------------------------|-------|-------|
|           |                   | WWAN  | WLAN2.4GHz Ant 7+9 Standalone Non DBS | WLAN2.4GHz Ant 7+9 Standalone DBS only | WLAN2.4GHz Ant 7+9 Simultaneous Non DBS | WLAN2.4GHz Ant 7+9 Simultaneous DBS | WLAN5GHz Ant 8+10 Standalone Non DBS | WLAN5GHz Ant 8+10 Standalone DBS only | WLAN5GHz Ant 8+10 Simultaneous Non DBS | WLAN5GHz Ant 8+10 Simultaneous DBS | WLAN6GHz Ant 8+10 Standalone Non DBS | WLAN6GHz Ant 8+10 Standalone DBS only | WLAN6GHz Ant 8+10 Simultaneous Non DBS | WLAN6GHz Ant 8+10 Simultaneous DBS | RFID  | NFC   |
| All Bands | Front             | 1.998 |                                       |                                        |                                         |                                     | 1.083                                | 1.572                                 | 0.910                                  | 0.488                              | 0.129                                | 0.129                                 | 0.129                                  | 0.129                              | 0.550 | 0.001 |
|           | Back              | 1.998 |                                       |                                        |                                         |                                     | 2.753                                | 1.572                                 | 0.910                                  | 0.488                              | 0.334                                | 0.334                                 | 0.334                                  | 0.334                              | 0.349 | 0.073 |
|           | Left side         | 1.998 |                                       |                                        |                                         |                                     | 0.219                                | 1.572                                 | 0.910                                  | 0.488                              | 0.023                                | 0.023                                 | 0.023                                  | 0.023                              | 0.327 | 0.001 |
|           | Right side        | 1.998 |                                       |                                        |                                         |                                     | 2.741                                | 1.572                                 | 0.910                                  | 0.488                              | 0.105                                | 0.105                                 | 0.105                                  | 0.105                              | 0.017 | 0.001 |
|           | Top side          | 1.998 | 2.827                                 | 1.433                                  | 0.852                                   | 0.440                               | 1.822                                | 1.572                                 | 0.910                                  | 0.488                              | 0.235                                | 0.235                                 | 0.235                                  | 0.235                              | 0.263 | 0.001 |
|           | Bottom side       | 1.998 |                                       |                                        |                                         |                                     |                                      |                                       |                                        |                                    |                                      |                                       |                                        |                                    | 0.011 | 0.001 |

| WWAN Band | Exposure Position | 6+14+15               | 3+7+14+15             | 3+11+14+15            | 1+4+14+15             | 1+8+14+15             | 1+12+14+15            | 1+5+9+14+15           | 1+5+13+14+15          | 2+14+15               | 10+14+15              |
|-----------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|           |                   | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) |
| All Bands | Front             | 1.63                  | 2.12                  | 0.68                  | 2.55                  | 3.46                  | 2.68                  | 3.04                  | 2.68                  | 0.55                  | 0.68                  |
|           | Back              | 3.18                  | 1.99                  | 0.76                  | 2.42                  | 3.33                  | 2.75                  | 2.91                  | 2.75                  | 0.42                  | 0.76                  |
|           | Left side         | 0.55                  | 1.90                  | 0.35                  | 2.33                  | 3.24                  | 2.35                  | 2.81                  | 2.35                  | 0.33                  | 0.35                  |
|           | Right side        | 2.76                  | 1.59                  | 0.12                  | 2.02                  | 2.93                  | 2.12                  | 2.50                  | 2.12                  | 0.02                  | 0.12                  |
|           | Top side          | 2.09                  | 3.27                  | 1.93                  | 3.11                  | 3.17                  | 2.50                  | 3.19                  | 2.94                  | 3.09                  | 0.50                  |
|           | Bottom side       | 0.01                  | 0.01                  | 0.01                  | 2.01                  | 2.01                  | 2.01                  | 2.01                  | 2.01                  | 0.01                  | 0.01                  |

**<RFID Off>**

| WWAN Band                  | Exposure Position | 1     | 2                                     | 3                                      | 4                                       | 5                                   | 6                                    | 7                                     | 8                                      | 9                                  | 10                                   | 11                                    | 12                                     | 13                                 | 15    |
|----------------------------|-------------------|-------|---------------------------------------|----------------------------------------|-----------------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|------------------------------------|--------------------------------------|---------------------------------------|----------------------------------------|------------------------------------|-------|
|                            |                   | WWAN  | WLAN2.4GHz Ant 7+9 Standalone Non DBS | WLAN2.4GHz Ant 7+9 Standalone DBS only | WLAN2.4GHz Ant 7+9 Simultaneous Non DBS | WLAN2.4GHz Ant 7+9 Simultaneous DBS | WLAN5GHz Ant 8+10 Standalone Non DBS | WLAN5GHz Ant 8+10 Standalone DBS only | WLAN5GHz Ant 8+10 Simultaneous Non DBS | WLAN5GHz Ant 8+10 Simultaneous DBS | WLAN6GHz Ant 8+10 Standalone Non DBS | WLAN6GHz Ant 8+10 Standalone DBS only | WLAN6GHz Ant 8+10 Simultaneous Non DBS | WLAN6GHz Ant 8+10 Simultaneous DBS | NFC   |
| All Bands(Ant0&2 &3&4&5&6) | Front             | 2.824 |                                       |                                        |                                         |                                     | 1.083                                | 1.572                                 | 0.910                                  | 0.488                              | 0.129                                | 0.129                                 | 0.129                                  | 0.129                              | 0.001 |
|                            | Back              | 2.308 |                                       |                                        |                                         |                                     | 2.753                                | 1.572                                 | 0.910                                  | 0.488                              | 0.334                                | 0.334                                 | 0.334                                  | 0.334                              | 0.073 |
|                            | Left side         | 3.078 |                                       |                                        |                                         |                                     | 0.219                                | 1.572                                 | 0.910                                  | 0.488                              | 0.023                                | 0.023                                 | 0.023                                  | 0.023                              | 0.001 |
|                            | Right side        |       |                                       |                                        |                                         |                                     | 2.741                                | 1.572                                 | 0.910                                  | 0.488                              | 0.105                                | 0.105                                 | 0.105                                  | 0.105                              | 0.001 |
|                            | Top side          | 1.175 | 2.827                                 | 1.433                                  | 0.852                                   | 0.440                               | 1.822                                | 1.572                                 | 0.910                                  | 0.488                              | 0.235                                | 0.235                                 | 0.235                                  | 0.235                              | 0.001 |
|                            | Bottom side       | 3.069 |                                       |                                        |                                         |                                     |                                      |                                       |                                        |                                    |                                      |                                       |                                        |                                    | 0.001 |

| WWAN Band                  | Exposure Position | 6+15                  | 3+7+15                | 3+11+15               | 1+4+15                | 1+8+15                | 1+12+15               | 1+5+9+15              | 1+5+13+15             | 2+15                  | 10+15                 |
|----------------------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                            |                   | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) | Summed 10g SAR (W/kg) |
| All Bands(Ant0&2 &3&4&5&6) | Front             | 1.08                  | 1.57                  | 0.13                  | 2.83                  | 3.74                  | 2.95                  | 3.31                  | 2.95                  | 0.00                  | 0.13                  |
|                            | Back              | 2.83                  | 1.65                  | 0.41                  | 2.38                  | 3.29                  | 2.72                  | 2.87                  | 2.72                  | 0.07                  | 0.41                  |
|                            | Left side         | 0.22                  | 1.57                  | 0.02                  | 3.08                  | 3.99                  | 3.10                  | 3.57                  | 3.10                  | 0.00                  | 0.02                  |
|                            | Right side        | 2.74                  | 1.57                  | 0.11                  | 0.00                  | 0.91                  | 0.11                  | 0.49                  | 0.11                  | 0.00                  | 0.11                  |
|                            | Top side          | 1.82                  | 3.01                  | 1.67                  | 2.03                  | 2.09                  | 1.41                  | 2.10                  | 1.85                  | 2.83                  | 0.24                  |
|                            | Bottom side       | 0.00                  | 0.00                  | 0.00                  | 3.07                  | 3.07                  | 3.07                  | 3.07                  | 3.07                  | 0.00                  | 0.00                  |

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## **17. Uncertainty Assessment**

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be  $\leq 30\%$ , for a confidence interval of  $k = 2$ . If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

## **18. References**

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [9] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [10] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [11] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [12] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [13] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015

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