

FCC SAR Test Report

APPLICANT : Xiaomi Communications Co., Ltd.
EQUIPMENT : Mobile Phone
BRAND NAME : Redmi
MODEL NAME : 25080RABDG
FCC ID : 2AFZZRABDG
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

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Table of Contents

1. Statement of Compliance	4
2. Administration Data	5
3. Guidance Applied	6
4. Equipment Under Test (EUT) Information	7
4.1 General Information.....	7
4.2 Maximum Power Table	9
4.3 General LTE SAR Test and Reporting Considerations	12
4.4 General 5G NR SAR Test and Reporting Considerations	16
5. Proximity Sensor Triggering Test.....	19
6. RF Exposure Limits.....	21
6.1 Uncontrolled Environment	21
6.2 Controlled Environment.....	21
7. Specific Absorption Rate (SAR)	22
7.1 Introduction	22
7.2 SAR Definition	22
8. System Description and Setup.....	23
8.1 E-Field Probe	24
8.2 Data Acquisition Electronics (DAE)	24
8.3 Phantom.....	25
8.4 Device Holder.....	26
9. Measurement Procedures.....	27
9.1 Spatial Peak SAR Evaluation	27
9.2 Power Reference Measurement.....	28
9.3 Area Scan.....	28
9.4 Zoom Scan.....	29
9.5 Volume Scan Procedures.....	29
9.6 Power Drift Monitoring.....	29
10. Test Equipment List	30
11. System Verification	31
11.1 Tissue Simulating Liquids	31
11.2 Tissue Verification.....	31
11.3 System Performance Check Results	33
12. RF Exposure Positions	34
12.1 Ear and handset reference point	34
12.2 Definition of the cheek position	35
12.3 Definition of the tilt position	36
12.4 Body Worn Accessory	37
12.5 Product Specific 10g SAR Exposure	38
12.6 Wireless Router.....	38
13. Conducted RF Output Power (Unit: dBm).....	39
14. Antenna Location	54
15. SAR Test Results	55
15.1 Head SAR	58
15.2 Hotspot SAR	68
15.3 Body Worn Accessory SAR	79
15.4 Product specific 10g SAR.....	88
15.5 Repeated SAR Measurement	89
15.6 NR Linearity Data Analysis	90
16. Simultaneous Transmission Analysis	93
16.1 Head Exposure Conditions.....	94
16.2 Hotspot Exposure Conditions.....	96
16.3 Body-Worn Accessory Exposure Conditions	99
16.4 Product specific 10g SAR Exposure Conditions.....	102
17. Uncertainty Assessment.....	103
18. References	104
Appendixes	105
Appendix A. Plots of System Performance Check.....	105
Appendix B. Plots of High SAR Measurement	105
Appendix C. DASY Calibration Certificate.....	105
Appendix D. Test Setup Photos.....	105
Appendix E. Conducted RF Output Power Table	105
Appendix F. Power measurement connection diagram and CA Conducted RF Output Power Table	105
Appendix G. Power reduction mechanism verification	105



Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA562503	Rev. 01	Initial issue of report.	Aug. 12, 2025

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Xiaomi Communications Co., Ltd., Mobile Phone, 25080RABDG**, are as follows.

Equipment Class	Frequency Band		Highest SAR Summary				Highest Simultaneous Transmission 1g SAR SAR (W/kg)	Highest Simultaneous Transmission 10g SAR SAR (W/kg)
			Head (Separation 0mm)	Hotspot (Separation 10mm)	Body-worn (Separation 5mm)	Extremity (Separation 0mm)		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	10g SAR (W/kg)		
Licensed	GSM	GSM850	0.65	0.58	0.95		1.59	
		GSM1900	1.00	0.40	0.90			
	WCDMA	WCDMA V	0.87	0.69	1.07			
		WCDMA II	0.86	0.32	0.84			
		WCDMA IV	0.73	0.45	0.78			
	LTE	LTE Band 2	0.93	0.54	0.96			
		LTE Band 7	0.83	0.34	0.82			
		LTE Band 12/17	0.88	0.64	0.99			
		LTE Band 13	0.88	0.74	1.08			
		LTE Band 26/5	0.86	0.73	1.08			
		LTE Band 41/38	1.07	0.39	0.92			
		LTE Band 48	0.99	0.49	1.03			
		LTE Band 66/4	1.00	0.47	1.07			
		LTE Band 42	1.02	0.61	1.03			
	FR1	FR1 n2	1.00	0.56	1.08			
		FR1 n7	0.94	0.33	0.94			
		FR1 n12	0.75	0.86	0.95			
		FR1 n26/n5	0.33	0.41	0.89			
		FR1 n41/n38	1.06	0.61	1.09			
		FR1 n48	1.09	0.55	1.04			
		FR1 n66	1.05	0.42	1.09			
		FR1 n77/n78	1.01	0.45	1.04			
DTS	WLAN	2.4GHz WLAN	1.02	0.50	1.09		1.59	
NII		5GHz WLAN	1.07	0.54	1.00	1.62	1.57	1.62
DSS	Bluetooth	Bluetooth	0.21	<0.10	0.26		1.57	
Date of Testing:			2025/07/05 ~ 2025/08/05					

Remark:

- This device supports LTE B4 / B5 / B17 / B38 and B66 / B26 / B12 / B41. Since the supported frequency span for LTE B4 / B5 / B17 / B38 falls completely within the support's frequency span for LTE 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 B66 / B26 / B12 / B41.
- This device supports 5G NR n38/n5 /n78 and n41/n26 /n77. Since the supported frequency span for 5G NR n38/n5 /n78 falls completely within the support's frequency span for n41/n26 /n77, both 5G NR bands have the same target power, and both 5G NR bands share the same transmission path; therefore, SAR was only assessed for n41/n26 /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 5145.01.

Testing Laboratory			
Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR06-KS	CN1257	314309

Applicant	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer	
Company Name	Xiaomi Communications Co., Ltd.
Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

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 616217 D04 SAR for laptop and tablets v01r02
- 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	Mobile Phone
Brand Name	Redmi
Model Name	25080RABDG
FCC ID	2AFZZRABDG
IMEI Code	Sample 1 862542070040041/862542070040058, 862542070038243/862542070038250 862542070038242/862542070038359, 862542070036668/862542070038376 Sample 2 862542070080724/862542070080732 Sample 4 862542070071186/862542070071194
Wireless Technology and Frequency Range	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 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 n26: 814 MHz ~ 849 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA HSPA+(16QAM uplink is supported) LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM WLAN 2.4GHz 802.11b/g/n HT20



	WLAN 2.4GHz 802.11ax HE20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR/EDR/LE NFC: ASK
HW Version	135100P16
SW Version	Xiaomi HyperOS 2.0
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype

Remark:

1. This device supports VoIP in GPRS, EGPRS, WCDMA, LTE and 5G NR (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
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 supports WiFi Direct (GC only).
4. This device does not support DTM operation and supports GPRS/EGPRS mode up to multi-slot class 12.
5. For dual SIM card mobile has two SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active).
6. The device implements proximity sensor/receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). Details about the power management decision and sensor detection are provided in the operational description. And the device will invoke corresponding work scenarios power level base on frequency bands/antennas, which can refer to power table at appendix E.
7. For WLAN when transmit simultaneously with WWAN/BT, the device WLAN power will be reduced power at head, body-worn, hotspot and extremity conditions.
8. This device supports HPUE mode for 5G NR n77/n78 with higher power. 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 power class 3 was chosen to perform full SAR testing and power class 2 verified the worst case of power class 3 SAR.
9. For 5G NR n41/n77/n78 HPUE, 5G NR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands, using FTM to perform SAR with default 100% transmission.
10. The device supports the UL duty cycle detection mechanism limited to LTE TDD frequency bands (LTE Band 38/41/42/48) and 5G NR TDD frequency bands (5G NR n38/41/48/77/78).
11. For 5G NR EN-DC mode, standalone SAR performed for 5G NR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5G NR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
12. There are four samples. The difference between them is memory capacity and screen: The sample 1 is 1st source screen and 1st source battery with 12+256G capacity, Sample 2 is 2nd source screen and 2nd source battery with 8+256G capacity, Sample 3 is 1st source screen and 1st source battery with 8+512G capacity and Sample 4 is 3rd source screen and 3rd source battery with 12+512G capacity. According to the difference, sample 1 was chosen to perform full test, and the sample 2/4 are verified the difference with the sample 1. For sample 3, the difference does not affect the test, so sample 3 is not tested.
13. This device has NFC function and the NFC SAR report will be separately submitted.
14. This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode. NSA and SA mode performed SAR separately.

<5G NR>

Mode	Band	Duplex	SCS(KHz)	Bandwidths(BW)
NSA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50
	n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
	n38	TDD	30	10, 15, 20, 25, 30, 40
	n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
	n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
	n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
SA	n2	FDD	15	5, 10, 15, 20, 25, 30, 35, 40
	n5	FDD	15	5, 10, 15, 20
	n7	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 50



n12	FDD	15	5, 10, 15
n26	FDD	15	5, 10, 15, 20
n66	FDD	15	5, 10, 15, 20, 25, 30, 35, 40, 45
n38	TDD	30	10, 15, 20, 25, 30, 40
n41	TDD	30	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100
n48	TDD	30	10, 15, 20, 40
n77	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
n78	TDD	30	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

4.2 Maximum Power Table

<WWAN Power Table>

Mode	Antenna	FCC Power Table				
		Default	ECI 1	ECI 3	ECI 5	ECI 4
			Receiver on	Sensor on	Hotspot	Sensor off
GSM850 GSM 1 Tx slot	Ant 0	33.50	33.50	33.50	33.50	33.50
GSM850 GPRS 1 Tx slot	Ant 0	33.50	33.50	33.50	33.50	33.50
GSM850 GPRS 2 Tx slots	Ant 0	30.50	30.50	30.50	30.50	30.50
GSM850 GPRS 3 Tx slots	Ant 0	28.70	28.70	28.70	28.70	28.70
GSM850 GPRS 4 Tx slots	Ant 0	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 1 Tx slot	Ant 0	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 2 Tx slots	Ant 0	24.50	24.50	24.50	24.50	24.50
GSM850 EDGE 3 Tx slots	Ant 0	22.70	22.70	22.70	22.70	22.70
GSM850 EDGE 4 Tx slots	Ant 0	21.50	21.50	21.50	21.50	21.50
GSM850 GSM 1 Tx slot	Ant 2	33.50	33.00	33.50	33.00	33.50
GSM850 GPRS 1 Tx slot	Ant 2	33.50	33.00	33.50	33.00	33.50
GSM850 GPRS 2 Tx slots	Ant 2	30.50	30.00	30.50	30.00	30.50
GSM850 GPRS 3 Tx slots	Ant 2	28.70	28.20	28.70	28.20	28.70
GSM850 GPRS 4 Tx slots	Ant 2	27.50	27.00	27.50	27.00	27.50
GSM850 EDGE 1 Tx slot	Ant 2	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 2 Tx slots	Ant 2	24.50	24.50	24.50	24.50	24.50
GSM850 EDGE 3 Tx slots	Ant 2	22.70	22.70	22.70	22.70	22.70
GSM850 EDGE 4 Tx slots	Ant 2	21.50	21.50	21.50	21.50	21.50
GSM1900 GSM 1 Tx slot	Ant 1	30.50	30.50	28.50	28.50	30.50
GSM1900 GPRS 1 Tx slot	Ant 1	30.50	30.50	28.50	28.50	30.50
GSM1900 GPRS 2 Tx slots	Ant 1	27.50	27.50	25.50	25.50	27.50
GSM1900 GPRS 3 Tx slots	Ant 1	25.70	25.70	23.70	23.70	25.70
GSM1900 GPRS 4 Tx slots	Ant 1	24.50	24.50	22.50	22.50	24.50
GSM1900 EDGE 1 Tx slot	Ant 1	27.00	27.00	27.00	27.00	27.00
GSM1900 EDGE 2 Tx slots	Ant 1	24.00	24.00	24.00	24.00	24.00
GSM1900 EDGE 3 Tx slots	Ant 1	22.20	22.20	22.20	22.20	22.20
GSM1900 EDGE 4 Tx slots	Ant 1	21.00	21.00	21.00	21.00	21.00
GSM1900 GSM 1 Tx slot	Ant 5	30.50	29.00	29.00	29.00	30.50
GSM1900 GPRS 1 Tx slot	Ant 5	30.50	29.00	29.00	29.00	30.50
GSM1900 GPRS 2 Tx slots	Ant 5	27.50	26.00	26.00	26.00	27.50
GSM1900 GPRS 3 Tx slots	Ant 5	25.70	24.20	24.20	24.20	25.70
GSM1900 GPRS 4 Tx slots	Ant 5	24.50	23.00	23.00	23.00	24.50
GSM1900 EDGE 1 Tx slot	Ant 5	27.00	27.00	27.00	27.00	27.00
GSM1900 EDGE 2 Tx slots	Ant 5	24.00	24.00	24.00	24.00	24.00
GSM1900 EDGE 3 Tx slots	Ant 5	22.20	22.20	22.20	22.20	22.20
GSM1900 EDGE 4 Tx slots	Ant 5	21.00	21.00	21.00	21.00	21.00
WCDMA V	Ant 0	25.00	25.00	25.00	25.00	25.00
WCDMA V	Ant 2	25.00	25.00	24.00	24.00	25.00
WCDMA II	Ant 1	25.00	25.00	20.50	20.50	25.00
WCDMA II	Ant 5	25.00	19.00	19.00	19.00	24.50



FCC SAR Test Report

Report No. : FA562503

WCDMA IV	Ant 1	25.00	25.00	20.50	20.50	25.00
WCDMA IV	Ant 5	25.00	20.00	20.00	20.00	25.00
LTE Band 12 (17)	Ant 0	25.50	25.50	25.50	25.50	25.50
LTE Band 12 (17)	Ant 2	25.50	24.50	23.00	23.00	25.50
LTE Band 13	Ant 0	25.50	25.50	25.50	25.50	25.50
LTE Band 13	Ant 2	25.50	25.00	24.00	24.00	25.50
LTE Band 26 (5)	Ant 0	25.50	25.50	25.50	25.50	25.50
LTE Band 5	Ant 2	25.50	25.50	24.00	24.00	25.50
LTE Band 5 ENDC	Ant 2	25.50	22.50	21.50	24.00	25.50
LTE Band 26	Ant 2	25.50	25.50	24.50	24.50	25.50
LTE Band 26 ENDC	Ant 2	25.50	22.50	21.50	24.50	25.50
LTE Band 2	Ant 1	25.50	25.50	19.50	19.50	25.50
LTE Band 2 ENDC	Ant 3	25.00	20.00	19.00	19.00	25.00
LTE Band 2	Ant 5	25.50	19.00	19.50	19.00	25.00
LTE Band 7	Ant 1	25.50	25.50	22.00	22.00	25.50
LTE Band 7 ENDC	Ant 1	25.50	25.50	19.50	22.00	25.50
LTE Band 7 ENDC	Ant 3	25.00	19.00	16.50	16.50	25.00
LTE Band 7	Ant 5	25.50	18.00	18.50	18.00	23.50
LTE Band 7 ENDC	Ant 5	25.50	18.00	15.50	18.00	23.50
LTE Band 7	Ant 6	24.00	18.00	17.50	17.50	24.00
LTE Band 4	Ant 1	25.50	25.50	18.50	18.50	25.50
LTE Band 66	Ant 1	25.50	25.50	20.50	20.50	25.50
LTE Band 66 (4) ENDC	Ant 3	25.00	21.00	21.00	21.00	25.00
LTE Band 66 (4)	Ant 5	25.50	19.50	19.50	19.50	25.00
LTE Band 38	Ant 1	25.50	25.50	22.50	22.50	25.50
LTE Band 41	Ant 1	25.50	25.50	23.00	23.00	25.50
LTE Band 41 (38) ENDC	Ant 3	25.00	22.50	21.50	21.50	25.00
LTE Band 41 (38)	Ant 5	25.50	20.00	21.50	20.00	25.00
LTE Band 42	Ant 4	25.50	19.50	19.50	19.50	24.50
LTE Band 42	Ant 6	25.50	24.00	23.00	23.00	25.50
LTE Band 48	Ant 4	25.50	20.00	19.00	19.00	24.50
LTE Band 48	Ant 6	25.50	24.00	23.50	23.50	25.50
FR1 n12	Ant 0	25.70	25.70	25.70	25.70	25.70
FR1 n12	Ant 2	25.70	25.70	23.20	23.20	25.70
FR1 n26 (5)	Ant 0	25.70	25.70	25.70	25.70	25.70
FR1 n26 (5) ENDC	Ant 0	25.70	25.70	23.70	25.70	23.70
FR1 n26 (5)	Ant 2	25.70	25.70	25.20	25.20	25.70
FR1 n2	Ant 1	25.70	25.70	21.20	21.20	25.70
FR1 n2 ENDC	Ant 1	25.70	25.70	18.70	21.20	25.70
FR1 n2	Ant 5	25.70	19.70	19.70	19.70	25.70
FR1 n2 ENDC	Ant 5	25.70	16.70	16.70	19.70	25.70
FR1 n7	Ant 1	25.70	25.70	21.70	21.70	25.70
FR1 n7 ENDC	Ant 1	25.70	25.70	19.20	21.70	25.70
FR1 n7	Ant 5	25.70	18.20	19.20	19.20	24.20
FR1 n7 ENDC	Ant 5	25.70	15.20	16.20	19.20	24.20
FR1 n7 ENDC	Ant 6	24.50	20.00	18.00	18.00	24.50
FR1 n66	Ant 1	25.70	25.70	20.70	20.70	25.70
FR1 n66 ENDC	Ant 1	25.70	25.70	18.20	20.70	25.70
FR1 n66	Ant 5	25.70	19.70	19.70	19.70	25.70
FR1 n66 ENDC	Ant 5	25.70	16.70	16.70	19.70	25.70
FR1 n41 (38)	Ant 1	25.70	25.70	21.20	21.20	25.70
FR1 n41 (38) ENDC	Ant 1	25.70	25.70	18.70	21.20	25.70
FR1 n41 (38)	Ant 3	23.00	19.50	19.00	19.00	23.00
FR1 n41 (38) ENDC	Ant 3	23.00	16.50	16.00	19.00	23.00
FR1 n38	Ant 5	25.70	17.70	19.20	17.70	23.20
FR1 n41	Ant 5	25.70	17.70	19.20	17.70	23.20



FCC SAR Test Report

Report No. : FA562503

FR1 n41 (38) ENDC	Ant 5	25.70	14.70	16.70	17.70	23.20
FR1 n41 (38) ENDC	Ant 6	24.50	20.50	18.50	18.50	24.50
FR1 n38	Ant 10	23.00	23.00	23.00	23.00	23.00
FR1 n41	Ant 10	23.00	23.00	23.00	23.00	23.00
FR1 n48	Ant 4	25.70	18.20	17.70	17.70	23.70
FR1 n48	Ant 6	25.70	21.70	20.70	20.70	25.70
FR1 n77 (78) PartO PC3	Ant 2	22.50	22.50	22.50	22.50	22.50
FR1 n77 (78) PartO PC2	Ant 2	25.50	25.50	25.50	25.50	25.50
FR1 n77 (78) PartQ PC3	Ant 2	22.50	22.50	22.50	22.50	22.50
FR1 n77 (78)PartQ PC2	Ant 2	25.50	25.50	25.50	25.50	25.50
FR1 n77 (78) PartO PC3	Ant 4	24.50	17.00	16.50	16.50	23.00
FR1 n77 (78) PartO PC3 ENDC	Ant 4	24.50	15.50	14.00	16.50	23.00
FR1 n77 (78) PartO PC2	Ant 4	27.50	20.00	19.50	19.50	26.00
FR1 n77 (78) PartO PC2 ENDC	Ant 4	27.50	18.50	17.00	19.50	26.00
FR1 n77 (78) PartQ PC3	Ant 4	24.50	17.00	16.50	16.50	23.00
FR1 n77 (78) PartQ PC3 ENDC	Ant 4	24.50	15.50	14.00	16.50	23.00
FR1 n77 (78)PartQ PC2	Ant 4	27.50	20.00	19.50	19.50	26.00
FR1 n77 (78)PartQ PC2 ENDC	Ant 4	27.50	18.50	17.00	19.50	26.00
FR1 n77 (78) PartO PC3	Ant 6	24.50	22.50	21.00	21.00	24.50
FR1 n77 (78) PartO PC3 ENDC	Ant 6	24.50	19.50	18.00	21.00	24.50
FR1 n77 (78) PartO PC2	Ant 6	27.50	25.50	24.00	24.00	27.50
FR1 n77 (78) PartO PC2 ENDC	Ant 6	27.50	22.50	21.00	24.00	27.50
FR1 n77 (78) PartQ PC3	Ant 6	24.50	22.50	21.00	21.00	24.50
FR1 n77 (78) PartQ PC3 ENDC	Ant 6	24.50	19.50	18.00	21.00	24.50
FR1 n77 (78)PartQ PC2	Ant 6	27.50	25.50	24.00	24.00	27.50
FR1 n77 (78)PartQ PC2 ENDC	Ant 6	27.50	22.50	21.00	24.00	27.50
FR1 n77 (78) PartO PC3	Ant 11	22.50	22.50	16.50	16.50	16.50
FR1 n77 (78) PartO PC2	Ant 11	25.50	25.50	19.50	19.50	19.50
FR1 n77 (78) PartQ PC3	Ant 11	22.50	22.50	16.50	16.50	16.50
FR1 n77 (78)PartQ PC2	Ant 11	25.50	25.50	19.50	19.50	19.50



4.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																										
FCC ID		2AFZZRABDG																																																																								
Equipment Name		Mobile Phone																																																																								
Operating Frequency Range of each LTE transmission band		LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz																																																																								
Channel Bandwidth		LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 42: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 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_{RB})</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>> 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>≤ 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>> 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>≤ 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>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 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_{RB})						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_{RB})						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 Proximity sensors/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		Inter-Band and 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. 2. This device supports maximum of 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	20450	829	20450	829		
M	20525	836.5	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	20600	844	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	20850	2510	20850	2510		
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535		
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	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	23060	704	23060	704		
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5		
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23130	711	23130	711		
LTE Band 13														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)			
L	23205		779.5		23230		782							
M	23230		782											
H	23255		784.5											
LTE Band 17														
	Bandwidth 5 MHz				Bandwidth 10 MHz									
	Channel #		Freq.(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 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	26765	821.5		
M	26865	831.5	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	26965	841.5		
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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37850	2580	37850	2580		
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595		
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38150	2610	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 42								
	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	42115	3452.5	42140	3455	42165	3457.5	42190	3460
M	42590	3500	42590	3500	42590	3500	42590	3500
H	43065	3547.5	43040	3545	43015	3542.5	42990	3540
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)
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 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 4	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 66	Yes	Yes	Yes	Yes	Yes	Yes
LTE Band 38			Yes	Yes	Yes	Yes
LTE Band 41			Yes	Yes	Yes	Yes

2) LTE Bands tune up:

Band	Antenna	Full Power	ECI 1	ECI 3	ECI 5	ECI 4
		Tune-up Limit	Receiver on Tune-up Limit	Sensor on Tune-up Limit	Hotspot Tune-up Limit	Sensor off Tune-up Limit
LTE Band 12	Ant 0	25.5	25.5	25.5	25.5	25.5
LTE Band 17	Ant 0	25.5	25.5	25.5	25.5	25.5
LTE Band 12	Ant 2	25.5	24.5	23	23	25.5
LTE Band 17	Ant 2	25.5	24.5	23	23	25.5
LTE Band 5	Ant 0	25.5	25.5	25.5	25.5	25.5
LTE Band 26	Ant 0	25.5	25.5	25.5	25.5	25.5
LTE Band 5	Ant 2	25.5	25.5	24	24	25.5
LTE Band 5 ENDC	Ant 2	25.5	22.5	21.5	24	25.5
LTE Band 26	Ant 2	25.5	25.5	24.5	24.5	25.5
LTE Band 26 ENDC	Ant 2	25.5	22.5	21.5	24.5	25.5
LTE Band 4	Ant 1	25.5	25.5	18.5	18.5	25.5
LTE Band 66	Ant 1	25.5	25.5	20.5	20.5	25.5
LTE Band 4 ENDC	Ant 3	25	21	21	21	25
LTE Band 66 ENDC	Ant 3	25	21	21	21	25
LTE Band 4	Ant 5	25.5	19.5	19.5	19.5	25
LTE Band 66	Ant 5	25.5	19.5	19.5	19.5	25
LTE Band 38	Ant 1	25.5	25.5	22.5	22.5	25.5
LTE Band 41	Ant 1	25.5	25.5	23	23	25.5
LTE Band 38 ENDC	Ant 3	25	22.5	21.5	21.5	25
LTE Band 41 ENDC	Ant 3	25	22.5	21.5	21.5	25
LTE Band 38	Ant 5	25.5	20	21.5	20	25
LTE Band 41	Ant 5	25.5	20	21.5	20	25

4.4 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 n26: 814 MHz ~ 849 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48: 3550 MHz ~ 3700 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Channel Bandwidth	The detail please refers to section 4.1 5GNR FR1 bands table.
SCS	FDD/TDD: SCS15KHz/SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B7/4/66
LTE Anchor Bands for n5	LTE B7
LTE Anchor Bands for n7	LTE B2/4/5/66
LTE Anchor Bands for n66	LTE B2/4/5/7
LTE Anchor Bands for n38	LTE B2/4/5/66
LTE Anchor Bands for n41	LTE B2/4/5/66
LTE Anchor Bands for n77	LTE B2
LTE Anchor Bands for n78	LTE B2/4/5/7/26/38/41/66

Transmission (H, M, L) channel numbers and frequencies in each 5G NR band																
NR Band 2																
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L 370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870	
M 376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	
H 381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890	

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 35MHz		Bandwidth 40MHz		Bandwidth 50MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	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	503500	2517.5	504000	2520	505000	2525
M	507000	2535	507000	2535	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	510500	2552.5	510000	2550	509000	2545

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 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 66																		
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1762.5	352000	1760	351500	1757.5

NR Band 38												
	Bandwidth10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515000	2575	515500	2577.5	516000	2580	516500	2582.5	517000	2585	518000	2590
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	523000	2615	522500	2612.5	522000	2610	521500	2607.5	521000	2605	5120000	2600

NR Band 41																												
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	502704	2513.52	503202	2516.01	503700	2518.5	504204	2521.02	505200	2526	500202	2501.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534498	2672.49	534000	2670	533496	2667.48	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 48								
	Bandwidth 10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637168	3557.52	637334	3560.01	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646166	3692.49	646000	3690	645332	3679.98

NR Band 77																								
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	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	656000	3840	656000	3840.00	656000	3840.00	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.00	662332	3934.98	662000	3930

NR Band 78																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02		
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

For <3450 MHz ~ 3550 MHz >

NR Band 77																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

NR Band 78																								
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		

<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	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	Yes	Yes		Yes						
FR1 n41		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n77		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR1 n78		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes

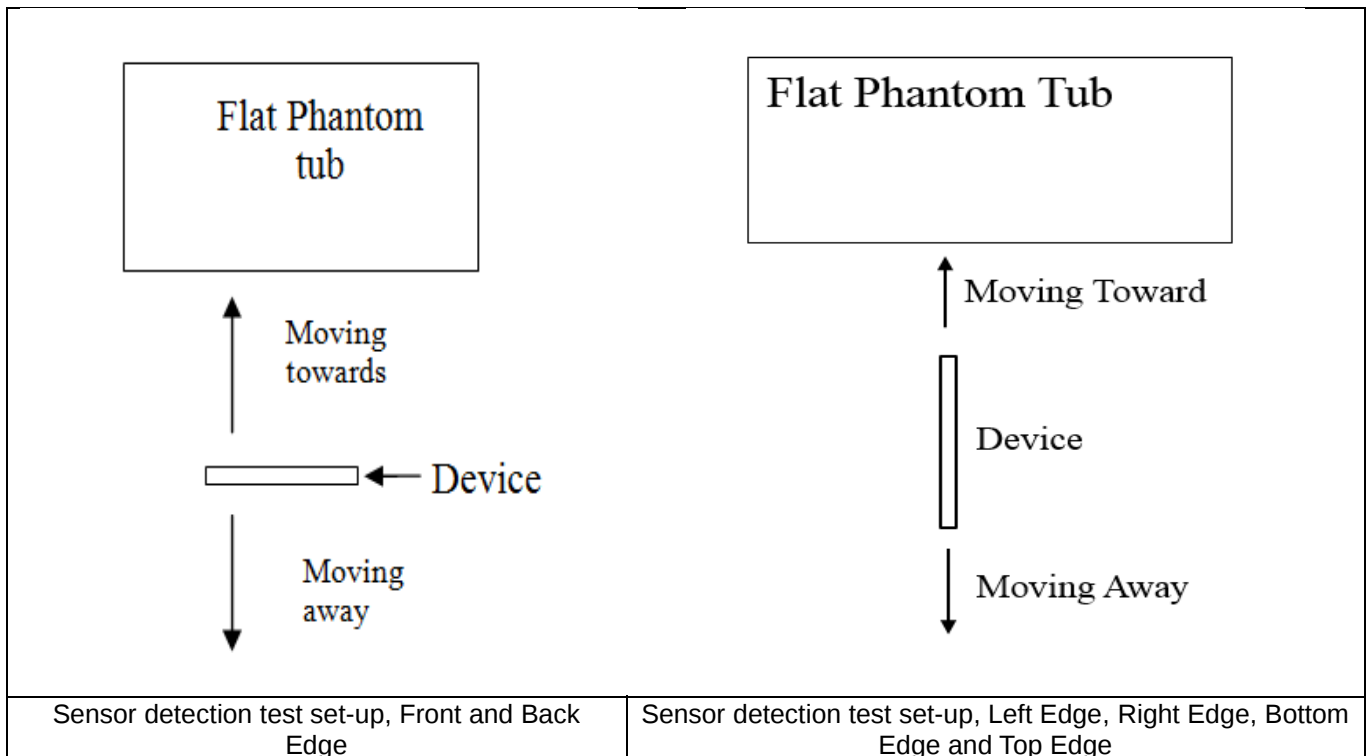
2) NR Bands Tune up:

Band	Antenna	Full Power	ECI 1	ECI 3	ECI 5	ECI 4
			Receiver on	Sensor on	Hotspot	Sensor off
		Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit	Tune-up Limit
FR1 n5	Ant 0	25.7	25.7	25.7	25.7	25.7
FR1 n26	Ant 0	25.7	25.7	25.7	25.7	25.7
FR1 n5 ENDC	Ant 0	25.7	25.7	23.7	25.7	23.7
FR1 n26 ENDC	Ant 0	25.7	25.7	23.7	25.7	23.7
FR1 n5	Ant 2	25.7	25.7	25.2	25.2	25.7
FR1 n26	Ant 2	25.7	25.7	25.2	25.2	25.7
FR1 n38	Ant 1	25.7	25.7	21.2	21.2	25.7
FR1 n41	Ant 1	25.7	25.7	21.2	21.2	25.7
FR1 n38 ENDC	Ant 1	25.7	25.7	18.7	21.2	25.7
FR1 n41 ENDC	Ant 1	25.7	25.7	18.7	21.2	25.7
FR1 n38	Ant 3	23	19.5	19	19	23
FR1 n41	Ant 3	23	19.5	19	19	23
FR1 n41 (38) ENDC	Ant 3	23	16.5	16	19	23
FR1 n38	Ant 5	25.7	17.7	19.2	17.7	23.2
FR1 n41	Ant 5	25.7	17.7	19.2	17.7	23.2
FR1 n38 ENDC	Ant 5	25.7	14.7	16.7	17.7	23.2
FR1 n41 ENDC	Ant 5	25.7	14.7	16.7	17.7	23.2
FR1 n38 ENDC	Ant 6	24.5	20.5	18.5	18.5	24.5
FR1 n41 ENDC	Ant 6	24.5	20.5	18.5	18.5	24.5
FR1 n38	Ant 10	23	23	23	23	23
FR1 n41	Ant 10	23	23	23	23	23
FR1 n77 PC3	Ant 2	22.5	22.5	22.5	22.5	22.5
FR1 n77 PC2	Ant 2	25.5	25.5	25.5	25.5	25.5
FR1 n78 PC3	Ant 2	22.5	22.5	22.5	22.5	22.5
FR1 n78 PC2	Ant 2	25.5	25.5	25.5	25.5	25.5
FR1 n77 PC3	Ant 4	24.5	17	16.5	16.5	23
FR1 n77 PC2	Ant 4	27.5	20	19.5	19.5	26
FR1 n78 PC3	Ant 4	24.5	17	16.5	16.5	23
FR1 n78 PC2	Ant 4	27.5	20	19.5	19.5	26
FR1 n77 PC3 ENDC	Ant 4	24.5	15.5	14	16.5	23
FR1 n77 PC2 ENDC	Ant 4	27.5	18.5	17	19.5	26
FR1 n78 PC3 ENDC	Ant 4	24.5	15.5	14	16.5	23
FR1 n78 PC2 ENDC	Ant 4	27.5	18.5	17	19.5	26
FR1 n77 PC3	Ant 6	24.5	22.5	21	21	24.5
FR1 n77 PC3 ENDC	Ant 6	24.5	19.5	18	21	24.5
FR1 n77 PC2	Ant 6	27.5	25.5	24	24	27.5
FR1 n77 PC2 ENDC	Ant 6	27.5	22.5	21	24	27.5
FR1 n78 PC3	Ant 6	24.5	22.5	21	21	24.5
FR1 n78 PC3 ENDC	Ant 6	24.5	19.5	18	21	24.5
FR1 n78 PC2	Ant 6	27.5	25.5	24	24	27.5
FR1 n78 PC2 ENDC	Ant 6	27.5	22.5	21	24	27.5
FR1 n77 PC3	Ant 11	22.5	22.5	16.5	16.5	16.5
FR1 n77 PC2	Ant 11	25.5	25.5	19.5	19.5	19.5
FR1 n78 PC3	Ant 11	22.5	22.5	16.5	16.5	16.5
FR1 n78 PC2	Ant 11	25.5	25.5	19.5	19.5	19.5

5. Proximity Sensor Triggering Test

<Proximity Sensor Triggering Distance>:

1. Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for highest frequency (3980MHz) and lowest (750MHz) frequency was used for proximity sensor triggering testing.
2. Capacitive proximity sensors placed coincident with antenna elements at the top and bottom ends of the phone are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or right or top or bottom or left edge of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.
3. The sensors can use to detect the proximity of the user's body or handheld states at the front or back or left or top or bottom or right edge of the device use a detection threshold distance. When front/back/top/left/right/bottom edge of body or handheld condition is detected reduced power will be active. The trigger distance shown in the sections below.
4. For verification of compliance of power reduction scheme, additional SAR testing with EUT transmitting at full RF power at a conservative trigger distance -1mm was performed.



<Sensor for Ant 1>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Right Edge		Bottom Edge	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	16	16	16	16	16	16	16	16

<Sensor for Ant 2/3/4/5/6>

Proximity Sensor Triggering Distance (mm)								
Position	Front		Back		Left Edge		Top Edge	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Minimum	9	9	15	15	16	16	11	11

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:

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

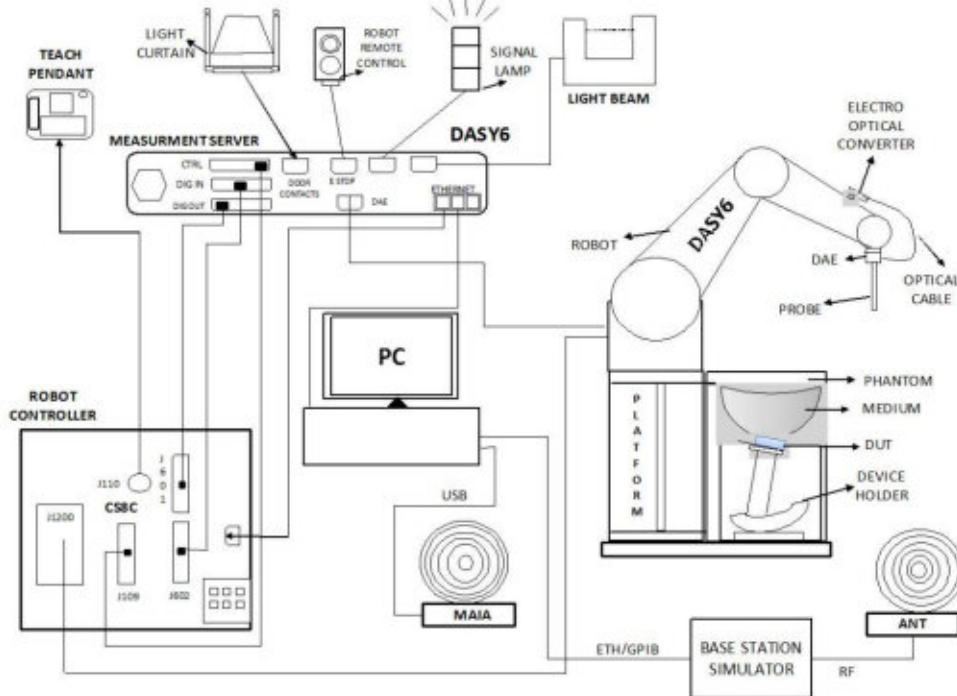
SAR is expressed in units of Watts per kilogram (W/kg)

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

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 Win7 or Win10 and the DASY5 or DASY6/8 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>

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

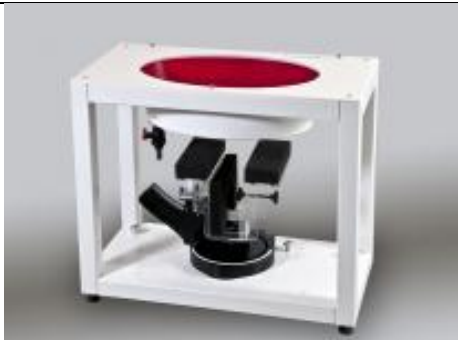
8.3 Phantom

<SAM Twin Phantom>

Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm	
Filling Volume	Approx. 25 liters	
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet	
Measurement Areas	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>

Shell Thickness	2 ± 0.2 mm (sagging: <1%)	
Filling Volume	Approx. 30 liters	
Dimensions	Major ellipse axis: 600 mm 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.

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 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: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 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.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm *	3 – 4 GHz: ≤ 5 mm * 4 – 6 GHz: ≤ 4 mm *
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 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		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ 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 <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 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	Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1087	Mar. 12, 2025	Mar. 11, 2026
SPEAG	835MHz System Validation Kit	D835V2	4d162	Dec. 13, 2024	Dec. 12, 2025
SPEAG	1750MHz System Validation Kit	D1750V2	1090	Mar. 12, 2025	Mar. 11, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d170	Mar. 13, 2025	Mar. 12, 2026
SPEAG	2450MHz System Validation Kit	D2450V2	1095	Feb. 08, 2024	Feb. 06, 2026
SPEAG	2600MHz System Validation Kit	D2600V2	1112	Dec. 18, 2023	Dec. 16, 2025
SPEAG	3500MHz System Validation Kit	D3500V2	1037	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3700MHz System Validation Kit	D3700V2	1008	Nov. 20, 2023	Nov. 18, 2025
SPEAG	3900MHz System Validation Kit	D3900V2	1048	Mar. 09, 2023	Mar. 06, 2026
SPEAG	5000MHz System Validation Kit	D5GHzV2	1113	Sep. 23, 2022	Sep. 21, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7706	May 22, 2025	May 21, 2026
SPEAG	Data Acquisition Electronics	DAE4	1691	Jun. 04, 2025	Jun. 03, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7918	Mar. 24, 2025	Mar. 23, 2026
SPEAG	SAM Twin Phantom	SAM Twin	TP-2022	NCR	NCR
Beichuang	Thermo-Hygrometer	HTC-1	1959631	May 27, 2025	May 26, 2026
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8820C	6201563900	Jul. 02, 2025	Jul. 01, 2026
Agilent	ENA Series Network Analyzer	E5071C	MY46112129	Jul. 02, 2025	Jul. 01, 2026
SPEAG	Dielectric Probe Kit	DAK-3.5	1144	Aug. 20, 2024	Aug. 19, 2025
Anritsu	Vector Signal Generator	MG3710A	6201682672	Jan. 03, 2025	Jan. 02, 2026
BONN	POWER AMPLIFIER	BLMA 2060-2	087193B	NCR	NCR
Agilent	Dual Directional Coupler	778D	20500	Jul. 02, 2025	Jul. 01, 2026
Agilent	Dual Directional Coupler	11691D	MY48151020	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Meter	NRVD	102081	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRV-Z5	100538	Jul. 02, 2025	Jul. 01, 2026
Rohde & Schwarz	Power Sensor	NRV-Z5	100539	Jul. 02, 2025	Jul. 01, 2026
ARRA	Power Divider	A3200-2	N/A	NCR	NCR
MCL	Attenuation1	BW-S10W5+	N/A	NCR	NCR
R&S	BLUETOOTH TESTER	CBT	101246	Jul. 03, 2025	Jul. 02, 2026
Rohde & Schwarz	Spectrum Analyzer	FSV7	101631	Oct. 11, 2024	Oct. 10, 2025
TES	DIGITAC THERMOMETER	TYPE-K	220305411	Jan. 02, 2025	Jan. 01, 2026

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.

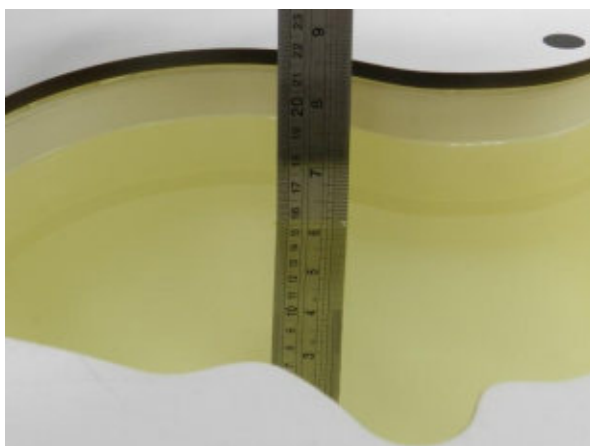


Fig 11.1 Photo of Liquid Height for Head SAR



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 (σ)	Permittivity (ϵ_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)	Liquid Temp (°C)	Conductivity (σ)	Permittivity (εr)	Conductivity Target (σ)	Permittivity Target (εr)	Delta (σ) (%)	Delta (εr) (%)	Limit (%)	Date
750	22.6	0.89	42.9	0.89	41.9	0.00	2.39	±5.0	2025-07-05
750	22.6	0.892	42.9	0.89	41.9	0.22	2.39	±5.0	2025-07-13
750	22.7	0.887	42.9	0.89	41.9	-0.34	2.39	±5.0	2025-08-01
835	22.7	0.914	42.4	0.9	41.5	1.56	2.17	±5.0	2025-07-06
835	22.7	0.92	42.6	0.9	41.5	2.22	2.65	±5.0	2025-07-14
835	22.7	0.915	42.5	0.9	41.5	1.67	2.41	±5.0	2025-08-02
1750	22.8	1.37	40.6	1.37	40.1	0.00	1.25	±5.0	2025-07-07
1750	22.6	1.36	40.7	1.37	40.1	-0.73	1.50	±5.0	2025-07-15
1750	22.6	1.38	40.7	1.37	40.1	0.73	1.50	±5.0	2025-08-03
1900	22.8	1.44	39.2	1.4	40.0	2.86	-2.00	±5.0	2025-07-08
1900	22.8	1.44	39.1	1.4	40.0	2.86	-2.25	±5.0	2025-07-16
1900	22.7	1.46	39.1	1.4	40.0	4.29	-2.25	±5.0	2025-08-04
2450	22.6	1.77	39.3	1.8	39.2	-1.67	0.26	±5.0	2025-07-17
2600	22.8	1.91	38.8	1.96	39.0	-2.55	-0.51	±5.0	2025-07-09
2600	22.6	1.92	38.8	1.96	39.0	-2.04	-0.51	±5.0	2025-07-17
2600	22.7	1.92	38.9	1.96	39.0	-2.04	-0.26	±5.0	2025-08-05
3500	22.7	2.97	37.7	2.91	37.9	2.06	-0.53	±5.0	2025-07-10
3500	22.7	2.96	37.6	2.91	37.9	1.72	-0.79	±5.0	2025-07-18
3700	22.6	3.2	37.5	3.12	37.7	2.56	-0.53	±5.0	2025-07-11
3700	22.9	3.16	37.5	3.12	37.7	1.28	-0.53	±5.0	2025-07-19
3900	22.7	3.38	37.3	3.33	37.51	1.50	-0.56	±5.0	2025-07-12
3900	22.7	3.37	37.4	3.33	37.51	1.20	-0.29	±5.0	2025-07-20
5250	22.6	4.65	36.2	4.71	35.95	-1.27	0.70	±5.0	2025-07-18
5600	22.7	5.0	35.7	5.07	35.5	-1.38	0.56	±5.0	2025-07-19
5750	22.8	5.2	35.6	5.22	35.35	-0.38	0.71	±5.0	2025-07-20

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.

Date	Frequency (MHz)	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 (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
2025-07-05	750	50.00	1087	7706	1691	0.419	8.680	8.380	-3.46	0.276	5.610	5.520	-1.60
2025-07-13	750	50.00	1087	7706	1691	0.421	8.680	8.420	-3.00	0.277	5.610	5.540	-1.25
2025-08-01	750	50.00	1087	7706	1691	0.403	8.680	8.060	-7.14	0.276	5.610	5.520	-1.60
2025-07-06	835	50.00	4d162	7706	1691	0.432	9.080	8.640	-4.85	0.289	5.850	5.780	-1.20
2025-07-14	835	50.00	4d162	7706	1691	0.423	9.080	8.460	-6.83	0.284	5.850	5.680	-2.91
2025-08-02	835	50.00	4d162	7706	1691	0.486	9.080	9.720	7.05	0.308	5.850	6.160	5.30
2025-07-07	1750	50.00	1090	7706	1691	1.750	36.600	35.000	-4.37	0.962	19.500	19.240	-1.33
2025-07-15	1750	50.00	1090	7706	1691	1.740	36.600	34.800	-4.92	0.958	19.500	19.160	-1.74
2025-08-03	1750	50.00	1090	7706	1691	1.890	36.600	37.800	3.28	1.030	19.500	20.600	5.64
2025-07-08	1900	50.00	5d170	7706	1691	1.970	39.100	39.400	0.77	1.070	20.600	21.400	3.88
2025-07-16	1900	50.00	5d170	7706	1691	2.040	39.100	40.800	4.35	1.110	20.600	22.200	7.77
2025-08-04	1900	50.00	5d170	7706	1691	2.020	39.100	40.400	3.32	1.100	20.600	22.000	6.80
2025-07-17	2450	50.00	1095	7918	1691	2.740	52.600	54.800	4.18	1.310	24.700	26.200	6.07
2025-07-09	2600	50.00	1112	7706	1691	2.590	55.100	51.800	-5.99	1.200	24.800	24.000	-3.23
2025-07-17	2600	50.00	1112	7706	1691	2.610	55.100	52.200	-5.26	1.210	24.800	24.200	-2.42
2025-08-05	2600	50.00	1112	7706	1691	2.600	55.100	52.000	-5.63	1.210	24.800	24.200	-2.42
2025-07-10	3500	50.00	1037	7706	1691	3.170	65.400	63.400	-3.06	1.260	24.700	25.200	2.02
2025-07-18	3500	50.00	1037	7706	1691	3.320	65.400	66.400	1.53	1.310	24.700	26.200	6.07
2025-07-11	3700	50.00	1008	7706	1691	3.240	67.200	64.800	-3.57	1.260	24.400	25.200	3.28
2025-07-19	3700	50.00	1008	7706	1691	3.190	67.200	63.800	-5.06	1.240	24.400	24.800	1.64
2025-07-12	3900	50.00	1048	7706	1691	3.560	69.100	71.200	3.04	1.230	24.100	24.600	2.07
2025-07-20	3900	50.00	1048	7706	1691	3.550	69.100	71.000	2.75	1.220	24.100	24.400	1.24
2025-07-18	5250	50.00	1113	7918	1691	3.990	81.500	79.800	-2.09	1.160	23.300	23.200	-0.43
2025-07-19	5600	50.00	1113	7918	1691	4.210	82.600	84.200	1.94	1.200	23.700	24.000	1.27
2025-07-20	5750	50.00	1113	7918	1691	3.880	80.800	77.600	-3.96	1.110	23.000	22.200	-3.48

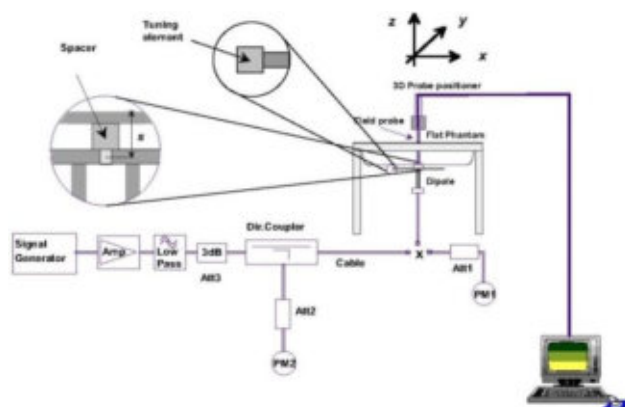


Fig 11.3.1 System Performance Check Setup



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.

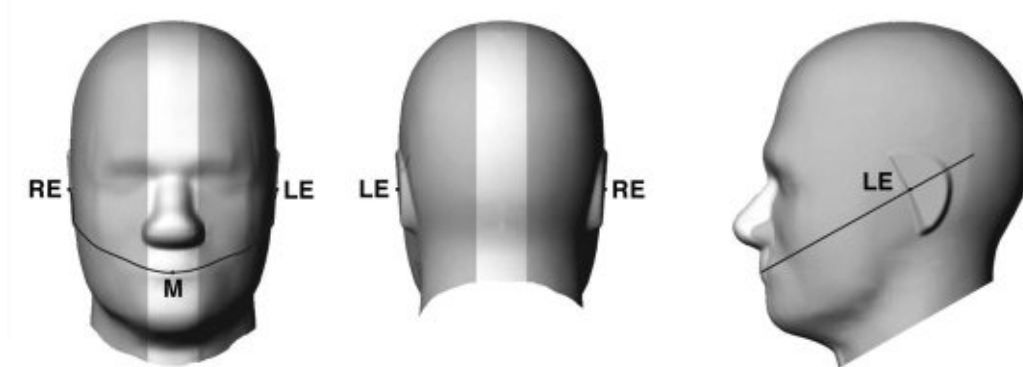


Fig 12.1.1 Front, back, and side views of SAM twin phantom

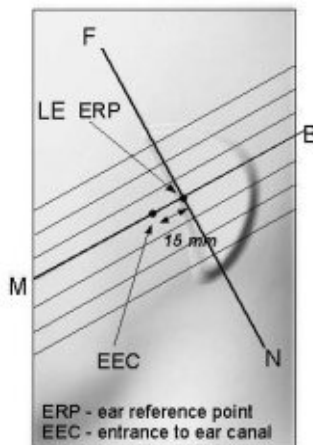


Fig 12.1.2 Close-up side view of phantom showing the ear region.

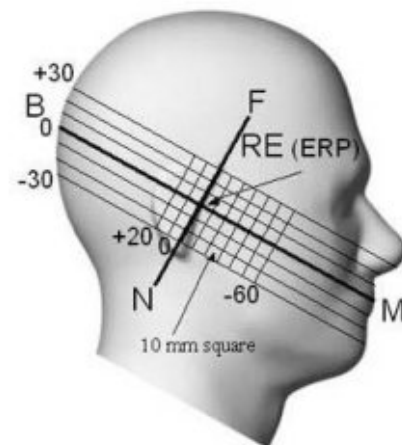


Fig 12.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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 horizontal line. 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.

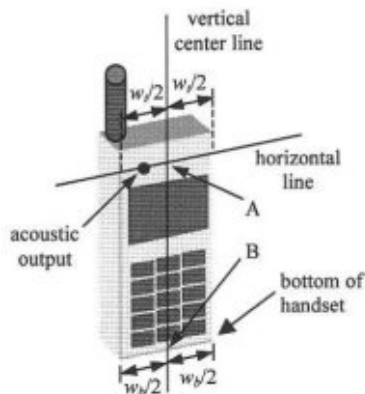


Fig 12.2.1 Handset vertical and horizontal reference lines—"fixed case"

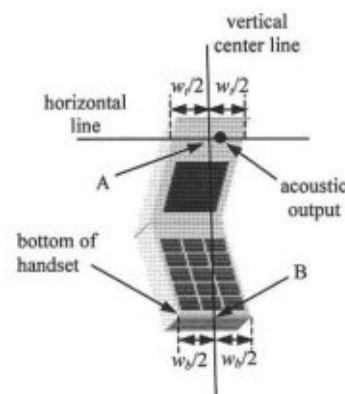


Fig 12.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

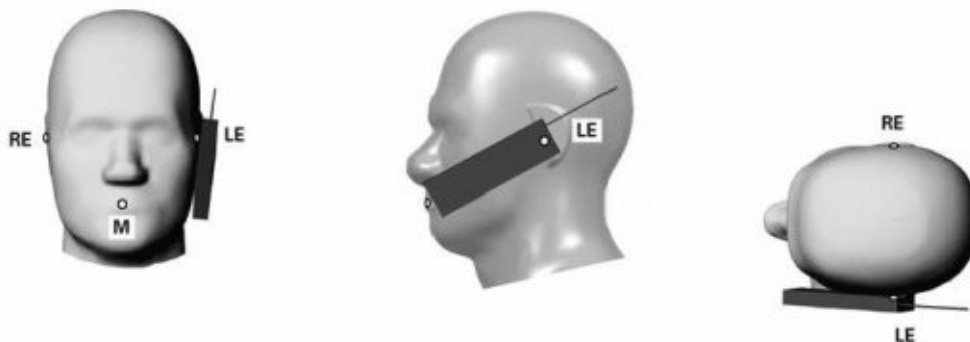


Fig 12.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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 handset 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.

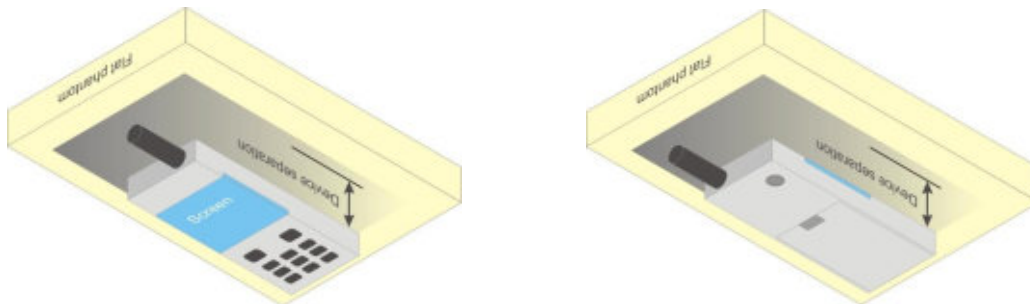


Fig 12.4 Body Worn Position

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 ≤ 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.6 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 ($L \times W \geq 9$ cm x 5 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.

<GSM Conducted Power>

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For HSPA+ devices supporting 16 QAM in the uplink, power measurements procedure is according to the configurations in Table C.11.1.4 of 3GPP TS 34.121-1.
4. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set Gain Factors (β_c and β_d) and parameters were set according to each
 - ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - iii. Set RMC 12.2Kbps + HSDPA mode.
 - iv. Set Cell Power = -86 dBm
 - v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
 - vi. Select HSDPA Uplink Parameters
 - vii. Set Delta ACK, Delta NACK and Delta CQI = 8
 - viii. Set Ack-Nack Repetition Factor to 3
 - ix. Set CQI Feedback Cycle (k) to 4 ms
 - x. Set CQI Repetition Factor to 2
 - xi. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_o/β_d	β_{HS} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$. Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$. Note 3: CM = 1 for $\beta_o/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases. Note 4: For subtest 2 the β_o/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.							

Setup Configuration

HSUPA Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
 - iii. Set Cell Power = -86 dBm
 - iv. Set Channel Type = 12.2k + HSPA
 - v. Set UE Target Power
 - vi. Power Ctrl Mode= Alternating bits
 - vii. Set and observe the E-TFCI
 - viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- d. The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

- a. The EUT was connected to Base Station referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set RMC 12.2Kbps + HSDPA mode.
 - ii. Set Cell Power = -25 dBm
 - iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 - iv. Select HSDPA Uplink Parameters
 - v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - vi. Set Delta ACK, Delta NACK and Delta CQI = 8
 - vii. Set Ack-Nack Repetition Factor to 3
 - viii. Set CQI Feedback Cycle (k) to 4 ms
 - ix. Set CQI Repetition Factor to 2
 - x. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

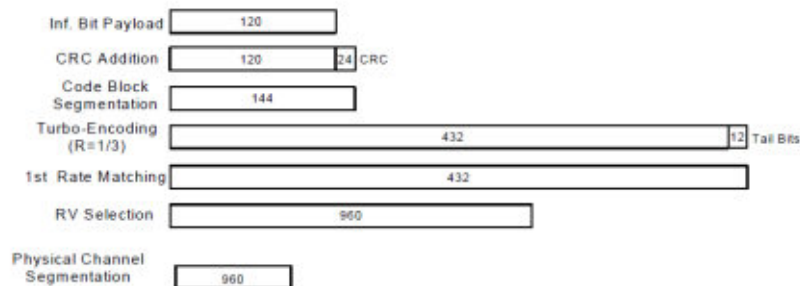
The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification. A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12
Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{DP})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK

Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.

Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)
Setup Configuration

HSPA+ 3GPP release 7 (uplink category 7) 16QAM, Setup Configuration:

1. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
2. The RF path losses were compensated into the measurements.
3. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2E:HSPA+:UL with 16QAM
 - ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.4, quoted from the TS 34.121-1 s5.2E
 - iii. Set Channel Params
 - iv. Set Cell Power = -86 dBm
 - v. Set Channel Type = HSPA
 - vi. Set UE Target Power =21 dBm
 - vii. Power Ctrl Mode= All Up Bits
 - viii. Set Manual Uplink DPCH Bc/Bd = Manual
 - ix. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 - x. Set HSPA Conn DL Channel Levels
 - xi. Set HS-SCCH Configs
 - xii. Set RB Test Mode Setup
 - xiii. Set Common HSUPA Parameters
 - xiv. Set Serving Grant
 - xv. Confirm that E-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
4. The transmitted maximum output power was recorded.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{fs} = 30/15 * \beta_c$.
 Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
 Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.
 Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
 Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

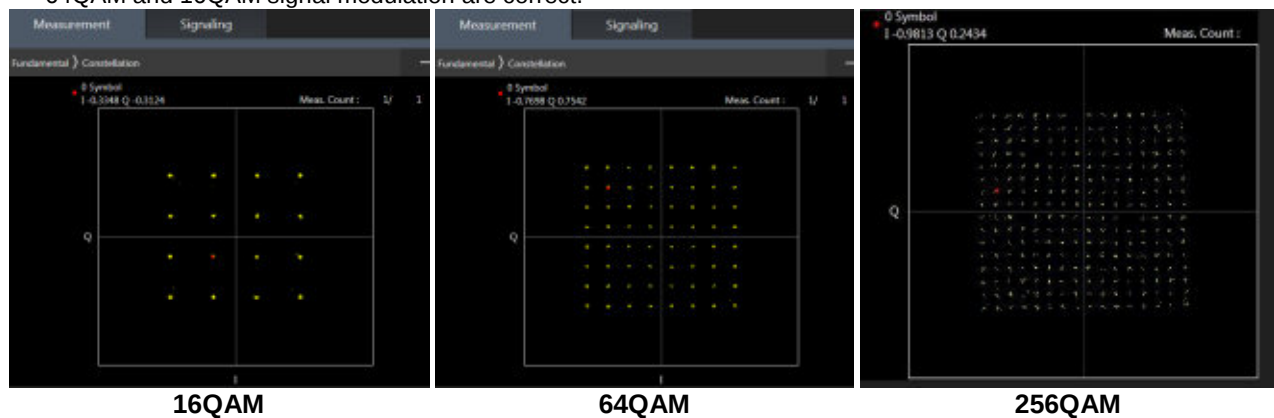
Setup Configuration
<WCDMA Conducted Power>
General Note:

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 ≤ 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 Conducted Power>

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. 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.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. 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 ≤ 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.
6. 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 ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. 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 ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. 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.
9. LTE B4 / B5 / B17 / B38 SAR test was covered by 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
10. According to May 2017 TCB workshop, for 16QAM and 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 256QAM, 64QAM and 16QAM signal modulation are correct.



<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

- 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations
- “special subframe S” contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS
- Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Anritsu MT8820C (firmware: #22.52#004) was used for LTE output power measurements and SAR testing.

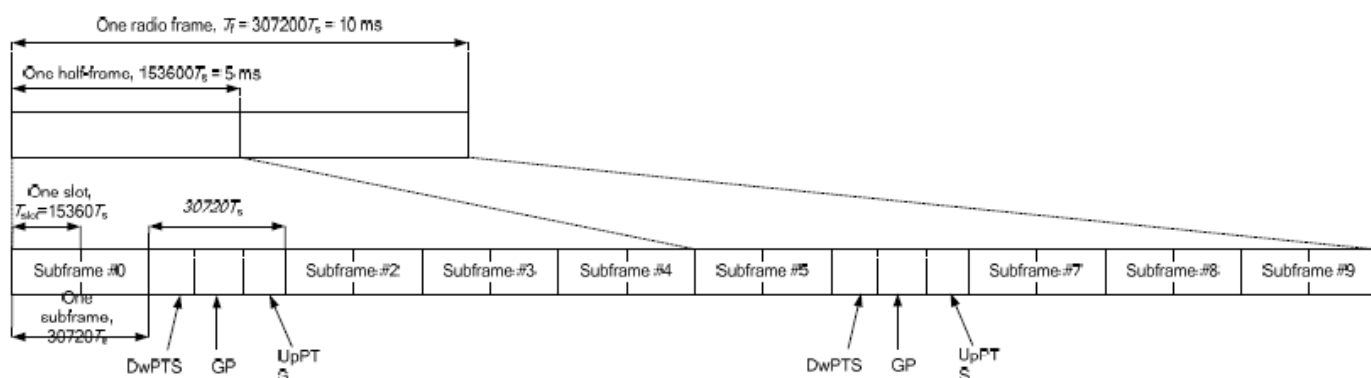


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$	-	-
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-	-	-

Special subframe (30720·T _s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
Uplink duty factor in one special subframe	0~4	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T _s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
Uplink duty factor in one special subframe	0~3	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

- Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is:
 $(3+0.167)/5 = 63.3\%$
- for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is:
 $(3+0.143)/5 = 62.9\%$
- For TDD LTE SAR measurement, 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 scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

<LTE Carrier Aggregation>

The detailed LTE Carrier Aggregation conducted power table can refer to Appendix F.

General Note:

1. Per Oct. 2024 TCB workshop, the downlink (DL) pertains to receiver functionality, thus it is not related to RF exposure compliance limits related to cumulative effects of different transmitters.
2. Per Oct. 2024 TCB workshop, equipment authorization applications shall refer to the worst-case UL powers resulting from all the possible modes of operations. Accordingly, CA-DL cases do not need to be analyzed separately, unless pertinent to establishing UL power setting.
3. Per Oct. 2024 TCB workshop, Manufacturer declares that TX power measurement for multiple DL CA configurations is deemed not required as the DL CA has no impact on the TX power according to preliminary scan. TX power measured in LTE standalone operation represents the worst case.
4. This device supports LTE carrier aggregation in the downlink. All 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.

LTE Carrier Aggregation Conducted Power (Uplink)

LTE Uplink CA	2CC Uplink Carrier Aggregation
Intra-band	Antenna Tx
CA_7C	ANT1/5
CA_38C	ANT1/5

<Intra-band>
General Note:

- i. The device supports intra-band uplink carrier aggregation for LTE B7/38 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.
- ii. 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.
- iii. 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.

<Inter-band uplink carrier aggregation consideration>

LTE Uplink CA	2CC Uplink Carrier Aggregation	
Inter-band	LTE TX Antenna	LTE TX Antenna
CA_2A-4A	ANT1	ANT3
CA_4A-5A	ANT1	ANT0
CA_2A-7A	ANT3	ANT6
CA_4A-7A	ANT3	ANT6

General Note:

1. For Inter-band CA co-located SAR analysis is performed using standalone SAR summed together and they are more conservatively for inter band CA.

5G NR Output Power (Unit: dBm)

General Note:

1. 5G NR n2 /n5 / n7 / n66 / n38 /n41 /n77 /n78 is NSA mode.
2. 5G NR n2/n5/n7/n12 /n26/n66 /n38/n41/n48/n77/n78 is SA mode.
3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
 - a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-s QPSK and the reported SAR for the DFT-s QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
 - b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class2 and 3, for 16QAM/64QAM/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the 16QAM/64QAM/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
 - c. 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
 - d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
 - e. 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 ≤ 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
 - f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ 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.
 - g. Smaller bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
4. NSA and SA mode should perform SAR separately. For the maximum power of NSA mode is the same as SA total power level, so SA SAR can represent NSA mode SAR.
5. 5GNR NSA mode, the power level is the same as 5GNR SA mode, so 5GNR NSA mode and SA mode power table only show one time.
6. 5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.
7. For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.
8. For 5GNR n77/n78 HPUE, 5GNR n77/n78 PC2 Maximum Duty Cycle is 50%, using FTM (Factory Test Mode) with 50% duty cycle is considered during SAR testing. For 5G NR other bands, using FTM to perform SAR with default 100% transmission.
9. This device supports HPUE mode for 5GNR n77/n78 with higher power. 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.

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
		$\leq 0.5^2$	$\leq 0.5^2$	0 ²
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
CP-OFDM	256 QAM	≤ 4.5		
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability powerBoosting-pi2BPSK and if the IE powerBoostPi2BPSK is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE powerBoostPi2BPSK is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		



<EN-DC combination>

ENDC	Main Antenna Tx			
	LTE TX	PA	NR TX	PA
DC_26A_n78A	ANT0	Main PA	ANT4/2/6/11	Main PA
DC_2A_n78A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_38A_n78A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_41A_n78A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_4A_n38A	ANT3	Other PA	ANT6/5/3/10	Other PA
DC_4A_n41A	ANT3	Other PA	ANT6/5/3/10	Other PA
DC_4A_n78A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_5A_n78A	ANT0/2	Main PA	ANT4/2/6/11	Main PA
DC_5A_n7A	ANT0/2	Main PA	ANT1/5	Main PA
DC_66A_n38A	ANT3	Other PA	ANT6/5/3/10	Other PA
DC_66A_n41A	ANT3	Other PA	ANT6/5/3/10	Other PA
DC_66A_n78A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_7A_n78A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_2A_n66A	ANT3	Other PA	ANT1/5	Main PA
DC_2A_n77A	ANT3	Other PA	ANT4/2/6/11	Main PA
DC_4A_n7A	ANT3	Other PA	ANT6/5	Other PA
DC_5A_n66A	ANT0/2	Main PA	ANT1/5	Main PA
DC_66A_n7A	ANT3	Other PA	ANT6/5	Other PA
DC_7A_n5A	ANT1/5	Main PA	ANT0/2	Main PA
DC_4A_n66A	ANT3	Other PA	ANT1/5	Main PA
DC_5A_n38A	ANT0/2	Main PA	ANT1/5/3/10	Main PA
DC_5A_n41A	ANT0/2	Main PA	ANT1/5/3/10	Main PA
DC_2A_n38A	ANT3	Other PA	ANT6/5/3/10	Other PA
DC_2A_n41A	ANT3	Other PA	ANT6/5/3/10	Other PA
DC_7A_n66A	ANT3	Other PA	ANT1/5	Main PA
DC_4A_n2A	ANT3	Other PA	ANT1/5	Main PA
DC_66A_n2A	ANT3	Other PA	ANT1/5	Main PA
DC_7A_n2A	ANT3	Other PA	ANT1/5	Main PA
DC_2A_n7A	ANT3	Other PA	ANT6/5	Other PA

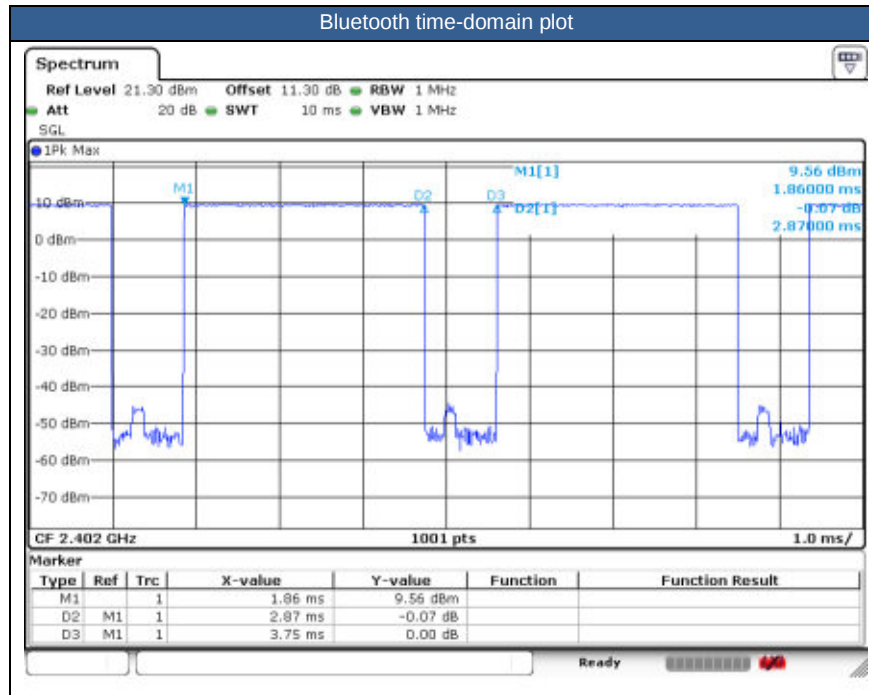
<WLAN Conducted Power>**General Note:**

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration. Additional output power measurements were not necessary.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.¹⁸ The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. 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 ≤ 0.8 W/kg or all required test position are tested.
 - c. 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 ≤ 1.2 W/kg or all required channels are tested.
6. 802.11 ax supports both full tone size mode and partial tone size mode, after verification on partial tone size mode that partial size tone mode power will not be higher than full tone size mode, therefore, full tone mode power was chosen to be measured in this report.

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle are 76.5% as following figure, Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.





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.
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:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 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
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 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 proximity sensor/receiver detection/hotspot mode for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). Details about the power management decision and sensor detection are provided in the operational description. 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. 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 (for handheld on state, the maximum full power means reduced power), including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - b. 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.
6. 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).
7. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot SAR.
8. 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 ≤ 25 mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.
9. This device supports UAC (Unified Antenna Control) technology for GSM850, LTE B5/13/26 and 5GNR n5/26 at Ant0, which is an antenna tuner technology developed by MTK that can perform adaptive tuning based on the base station network. All tune codes have been to perform full SAR testing.

UL duty cycle detection mechanism specification:

The device supports the UL duty cycle detection mechanism for LTE TDD B38/41/42/48 & 5G NR n41/77/78/38/48 (including FR1 SA and FR1 ENDC). The mechanism is that the output power (maximum burst power) is different at different UL duty cycle levels, but maintaining the maximum average power is matched to the SAR is compliant. When at low duty cycle, the transmit power is compensated but does not exceed the upper range defined by the 3GPP standard, thus improving the OTA performance

Note:

1. SAR is not required because the average output power is not higher than the Max UL duty cycle configuration.
2. For each band, the SAR evaluation uses the highest Time-average power configuration.
3. The detail results please referred to KDB inquiry with the FCC and Duty cycle_OD.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

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 ≤ 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 ≤ 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 ≤ 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 ≤ 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 B4 / B5 / B17 / B38 SAR test was covered by 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 ≤ 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 ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n2/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 ≤ 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 ≤ 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 ≤ 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 ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

ECI status description:

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

Exposure Condition	ECI	Trigger conditions
Head SAR	ECI1	Earpiece On
Hotspot SAR	ECI5	Hotspot On
Body worn SAR /Extremity SAR	ECI3	Sensor On
Body worn SAR /Extremity SAR	ECI4	Sensor Off



15.1 Head SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	ECI 1	-	189	836.4	1	26.44	27.50	1.276	-0.02	0.133	0.170
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant0	ECI 1	-	189	836.4	1	26.44	27.50	1.276	0.05	0.073	0.093
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant0	ECI 1	-	189	836.4	1	26.44	27.50	1.276	-0.09	0.122	0.156
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant0	ECI 1	-	189	836.4	1	26.44	27.50	1.276	0.13	0.061	0.078
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant0	ECI 1	code 96	189	836.4	1	26.44	27.5	1.276	0.08	0.127	0.162
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant0	ECI 1	code 96	189	836.4	1	26.44	27.5	1.276	0.01	0.069	0.088
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant0	ECI 1	code 96	189	836.4	1	26.44	27.5	1.276	0.03	0.119	0.152
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant0	ECI 1	code 96	189	836.4	1	26.44	27.5	1.276	-0.08	0.058	0.074
	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant2	ECI 1	-	189	836.4	1	26.11	27.00	1.227	-0.00	0.271	0.333
	GSM850	GPRS 4 Tx slots	Right Tilted	0mm	Ant2	ECI 1	-	189	836.4	1	26.11	27.00	1.227	-0.06	0.048	0.059
01	GSM850	GPRS 4 Tx slots	Right Cheek	0mm	Ant2	ECI 1	-	189	836.4	1	26.11	27.00	1.227	0.16	0.532	0.653
	GSM850	GPRS 4 Tx slots	Left Tilted	0mm	Ant2	ECI 1	-	189	836.4	1	26.11	27.00	1.227	-0.18	0.067	0.082
	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant2	ECI 1	code D2	189	836.4	1	26.11	27	1.227	0.08	0.153	0.188
	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant1	ECI 1	-	661	1880	1	23.51	24.50	1.256	-0.05	0.112	0.141
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant1	ECI 1	-	661	1880	1	23.51	24.50	1.256	0.16	0.064	0.080
	GSM1900	GPRS 4 Tx slots	Left Cheek	0mm	Ant1	ECI 1	-	661	1880	1	23.51	24.50	1.256	0.10	0.095	0.119
	GSM1900	GPRS 4 Tx slots	Left Tilted	0mm	Ant1	ECI 1	-	661	1880	1	23.51	24.50	1.256	0.17	0.081	0.102
	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant5	ECI 1	-	661	1880	1	22.27	23.00	1.183	-0.06	0.775	0.917
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant5	ECI 1	-	512	1850.2	1	22.26	23.00	1.186	-0.03	0.806	0.956
	GSM1900	GPRS 4 Tx slots	Right Cheek	0mm	Ant5	ECI 1	-	810	1909.8	1	22.25	23.00	1.189	-0.18	0.841	1.000
02	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant5	ECI 1	-	661	1880	1	22.27	23.00	1.183	0.05	0.849	1.004
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant5	ECI 1	-	512	1850.2	1	22.26	23.00	1.186	-0.10	0.768	0.911
	GSM1900	GPRS 4 Tx slots	Right Tilted	0mm	Ant5	ECI 1	-	810	1909.8	1	22.25	23.00	1.189	0.06	0.788	0.937
	GSM1900	GPRS 4 Tx slots	Left Cheek	0mm	Ant5	ECI 1	-	661	1880	1	22.27	23.00	1.183	-0.08	0.439	0.519
	GSM1900	GPRS 4 Tx slots	Left Tilted	0mm	Ant5	ECI 1	-	661	1880	1	22.27	23.00	1.183	0.17	0.499	0.590

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant1	ECI 1	-	9400	1880	1	24.43	25.00	1.14	-0.04	0.111	0.127
	WCDMA II	RMC 12.2Kbps	Right Tilted	0mm	Ant1	ECI 1	-	9400	1880	1	24.43	25.00	1.14	0.11	0.077	0.088
	WCDMA II	RMC 12.2Kbps	Left Cheek	0mm	Ant1	ECI 1	-	9400	1880	1	24.43	25.00	1.14	0.19	0.107	0.122
	WCDMA II	RMC 12.2Kbps	Left Tilted	0mm	Ant1	ECI 1	-	9400	1880	1	24.43	25.00	1.14	-0.08	0.082	0.093
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant5	ECI 1	-	9400	1880	1	18.58	19.00	1.102	0.05	0.752	0.829
	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant5	ECI 1	-	9262	1852.4	1	18.55	19.00	1.109	0.07	0.756	0.838
03	WCDMA II	RMC 12.2Kbps	Right Cheek	0mm	Ant5	ECI 1	-	9538	1907.6	1	18.26	19.00	1.186	0.01	0.721	0.855
	WCDMA II	RMC 12.2Kbps	Right Tilted	0mm	Ant5	ECI 1	-	9400	1880	1	18.58	19.00	1.102	-0.09	0.722	0.796
	WCDMA II	RMC 12.2Kbps	Left Cheek	0mm	Ant5	ECI 1	-	9400	1880	1	18.58	19.00	1.102	0.03	0.382	0.421
	WCDMA II	RMC 12.2Kbps	Left Tilted	0mm	Ant5	ECI 1	-	9400	1880	1	18.58	19.00	1.102	0.15	0.430	0.474
	WCDMA IV	RMC 12.2Kbps	Right Cheek	0mm	Ant1	ECI 1	-	1413	1732.6	1	24.27	25.00	1.183	0.12	0.126	0.149
	WCDMA IV	RMC 12.2Kbps	Right Tilted	0mm	Ant1	ECI 1	-	1413	1732.6	1	24.27	25.00	1.183	0.19	0.054	0.064
	WCDMA IV	RMC 12.2Kbps	Left Cheek	0mm	Ant1	ECI 1	-	1413	1732.6	1	24.27	25.00	1.183	0.02	0.117	0.138
	WCDMA IV	RMC 12.2Kbps	Left Tilted	0mm	Ant1	ECI 1	-	1413	1732.6	1	24.27	25.00	1.183	-0.06	0.061	0.072
04	WCDMA IV	RMC 12.2Kbps	Right Cheek	0mm	Ant5	ECI 1	-	1413	1732.6	1	19.58	20.00	1.102	0.01	0.658	0.725
	WCDMA IV	RMC 12.2Kbps	Right Tilted	0mm	Ant5	ECI 1	-	1413	1732.6	1	19.58	20.00	1.102	-0.13	0.653	0.720
	WCDMA IV	RMC 12.2Kbps	Left Cheek	0mm	Ant5	ECI 1	-	1413	1732.6	1	19.58	20.00	1.102	0.10	0.321	0.354
	WCDMA IV	RMC 12.2Kbps	Left Tilted	0mm	Ant5	ECI 1	-	1413	1732.6	1	19.58	20.00	1.102	0.02	0.348	0.383
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant0	ECI 1	-	4182	836.4	1	24.14	25.00	1.219	0.01	0.182	0.222
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant0	ECI 1	-	4182	836.4	1	24.14	25.00	1.219	0.02	0.100	0.122
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant0	ECI 1	-	4182	836.4	1	24.14	25.00	1.219	0.17	0.159	0.194
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant0	ECI 1	-	4182	836.4	1	24.14	25.00	1.219	-0.09	0.075	0.091
	WCDMA V	RMC 12.2Kbps	Right Cheek	0mm	Ant2	ECI 1	-	4182	836.4	1	24.07	25.00	1.239	0.11	0.392	0.486
	WCDMA V	RMC 12.2Kbps	Right Tilted	0mm	Ant2	ECI 1	-	4182	836.4	1	24.07	25.00	1.239	-0.09	0.065	0.081
05	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant2	ECI 1	-	4182	836.4	1	24.07	25.00	1.239	0.04	0.705	0.873
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant2	ECI 1	-	4132	826.4	1	23.91	25.00	1.285	0.07	0.677	0.870
	WCDMA V	RMC 12.2Kbps	Left Cheek	0mm	Ant2	ECI 1	-	4233	846.6	1	24.01	25.00	1.256	-0.05	0.682	0.857
	WCDMA V	RMC 12.2Kbps	Left Tilted	0mm	Ant2	ECI 1	-	4182	836.4	1	24.07	25.00	1.239	-0.16	0.095	0.118



【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	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)
	LTE Band 2	20M	QPSK	1	0	Right Cheek	0mm	Ant1	ECI 1	-	18900	1880	1	24.35	25.50	1.303			-0.15	0.118	0.154
	LTE Band 2	20M	QPSK	50	0	Right Cheek	0mm	Ant1	ECI 1	-	18900	1880	1	23.13	24.50	1.371			0.12	0.097	0.133
	LTE Band 2	20M	QPSK	1	0	Right Tilted	0mm	Ant1	ECI 1	-	18900	1880	1	24.35	25.50	1.303			0.08	0.082	0.107
	LTE Band 2	20M	QPSK	50	0	Right Tilted	0mm	Ant1	ECI 1	-	18900	1880	1	23.13	24.50	1.371			0.16	0.068	0.093
	LTE Band 2	20M	QPSK	1	0	Left Cheek	0mm	Ant1	ECI 1	-	18900	1880	1	24.35	25.50	1.303			-0.04	0.124	0.162
	LTE Band 2	20M	QPSK	50	0	Left Cheek	0mm	Ant1	ECI 1	-	18900	1880	1	23.13	24.50	1.371			0.03	0.104	0.143
	LTE Band 2	20M	QPSK	1	0	Left Tilted	0mm	Ant1	ECI 1	-	18900	1880	1	24.35	25.50	1.303			0.08	0.092	0.120
	LTE Band 2	20M	QPSK	50	0	Left Tilted	0mm	Ant1	ECI 1	-	18900	1880	1	23.13	24.50	1.371			-0.17	0.077	0.106
	LTE Band 2	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	18900	1880	1	18.23	19.00	1.194			-0.06	0.744	0.888
	LTE Band 2	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	18700	1860	1	17.95	19.00	1.274			-0.05	0.690	0.879
	LTE Band 2	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	19100	1900	1	18.12	19.00	1.225			0.19	0.715	0.876
	LTE Band 2	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	18900	1880	1	18.16	19.00	1.213			0.12	0.738	0.895
06	LTE Band 2	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	18700	1860	1	18.05	19.00	1.245			0.01	0.747	0.930
	LTE Band 2	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	19100	1900	1	17.95	19.00	1.274			-0.16	0.711	0.906
	LTE Band 2	20M	QPSK	100	0	Right Cheek	0mm	Ant5	ECI 1	-	18900	1880	1	18.12	19.00	1.225			-0.18	0.724	0.887
	LTE Band 2	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	18900	1880	1	18.23	19.00	1.194			-0.01	0.724	0.864
	LTE Band 2	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	18700	1860	1	17.95	19.00	1.274			-0.00	0.677	0.862
	LTE Band 2	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	19100	1900	1	18.12	19.00	1.225			0.02	0.691	0.846
	LTE Band 2	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	18900	1880	1	18.16	19.00	1.213			-0.08	0.718	0.871
	LTE Band 2	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	18700	1860	1	18.05	19.00	1.245			0.07	0.706	0.879
	LTE Band 2	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	19100	1900	1	17.95	19.00	1.274			-0.10	0.700	0.892
	LTE Band 2	20M	QPSK	100	0	Right Tilted	0mm	Ant5	ECI 1	-	18900	1880	1	18.12	19.00	1.225			-0.02	0.728	0.892
	LTE Band 2	20M	QPSK	1	0	Left Cheek	0mm	Ant5	ECI 1	-	18900	1880	1	18.23	19.00	1.194			-0.06	0.376	0.449
	LTE Band 2	20M	QPSK	50	0	Left Cheek	0mm	Ant5	ECI 1	-	18900	1880	1	18.16	19.00	1.213			-0.06	0.367	0.445
	LTE Band 2	20M	QPSK	1	0	Left Tilted	0mm	Ant5	ECI 1	-	18900	1880	1	18.23	19.00	1.194			-0.02	0.418	0.499
	LTE Band 2	20M	QPSK	50	0	Left Tilted	0mm	Ant5	ECI 1	-	18900	1880	1	18.16	19.00	1.213			0.12	0.415	0.503
	LTE Band 2	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	18900	1880	1	18.62	20.00	1.374			-0.02	0.400	0.550
	LTE Band 2	20M	QPSK	50	0	Right Cheek	0mm	Ant3	ECI 1	-	18900	1880	1	18.61	20.00	1.377			0.14	0.390	0.537
	LTE Band 2	20M	QPSK	1	0	Right Tilted	0mm	Ant3	ECI 1	-	18900	1880	1	18.62	20.00	1.374			0.05	0.135	0.185
	LTE Band 2	20M	QPSK	50	0	Right Tilted	0mm	Ant3	ECI 1	-	18900	1880	1	18.61	20.00	1.377			-0.04	0.127	0.175
	LTE Band 2	20M	QPSK	1	0	Left Cheek	0mm	Ant3	ECI 1	-	18900	1880	1	18.62	20.00	1.374			0.07	0.106	0.146
	LTE Band 2	20M	QPSK	50	0	Left Cheek	0mm	Ant3	ECI 1	-	18900	1880	1	18.61	20.00	1.377			0.17	0.108	0.149
	LTE Band 2	20M	QPSK	1	0	Left Tilted	0mm	Ant3	ECI 1	-	18900	1880	1	18.62	20.00	1.374			-0.03	0.058	0.080
	LTE Band 2	20M	QPSK	50	0	Left Tilted	0mm	Ant3	ECI 1	-	18900	1880	1	18.61	20.00	1.377			-0.07	0.059	0.081
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant1	ECI 1	-	21100	2535	1	24.84	25.50	1.164			-0.11	0.100	0.116
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant1	ECI 1	-	21100	2535	1	23.83	24.50	1.167			0.09	0.079	0.092
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant1	ECI 1	-	21100	2535	1	24.84	25.50	1.164			0.01	0.076	0.088
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant1	ECI 1	-	21100	2535	1	23.83	24.50	1.167			0.10	0.061	0.071
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant1	ECI 1	-	21100	2535	1	24.84	25.50	1.164			0.14	0.183	0.213
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant1	ECI 1	-	21100	2535	1	23.83	24.50	1.167			0.17	0.147	0.172
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant1	ECI 1	-	21100	2535	1	24.84	25.50	1.164			0.01	0.070	0.081
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant1	ECI 1	-	21100	2535	1	23.83	24.50	1.167			-0.06	0.056	0.065
	LTE Band 7C	20M	QPSK	1	99	Left Cheek	0mm	Ant1	ECI 1	-	21100+ 21298	2535+ 2554.8	1	24.83	25.5	1.167			0.02	0.175	0.204
07	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	21100	2535	1	17.76	18.00	1.057			-0.07	0.787	0.832
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	20850	2510	1	17.51	18.00	1.119			0.04	0.729	0.816
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	21350	2560	1	17.63	18.00	1.089			-0.01	0.754	0.821
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	21100	2535	1	17.67	18.00	1.079			-0.04	0.746	0.805
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	20850	2510	1	17.41	18.00	1.146			0.03	0.723	0.829
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	21350	2560	1	17.50	18.00	1.122			-0.05	0.731	0.820
	LTE Band 7	20M	QPSK	100	0	Right Cheek	0mm	Ant5	ECI 1	-	21100	2535	1	17.62	18.00	1.091			0.08	0.751	0.819
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	21100	2535	1	17.76	18.00	1.057			-0.16	0.716	0.757
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	21100	2535	1	17.67	18.00	1.079			-0.08	0.733	0.791
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant5	ECI 1	-	21100	2535	1	17.76	18.00	1.057			0.06	0.307	0.324
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant5	ECI 1	-	21100	2535	1	17.67	18.00	1.079			0.10	0.314	0.339
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant5	ECI 1	-	21100	2535	1	17.76	18.00	1.057			0.06	0.351	0.371
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant5	ECI 1	-	21100	2535	1	17.67	18.00	1.079			0.02	0.361	0.390
	LTE Band 7C	20M	QPSK	1	99	Right Cheek	0mm	Ant5	ECI 1	-	21100+ 21298	2535+ 2554.8	1	17.44	18	1.138			-0.03	0.722	0.822
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	21100	2535	1	17.81	19.00	1.315			0.03	0.460	0.605
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant3	ECI 1	-	21100	2535	1	17.79	19.00	1.321			0.09	0.451	0.596
	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant3	ECI 1	-	21100	2535	1	17.81	19.00	1.315			-0.03	0.173	0.227
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant3	ECI 1	-	21100	2535	1	17.79	19.00	1.321			0.17	0.168	0.222
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant3	ECI 1	-	21100	2535	1	17.81	19.00	1.315			-0.15	0.136	0.179
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant3	ECI 1	-	21100	2535	1	17.79	19.00	1.321			0.03	0.133	0.176
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant3	ECI 1	-	21100	2535	1	17.81	19.00	1.315			-0.08	0.083	0.109
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant3	ECI 1	-	21100	2535	1	17.79	19.00	1.321			-0.14	0.079	0.104
	LTE Band 7	20M	QPSK	1	0	Right Cheek	0mm	Ant6	ECI 1	-	21100	2535	1	17.29	18.00	1.178			-0.01	0.410	0.483
	LTE Band 7	20M	QPSK	50	0	Right Cheek	0mm	Ant6	ECI 1	-	21100	2535	1	17.27	18.00	1.183			-0.08	0.408	0.483



FCC SAR Test Report

Report No. : FA562503

	LTE Band 7	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	21100	2535	1	17.29	18.00	1.178			0.17	0.454	0.535
	LTE Band 7	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	21100	2535	1	17.27	18.00	1.183			0.13	0.404	0.478
	LTE Band 7	20M	QPSK	1	0	Left Cheek	0mm	Ant6	ECI 1	-	21100	2535	1	17.29	18.00	1.178			-0.04	0.258	0.304
	LTE Band 7	20M	QPSK	50	0	Left Cheek	0mm	Ant6	ECI 1	-	21100	2535	1	17.27	18.00	1.183			-0.01	0.254	0.300
	LTE Band 7	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	21100	2535	1	17.29	18.00	1.178			-0.13	0.287	0.338
	LTE Band 7	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	21100	2535	1	17.27	18.00	1.183			0.18	0.280	0.331
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant0	ECI 1	-	23095	707.5	1	24.43	25.50	1.279			-0.07	0.082	0.105
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant0	ECI 1	-	23095	707.5	1	23.32	24.50	1.312			-0.04	0.064	0.084
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant0	ECI 1	-	23095	707.5	1	24.43	25.50	1.279			-0.12	0.058	0.074
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant0	ECI 1	-	23095	707.5	1	23.32	24.50	1.312			0.11	0.046	0.060
	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant0	ECI 1	-	23095	707.5	1	24.43	25.50	1.279			-0.04	0.089	0.114
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant0	ECI 1	-	23095	707.5	1	23.32	24.50	1.312			0.01	0.070	0.092
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant0	ECI 1	-	23095	707.5	1	24.43	25.50	1.279			0.02	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant0	ECI 1	-	23095	707.5	1	23.32	24.50	1.312			-0.07	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Right Cheek	0mm	Ant2	ECI 1	-	23095	707.5	1	23.44	24.50	1.276			-0.18	0.417	0.532
	LTE Band 12	10M	QPSK	25	0	Right Cheek	0mm	Ant2	ECI 1	-	23095	707.5	1	23.41	24.50	1.285			-0.09	0.420	0.540
	LTE Band 12	10M	QPSK	1	0	Right Tilted	0mm	Ant2	ECI 1	-	23095	707.5	1	23.44	24.50	1.276			0.16	0.082	0.105
	LTE Band 12	10M	QPSK	25	0	Right Tilted	0mm	Ant2	ECI 1	-	23095	707.5	1	23.41	24.50	1.285			0.11	0.084	0.108
08	LTE Band 12	10M	QPSK	1	0	Left Cheek	0mm	Ant2	ECI 1	-	23095	707.5	1	23.44	24.50	1.276			0.03	0.693	0.884
	LTE Band 12	10M	QPSK	25	0	Left Cheek	0mm	Ant2	ECI 1	-	23095	707.5	1	23.41	24.50	1.285			0.02	0.684	0.879
	LTE Band 12	10M	QPSK	50	0	Left Cheek	0mm	Ant2	ECI 1	-	23095	707.5	1	23.37	24.50	1.297			-0.13	0.675	0.875
	LTE Band 12	10M	QPSK	1	0	Left Tilted	0mm	Ant2	ECI 1	-	23095	707.5	1	23.44	24.50	1.276			-0.00	0.102	0.130
	LTE Band 12	10M	QPSK	25	0	Left Tilted	0mm	Ant2	ECI 1	-	23095	707.5	1	23.41	24.50	1.285			-0.07	0.102	0.131
	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant0	ECI 1	-	23230	782	1	24.33	25.50	1.309			-0.01	0.149	0.195
	LTE Band 13	10M	QPSK	25	0	Right Cheek	0mm	Ant0	ECI 1	-	23230	782	1	23.27	24.50	1.327			-0.14	0.119	0.158
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant0	ECI 1	-	23230	782	1	24.33	25.50	1.309			-0.17	0.097	0.127
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant0	ECI 1	-	23230	782	1	23.27	24.50	1.327			-0.13	0.079	0.105
	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant0	ECI 1	-	23230	782	1	24.33	25.50	1.309			-0.06	0.146	0.191
	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant0	ECI 1	-	23230	782	1	23.27	24.50	1.327			-0.04	0.116	0.154
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant0	ECI 1	-	23230	782	1	24.33	25.50	1.309			0.09	0.072	0.094
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant0	ECI 1	-	23230	782	1	23.27	24.50	1.327			-0.08	0.058	0.077
	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	24.33	25.5	1.309			-0.08	0.094	0.123
	LTE Band 13	10M	QPSK	25	0	Right Cheek	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	23.27	24.5	1.327			0.1	0.073	0.097
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	24.33	25.5	1.309			-0.18	0.055	0.072
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	23.27	24.5	1.327			0.1	0.044	0.058
	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	24.33	25.5	1.309			0.12	0.097	0.127
	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	23.27	24.5	1.327			0.08	0.067	0.089
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	24.33	25.5	1.309			-0.17	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant0	ECI 1	cdoe 3C	23230	782	1	23.27	24.5	1.327			-0.03	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Right Cheek	0mm	Ant2	ECI 1	-	23230	782	1	24.15	25.00	1.216			-0.09	0.388	0.472
	LTE Band 13	10M	QPSK	25	0	Right Cheek	0mm	Ant2	ECI 1	-	23230	782	1	24.08	24.50	1.102			-0.08	0.346	0.381
	LTE Band 13	10M	QPSK	1	0	Right Tilted	0mm	Ant2	ECI 1	-	23230	782	1	24.15	25.00	1.216			-0.04	0.074	0.090
	LTE Band 13	10M	QPSK	25	0	Right Tilted	0mm	Ant2	ECI 1	-	23230	782	1	24.08	24.50	1.102			-0.09	0.067	0.074
09	LTE Band 13	10M	QPSK	1	0	Left Cheek	0mm	Ant2	ECI 1	-	23230	782	1	24.15	25.00	1.216			-0.08	0.721	0.877
	LTE Band 13	10M	QPSK	25	0	Left Cheek	0mm	Ant2	ECI 1	-	23230	782	1	24.08	24.50	1.102			0.08	0.647	0.713
	LTE Band 13	10M	QPSK	50	0	Left Cheek	0mm	Ant2	ECI 1	-	23230	782	1	24.01	24.50	1.119			0.02	0.691	0.773
	LTE Band 13	10M	QPSK	1	0	Left Tilted	0mm	Ant2	ECI 1	-	23230	782	1	24.15	25.00	1.216			0.08	0.101	0.123
	LTE Band 13	10M	QPSK	25	0	Left Tilted	0mm	Ant2	ECI 1	-	23230	782	1	24.08	24.50	1.102			0.04	0.091	0.100
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant0	ECI 1	-	26865	831.5	1	24.52	25.50	1.253			0.01	0.175	0.219
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant0	ECI 1	-	26865	831.5	1	23.30	24.50	1.318			-0.02	0.143	0.188
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant0	ECI 1	-	26865	831.5	1	24.52	25.50	1.253			-0.10	0.100	0.125
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant0	ECI 1	-	26865	831.5	1	23.30	24.50	1.318			-0.12	0.084	0.111
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant0	ECI 1	-	26865	831.5	1	24.52	25.50	1.253			0.04	0.168	0.211
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant0	ECI 1	-	26865	831.5	1	23.30	24.50	1.318			0.07	0.135	0.178
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant0	ECI 1	-	26865	831.5	1	24.52	25.50	1.253			-0.09	0.087	0.109
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant0	ECI 1	-	26865	831.5	1	23.30	24.50	1.318			-0.07	0.067	0.088
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant0	ECI 1	code 96	26865	831.5	1	24.52	25.5	1.253			0.14	0.175	0.219
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant0	ECI 1	code 96	26865	831.5	1	23.3	24.5	1.318			0.11	0.145	0.191
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant0	ECI 1	code 96	26865	831.5	1	24.52	25.5	1.253			-0.05	0.094	0.118
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant0	ECI 1	code 96	26865	831.5	1	23.3	24.5	1.318			0.18	0.079	0.104
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant0	ECI 1	code 96	26865	831.5	1	24.52	25.5	1.253			0.14	0.136	0.17
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant0	ECI 1	code 96	26865	831.5	1	23.3	24.5	1.318			-0.17	0.118	0.156
	LTE Band 26	15M	QPSK	1	0	Left Tilted	0mm	Ant0	ECI 1	code 96	26865	831.5	1	24.52	25.5	1.253			0.17	0.073	0.091
	LTE Band 26	15M	QPSK	36	0	Left Tilted	0mm	Ant0	ECI 1	code 96	26865	831.5	1	23.3	24.5	1.318			-0.05	0.062	0.082
	LTE Band 26	15M	QPSK	1	0	Right Cheek	0mm	Ant2	ECI 1	-	26865	831.5	1	24.47	25.50	1.268			0.11	0.350	0.444
	LTE Band 26	15M	QPSK	36	0	Right Cheek	0mm	Ant2	ECI 1	-	26865	831.5	1	23.46	24.50	1.271			0.07	0.280	0.356
	LTE Band 26	15M	QPSK	1	0	Right Tilted	0mm	Ant2	ECI 1	-	26865	831.5	1	24.47	25.50	1.268			-0.06	0.060	0.076
	LTE Band 26	15M	QPSK	36	0	Right Tilted	0mm	Ant2	ECI 1	-	26865	831.5	1	23.46	24.50	1.271			-0.04	0.052	0.066
10	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant2	ECI 1	-	26865	831.5	1	24.47	25.50	1.268			-0.15	0.677	0.858
	LTE Band 26	15M	QPSK	36	0	Left Cheek	0mm	Ant2	ECI 1	-	26865	831.5									



FCC SAR Test Report

Report No. : FA562503

	LTE Band 26 ENDC	15M	QPSK	1	0	Left Cheek	0mm	Ant2	ECI 1	-	26865	831.5	1	21.51	22.5	1.256			0.09	0.327	0.411
	LTE Band 26 ENDC	15M	QPSK	50	0	Left Cheek	0mm	Ant2	ECI 1	-	26865	831.5	1	21.47	22.5	1.268			0.05	0.321	0.407
	LTE Band 26	15M	QPSK	1	0	Left Cheek	0mm	Ant2	ECI 1	code D2	26865	831.5	1	24.47	25.5	1.268			0.03	0.175	0.222
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant1	ECI 1	-	132322	1745	1	24.45	25.50	1.274			-0.04	0.133	0.169
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant1	ECI 1	-	132322	1745	1	23.33	24.50	1.309			0.18	0.107	0.140
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant1	ECI 1	-	132322	1745	1	24.45	25.50	1.274			0.14	0.058	0.074
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant1	ECI 1	-	132322	1745	1	23.33	24.50	1.309			-0.00	0.048	0.063
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant1	ECI 1	-	132322	1745	1	24.45	25.50	1.274			-0.15	0.131	0.167
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant1	ECI 1	-	132322	1745	1	23.33	24.50	1.309			-0.19	0.106	0.139
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant1	ECI 1	-	132322	1745	1	24.45	25.50	1.274			-0.04	0.078	0.099
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant1	ECI 1	-	132322	1745	1	23.33	24.50	1.309			0.11	0.062	0.081
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	132322	1745	1	18.82	19.50	1.169			-0.11	0.853	0.997
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	132072	1720	1	18.60	19.50	1.23			0.06	0.811	0.998
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	132572	1770	1	18.78	19.50	1.18			0.08	0.824	0.972
11	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	132322	1745	1	18.79	19.50	1.178			-0.02	0.852	1.004
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	132072	1720	1	18.56	19.50	1.242			0.01	0.807	1.002
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	132572	1770	1	18.64	19.50	1.219			-0.04	0.819	0.998
	LTE Band 66	20M	QPSK	100	0	Right Cheek	0mm	Ant5	ECI 1	-	132322	1745	1	18.73	19.50	1.194			0.03	0.821	0.980
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	132322	1745	1	18.82	19.50	1.169			0.06	0.814	0.952
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	132072	1720	1	18.60	19.50	1.23			-0.08	0.798	0.982
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	132572	1770	1	18.78	19.50	1.18			0.04	0.786	0.927
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	132322	1745	1	18.79	19.50	1.178			-0.08	0.805	0.948
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	132072	1720	1	18.56	19.50	1.242			0.01	0.782	0.971
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	132572	1770	1	18.64	19.50	1.219			-0.04	0.778	0.948
	LTE Band 66	20M	QPSK	100	0	Right Tilted	0mm	Ant5	ECI 1	-	132322	1745	1	18.73	19.50	1.194			0.02	0.795	0.949
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant5	ECI 1	-	132322	1745	1	18.82	19.50	1.169			-0.02	0.443	0.518
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant5	ECI 1	-	132322	1745	1	18.79	19.50	1.178			-0.07	0.443	0.522
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant5	ECI 1	-	132322	1745	1	18.82	19.50	1.169			-0.09	0.440	0.514
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant5	ECI 1	-	132322	1745	1	18.79	19.50	1.178			-0.18	0.442	0.521
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	code 04	132322	1745	1	18.79	19.5	1.178			-0.15	0.235	0.277
	LTE Band 66	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	132322	1745	1	19.66	21.00	1.361			-0.05	0.405	0.551
	LTE Band 66	20M	QPSK	50	0	Right Cheek	0mm	Ant3	ECI 1	-	132322	1745	1	19.63	21.00	1.371			-0.16	0.357	0.489
	LTE Band 66	20M	QPSK	1	0	Right Tilted	0mm	Ant3	ECI 1	-	132322	1745	1	19.66	21.00	1.361			-0.07	0.128	0.174
	LTE Band 66	20M	QPSK	50	0	Right Tilted	0mm	Ant3	ECI 1	-	132322	1745	1	19.63	21.00	1.371			-0.19	0.104	0.143
	LTE Band 66	20M	QPSK	1	0	Left Cheek	0mm	Ant3	ECI 1	-	132322	1745	1	19.66	21.00	1.361			0.01	0.111	0.151
	LTE Band 66	20M	QPSK	50	0	Left Cheek	0mm	Ant3	ECI 1	-	132322	1745	1	19.63	21.00	1.371			0.02	0.090	0.123
	LTE Band 66	20M	QPSK	1	0	Left Tilted	0mm	Ant3	ECI 1	-	132322	1745	1	19.66	21.00	1.361			-0.12	0.052	0.071
	LTE Band 66	20M	QPSK	50	0	Left Tilted	0mm	Ant3	ECI 1	-	132322	1745	1	19.63	21.00	1.371			0.14	0.043	0.059
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant1	ECI 1	-	40620	2593	1	24.88	25.50	1.153	62.9	1.006	0.03	0.082	0.095
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant1	ECI 1	-	40620	2593	1	23.79	24.50	1.178	62.9	1.006	0.05	0.064	0.076
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant1	ECI 1	-	40620	2593	1	24.88	25.50	1.153	62.9	1.006	-0.12	0.053	0.061
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant1	ECI 1	-	40620	2593	1	23.79	24.50	1.178	62.9	1.006	-0.01	0.043	0.051
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant1	ECI 1	-	40620	2593	1	24.88	25.50	1.153	62.9	1.006	-0.06	0.121	0.140
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant1	ECI 1	-	40620	2593	1	23.79	24.50	1.178	62.9	1.006	-0.06	0.095	0.113
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant1	ECI 1	-	40620	2593	1	24.88	25.50	1.153	62.9	1.006	0.09	0.041	0.048
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant1	ECI 1	-	40620	2593	1	23.79	24.50	1.178	62.9	1.006	0.03	0.001	0.001
	LTE Band 38C	20M	QPSK	1	99	Left Cheek	0mm	Ant1	ECI 1	-	37901+38099	2585.1+2604.9	1	24.82	25.5	1.169	62.9	1.006	-0.06	0.108	0.127
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	0.08	0.867	0.950
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	39750	2506	1	19.57	20.00	1.104	62.9	1.006	0.01	0.833	0.925
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	40185	2549.5	1	19.58	20.00	1.102	62.9	1.006	0.03	0.841	0.932
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	41055	2636.5	1	19.52	20.00	1.117	62.9	1.006	-0.08	0.842	0.946
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant5	ECI 1	-	41490	2680	1	19.55	20.00	1.109	62.9	1.006	-0.08	0.853	0.952
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.10	0.860	0.955
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	39750	2506	1	19.48	20.00	1.127	62.9	1.006	-0.18	0.836	0.948
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	40185	2549.5	1	19.53	20.00	1.114	62.9	1.006	0.10	0.826	0.926
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	41055	2636.5	1	19.51	20.00	1.119	62.9	1.006	0.12	0.841	0.947
	LTE Band 41	20M	QPSK	50	0	Right Cheek	0mm	Ant5	ECI 1	-	41490	2680	1	19.49	20.00	1.125	62.9	1.006	0.08	0.848	0.960
	LTE Band 41	20M	QPSK	100	0	Right Cheek	0mm	Ant5	ECI 1	-	40620	2593	1	19.53	20.00	1.114	62.9	1.006	-0.03	0.821	0.920
12	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	0.06	0.976	1.069
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	39750	2506	1	19.57	20.00	1.104	62.9	1.006	-0.03	0.933	1.036
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	40185	2549.5	1	19.58	20.00	1.102	62.9	1.006	-0.08	0.900	0.998
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	41055	2636.5	1	19.52	20.00	1.117	62.9	1.006	0.10	0.911	1.024
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant5	ECI 1	-	41490	2680	1	19.55	20.00	1.109	62.9	1.006	-0.18	0.888	0.991
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.10	0.942	1.046
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	39750	2506	1	19.48	20.00	1.127	62.9	1.006	0.12	0.880	0.998
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	40185	2549.5	1	19.53	20.00	1.114	62.9	1.006	0.08	0.921	1.032
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	41055	2636.5	1	19.51	20.00	1.119	62.9	1.006	-0.17	0.892	1.004
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant5	ECI 1	-	41490	2680	1	19.49	2						



FCC SAR Test Report

Report No. : FA562503

	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant5	ECI 1	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.18	0.472	0.524
	LTE Band 38C	20M	QPSK	1	99	Right Tilted	0mm	Ant5	ECI 1	-	37901+38099	2585.1+2604.9	1	19.48	20	1.127	62.9	1.006	-0.05	0.935	1.06
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.15	0.492	0.655
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	39750	2506	1	21.25	22.50	1.334	62.9	1.006	-0.18	0.468	0.628
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	40185	2549.5	1	21.18	22.50	1.355	62.9	1.006	-0.11	0.478	0.652
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	41055	2636.5	1	21.20	22.50	1.349	62.9	1.006	-0.19	0.464	0.630
	LTE Band 41	20M	QPSK	1	0	Right Cheek	0mm	Ant3	ECI 1	-	41490	2680	1	21.23	22.50	1.34	62.9	1.006	0.08	0.476	0.642
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant3	ECI 1	-	40620	2593	1	21.26	22.50	1.33	62.9	1.006	-0.17	0.444	0.594
	LTE Band 41	20M	QPSK	100	0	Right Cheek	0mm	Ant3	ECI 1	-	40620	2593	1	21.20	22.50	1.349	62.9	1.006	-0.04	0.452	0.613
	LTE Band 41	20M	QPSK	1	0	Right Tilted	0mm	Ant3	ECI 1	-	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.02	0.196	0.261
	LTE Band 41	20M	QPSK	50	0	Right Tilted	0mm	Ant3	ECI 1	-	40620	2593	1	21.26	22.50	1.33	62.9	1.006	-0.02	0.198	0.265
	LTE Band 41	20M	QPSK	1	0	Left Cheek	0mm	Ant3	ECI 1	-	40620	2593	1	21.28	22.50	1.324	62.9	1.006	0.05	0.143	0.190
	LTE Band 41	20M	QPSK	50	0	Left Cheek	0mm	Ant3	ECI 1	-	40620	2593	1	21.26	22.50	1.33	62.9	1.006	-0.13	0.135	0.181
	LTE Band 41	20M	QPSK	1	0	Left Tilted	0mm	Ant3	ECI 1	-	40620	2593	1	21.28	22.50	1.324	62.9	1.006	-0.13	0.103	0.137
	LTE Band 41	20M	QPSK	50	0	Left Tilted	0mm	Ant3	ECI 1	-	40620	2593	1	21.26	22.50	1.33	62.9	1.006	0.06	0.099	0.132
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	0.06	0.802	0.979
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	42190	3460	1	18.49	19.50	1.262	62.9	1.006	-0.19	0.783	0.994
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	42990	3540	1	18.53	19.50	1.25	62.9	1.006	0.19	0.794	0.998
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	0.19	0.799	0.989
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	42190	3460	1	18.47	19.50	1.268	62.9	1.006	0.12	0.774	0.987
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	42990	3540	1	18.52	19.50	1.253	62.9	1.006	-0.15	0.801	1.010
	LTE Band 42	20M	QPSK	100	0	Right Cheek	0mm	Ant4	ECI 1	-	42590	3500	1	18.55	19.50	1.245	62.9	1.006	-0.17	0.791	0.991
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant4	ECI 1	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	0.09	0.555	0.677
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant4	ECI 1	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	0.14	0.552	0.683
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant4	ECI 1	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	0.12	0.204	0.249
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant4	ECI 1	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	0.09	0.202	0.250
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant4	ECI 1	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	-0.12	0.175	0.214
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant4	ECI 1	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.02	0.174	0.215
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant6	ECI 1	-	42590	3500	1	22.66	24.00	1.361	62.9	1.006	0.02	0.677	0.927
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant6	ECI 1	-	42190	3460	1	22.58	24.00	1.387	62.9	1.006	-0.05	0.644	0.899
	LTE Band 42	20M	QPSK	1	0	Right Cheek	0mm	Ant6	ECI 1	-	42990	3540	1	22.59	24.00	1.384	62.9	1.006	-0.13	0.678	0.944
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant6	ECI 1	-	42590	3500	1	22.70	24.00	1.349	62.9	1.006	0.04	0.676	0.917
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant6	ECI 1	-	42190	3460	1	22.54	24.00	1.4	62.9	1.006	-0.13	0.649	0.914
	LTE Band 42	20M	QPSK	50	0	Right Cheek	0mm	Ant6	ECI 1	-	42990	3540	1	22.54	24.00	1.4	62.9	1.006	-0.18	0.675	0.951
	LTE Band 42	20M	QPSK	100	0	Right Cheek	0mm	Ant6	ECI 1	-	42590	3500	1	22.71	24.00	1.346	62.9	1.006	0.11	0.675	0.914
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	42590	3500	1	22.66	24.00	1.361	62.9	1.006	0.07	0.726	0.994
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	42190	3460	1	22.58	24.00	1.387	62.9	1.006	0.04	0.703	0.981
	LTE Band 42	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	42990	3540	1	22.59	24.00	1.384	62.9	1.006	0.05	0.705	0.982
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	42590	3500	1	22.70	24.00	1.349	62.9	1.006	0.07	0.723	0.981
	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	42190	3460	1	22.54	24.00	1.4	62.9	1.006	0.02	0.705	0.993
13	LTE Band 42	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	42990	3540	1	22.54	24.00	1.4	62.9	1.006	-0.04	0.721	1.015
	LTE Band 42	20M	QPSK	100	0	Right Tilted	0mm	Ant6	ECI 1	-	42590	3500	1	22.71	24.00	1.346	62.9	1.006	0.11	0.726	0.983
	LTE Band 42	20M	QPSK	1	0	Left Cheek	0mm	Ant6	ECI 1	-	42590	3500	1	22.66	24.00	1.361	62.9	1.006	-0.18	0.490	0.671
	LTE Band 42	20M	QPSK	50	0	Left Cheek	0mm	Ant6	ECI 1	-	42590	3500	1	22.70	24.00	1.349	62.9	1.006	-0.02	0.489	0.664
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	42590	3500	1	22.66	24.00	1.361	62.9	1.006	0.11	0.605	0.828
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	42190	3460	1	22.58	24.00	1.387	62.9	1.006	-0.03	0.593	0.827
	LTE Band 42	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	42990	3540	1	22.59	24.00	1.384	62.9	1.006	0.05	0.605	0.842
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	42590	3500	1	22.70	24.00	1.349	62.9	1.006	-0.18	0.605	0.821
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	42190	3460	1	22.54	24.00	1.4	62.9	1.006	0.04	0.591	0.832
	LTE Band 42	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	42990	3540	1	22.54	24.00	1.4	62.9	1.006	-0.04	0.604	0.851
	LTE Band 42	20M	QPSK	100	0	Left Tilted	0mm	Ant6	ECI 1	-	42590	3500	1	22.71	24.00	1.346	62.9	1.006	0.14	0.604	0.818
	LTE Band 48	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	55830	3609	1	19.46	20.00	1.132	62.9	1.006	0.13	0.807	0.919
	LTE Band 48	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	55340	3560	1	19.36	20.00	1.159	62.9	1.006	0.05	0.807	0.941
	LTE Band 48	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	56150	3641	1	19.43	20.00	1.14	62.9	1.006	-0.10	0.789	0.905
	LTE Band 48	20M	QPSK	1	0	Right Cheek	0mm	Ant4	ECI 1	-	56640	3690	1	19.35	20.00	1.161	62.9	1.006	0.12	0.744	0.869
	LTE Band 48	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	55830	3609	1	19.42	20.00	1.143	62.9	1.006	-0.04	0.805	0.926
	LTE Band 48	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	55340	3560	1	19.37	20.00	1.156	62.9	1.006	0.16	0.810	0.942
	LTE Band 48	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	56150	3641	1	19.39	20.00	1.151	62.9	1.006	0.18	0.789	0.914
	LTE Band 48	20M	QPSK	50	0	Right Cheek	0mm	Ant4	ECI 1	-	56640	3690	1	19.35	20.00	1.161	62.9	1.006	-0.11	0.738	0.862
	LTE Band 48	20M	QPSK	100	0	Right Cheek	0mm	Ant4	ECI 1	-	56150	3641	1	19.37	20.00	1.156	62.9	1.006	0.07	0.801	0.932
	LTE Band 48	20M	QPSK	1	0	Right Tilted	0mm	Ant4	ECI 1	-	55830	3609	1	19.46	20.00	1.132	62.9	1.006	-0.03	0.509	0.580
	LTE Band 48	20M	QPSK	50	0	Right Tilted	0mm	Ant4	ECI 1	-	55830	3609	1	19.42	20.00	1.143	62.9	1.006	-0.14	0.507	0.583
	LTE Band 48	20M	QPSK	1	0	Left Cheek	0mm	Ant4	ECI 1	-	55830	3609	1	19.46	20.00	1.132	62.9	1.006	-0.07	0.200	0.228
	LTE Band 48	20M	QPSK	50	0	Left Cheek	0mm	Ant4	ECI 1	-	55830	3609	1	19.42	20.00	1.143	62.9	1.006	-0.15	0.199	0.229
	LTE Band 48	20M	QPSK	1	0	Left Tilted	0mm	Ant4	ECI 1	-	55830	3609	1	19.46	20.00	1.132	62.9	1.006	0.09	0.176	0.200
	LTE Band 48	20M	QPSK	50	0	Left Tilted	0mm	Ant4	ECI 1	-	55830	3609	1	19.42	20.00	1.143	62.9	1.006			



FCC SAR Test Report

Report No. : FA562503

	LTE Band 48	20M	QPSK	50	0	Right Cheek	0mm	Ant6	ECI 1	-	56640	3690	1	22.70	24.00	1.349	62.9	1.006	0.17	0.627	0.851
	LTE Band 48	20M	QPSK	100	0	Right Cheek	0mm	Ant6	ECI 1	-	55830	3609	1	22.86	24.00	1.3	62.9	1.006	-0.00	0.684	0.895
	LTE Band 48	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	55830	3609	1	22.84	24.00	1.306	62.9	1.006	-0.12	0.730	0.959
	LTE Band 48	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	55340	3560	1	22.70	24.00	1.349	62.9	1.006	0.08	0.722	0.980
	LTE Band 48	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	56150	3641	1	22.75	24.00	1.334	62.9	1.006	-0.08	0.724	0.972
	LTE Band 48	20M	QPSK	1	0	Right Tilted	0mm	Ant6	ECI 1	-	56640	3690	1	22.77	24.00	1.327	62.9	1.006	0.03	0.661	0.882
	LTE Band 48	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	55830	3609	1	22.85	24.00	1.303	62.9	1.006	0.02	0.718	0.941
14	LTE Band 48	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	55340	3560	1	22.63	24.00	1.371	62.9	1.006	0.01	0.717	0.989
	LTE Band 48	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	56150	3641	1	22.73	24.00	1.34	62.9	1.006	-0.14	0.712	0.960
	LTE Band 48	20M	QPSK	50	0	Right Tilted	0mm	Ant6	ECI 1	-	56640	3690	1	22.70	24.00	1.349	62.9	1.006	-0.18	0.654	0.888
	LTE Band 48	20M	QPSK	100	0	Right Tilted	0mm	Ant6	ECI 1	-	55830	3609	1	22.86	24.00	1.3	62.9	1.006	-0.15	0.716	0.936
	LTE Band 48	20M	QPSK	1	0	Left Cheek	0mm	Ant6	ECI 1	-	55830	3609	1	22.84	24.00	1.306	62.9	1.006	-0.14	0.493	0.648
	LTE Band 48	20M	QPSK	1	0	Left Cheek	0mm	Ant6	ECI 1	-	55340	3560	1	22.70	24.00	1.349	62.9	1.006	-0.10	0.494	0.670
	LTE Band 48	20M	QPSK	1	0	Left Cheek	0mm	Ant6	ECI 1	-	56150	3641	1	22.75	24.00	1.334	62.9	1.006	-0.00	0.500	0.671
	LTE Band 48	20M	QPSK	1	0	Left Cheek	0mm	Ant6	ECI 1	-	56640	3690	1	22.77	24.00	1.327	62.9	1.006	0.01	0.469	0.626
	LTE Band 48	20M	QPSK	50	0	Left Cheek	0mm	Ant6	ECI 1	-	55830	3609	1	22.85	24.00	1.303	62.9	1.006	-0.18	0.486	0.637
	LTE Band 48	20M	QPSK	50	0	Left Cheek	0mm	Ant6	ECI 1	-	55340	3560	1	22.63	24.00	1.371	62.9	1.006	0.09	0.490	0.676
	LTE Band 48	20M	QPSK	50	0	Left Cheek	0mm	Ant6	ECI 1	-	56150	3641	1	22.73	24.00	1.34	62.9	1.006	-0.00	0.493	0.665
	LTE Band 48	20M	QPSK	100	0	Left Cheek	0mm	Ant6	ECI 1	-	55830	3609	1	22.86	24.00	1.3	62.9	1.006	0.18	0.501	0.655
	LTE Band 48	20M	QPSK	50	0	Left Cheek	0mm	Ant6	ECI 1	-	56640	3690	1	22.70	24.00	1.349	62.9	1.006	-0.13	0.464	0.630
	LTE Band 48	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	55830	3609	1	22.84	24.00	1.306	62.9	1.006	-0.18	0.616	0.809
	LTE Band 48	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	55340	3560	1	22.70	24.00	1.349	62.9	1.006	0.12	0.618	0.839
	LTE Band 48	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	56150	3641	1	22.75	24.00	1.334	62.9	1.006	-0.12	0.617	0.828
	LTE Band 48	20M	QPSK	1	0	Left Tilted	0mm	Ant6	ECI 1	-	56640	3690	1	22.77	24.00	1.327	62.9	1.006	-0.18	0.575	0.768
	LTE Band 48	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	55830	3609	1	22.85	24.00	1.303	62.9	1.006	0.03	0.611	0.801
	LTE Band 48	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	55340	3560	1	22.63	24.00	1.371	62.9	1.006	-0.04	0.609	0.840
	LTE Band 48	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	56150	3641	1	22.73	24.00	1.34	62.9	1.006	0.15	0.608	0.820
	LTE Band 48	20M	QPSK	50	0	Left Tilted	0mm	Ant6	ECI 1	-	56640	3690	1	22.70	24.00	1.349	62.9	1.006	0.07	0.567	0.769
	LTE Band 48	20M	QPSK	100	0	Left Tilted	0mm	Ant6	ECI 1	-	55830	3609	1	22.86	24.00	1.3	62.9	1.006	0.04	0.612	0.800

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	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)
	FR1 n2	40M	BPSK	1	1	Right Cheek	0mm	Ant1	ECI 1	-	376000	1880	1	24.75	25.70	1.245			0.09	0.102	0.127
	FR1 n2	40M	BPSK	108	54	Right Cheek	0mm	Ant1	ECI 1	-	376000	1880	1	24.54	25.70	1.306			0.18	0.106	0.138
	FR1 n2	40M	BPSK	1	1	Right Tilted	0mm	Ant1	ECI 1	-	376000	1880	1	24.75	25.70	1.245			0.16	0.067	0.083
	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant1	ECI 1	-	376000	1880	1	24.54	25.70	1.306			-0.11	0.075	0.098
	FR1 n2	40M	BPSK	1	1	Left Cheek	0mm	Ant1	ECI 1	-	376000	1880	1	24.75	25.70	1.245			0.01	0.105	0.131
	FR1 n2	40M	BPSK	108	54	Left Cheek	0mm	Ant1	ECI 1	-	376000	1880	1	24.54	25.70	1.306			0.04	0.116	0.151
	FR1 n2	40M	BPSK	1	1	Left Tilted	0mm	Ant1	ECI 1	-	376000	1880	1	24.75	25.70	1.245			-0.13	0.073	0.091
	FR1 n2	40M	BPSK	108	54	Left Tilted	0mm	Ant1	ECI 1	-	376000	1880	1	24.54	25.70	1.306			0.12	0.079	0.103
	FR1 n2	40M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	18.87	19.70	1.211			0.16	0.723	0.876
15	FR1 n2	40M	BPSK	108	54	Right Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	18.85	19.70	1.216			-0.08	0.823	1.001
	FR1 n2	40M	BPSK	216	0	Right Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	18.82	19.70	1.225			0.18	0.756	0.926
	FR1 n2	40M	BPSK	1	1	Right Tilted	0mm	Ant5	ECI 1	-	376000	1880	1	18.87	19.70	1.211			0.01	0.679	0.822
	FR1 n2	40M	BPSK	108	54	Right Tilted	0mm	Ant5	ECI 1	-	376000	1880	1	18.85	19.70	1.216			0.01	0.699	0.850
	FR1 n2	40M	BPSK	216	0	Right Tilted	0mm	Ant5	ECI 1	-	376000	1880	1	18.82	19.70	1.225			-0.01	0.700	0.858
	FR1 n2	40M	BPSK	1	1	Left Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	18.87	19.70	1.211			0.15	0.379	0.459
	FR1 n2	40M	BPSK	108	54	Left Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	18.85	19.70	1.216			-0.00	0.414	0.503
	FR1 n2	40M	BPSK	1	1	Left Tilted	0mm	Ant5	ECI 1	-	376000	1880	1	18.87	19.70	1.211			0.12	0.405	0.490
	FR1 n2	40M	BPSK	108	54	Left Tilted	0mm	Ant5	ECI 1	-	376000	1880	1	18.85	19.70	1.216			0.14	0.450	0.547
	FR1 n2 ENDC	40M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	15.81	16.7	1.227			0.02	0.387	0.475
	FR1 n2 ENDC	40M	BPSK	108	54	Right Cheek	0mm	Ant5	ECI 1	-	376000	1880	1	15.71	16.7	1.256			0.08	0.401	0.504
	FR1 n7	50M	BPSK	1	1	Right Cheek	0mm	Ant1	ECI 1	-	507000	2535	1	24.88	25.70	1.208			0.15	0.131	0.158
	FR1 n7	50M	BPSK	135	68	Right Cheek	0mm	Ant1	ECI 1	-	507000	2535	1	24.87	25.70	1.211			-0.18	0.124	0.150
	FR1 n7	50M	BPSK	1	1	Right Tilted	0mm	Ant1	ECI 1	-	507000	2535	1	24.88	25.70	1.208			0.02	0.081	0.098
	FR1 n7	50M	BPSK	135	68	Right Tilted	0mm	Ant1	ECI 1	-	507000	2535	1	24.87	25.70	1.211			0.18	0.067	0.081
	FR1 n7	50M	BPSK	1	1	Left Cheek	0mm	Ant1	ECI 1	-	507000	2535	1	24.88	25.70	1.208			-0.08	0.239	0.289
	FR1 n7	50M	BPSK	135	68	Left Cheek	0mm	Ant1	ECI 1	-	507000	2535	1	24.87	25.70	1.211			0.03	0.238	0.288
	FR1 n7	50M	BPSK	1	1	Left Tilted	0mm	Ant1	ECI 1	-	507000	2535	1	24.88	25.70	1.208			-0.01	0.070	0.085
	FR1 n7	50M	BPSK	135	68	Left Tilted	0mm	Ant1	ECI 1	-	507000	2535	1	24.87	25.70	1.211			0.07	0.065	0.079
	FR1 n7	50M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI 1	-	507000	2535	1	18.71	19.20	1.119			0.04	0.739	0.827
16	FR1 n7	50M	BPSK	135	68	Right Cheek	0mm	Ant5	ECI 1	-	507000	2535	1	18.68	19.20	1.127			0.04	0.834	0.940
	FR1 n7	50M	BPSK	270	0	Right Cheek	0mm	Ant5	ECI 1	-	507000	2535	1	18.60	19.20	1.148			0.03	0.807	0.926
	FR1 n7	50M	BPSK	1	1	Right Tilted	0mm	Ant5	ECI 1	-	507000	2535	1	18.71	19.20	1.119			-0.00	0.677	0.758
	FR1 n7	50M	BPSK	135	68	Right Tilted	0mm	Ant5	ECI 1	-	507000	2535	1	18.68	19.20	1.127			0.07	0.698	0.787
	FR1 n7	50M	BPSK	1	1	Left Cheek	0mm	Ant5	ECI 1	-	507000	2535	1	18.71	19.20	1.119			0.10	0.308	0.345
	FR1 n7	50M	BPSK	135	68	Left Cheek	0mm	Ant5	ECI 1	-	507000	2535	1	18.68	19.20	1.127			0.05	0.334	0.376
	FR1 n7	50M	BPSK	1	1	Left Tilted	0mm	Ant5	ECI 1	-	507000	2535	1	18.71	19.20	1.119			-0.08	0.322	0.360
	FR1 n7	50M	BPSK	135	68	Left Tilted	0mm	Ant5	ECI 1	-	507000	2535	1	18.68	19.20	1.127			0.08	0.353	0.398
	FR1 n7 ENDC	50M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI1	-	507000	2535	1	15.76	16.2	1.107			0.05	0.407	0.451



FCC SAR Test Report

Report No. : FA562503

	FR1 n7 ENDC	50M	BPSK	135	68	Right Cheek	0mm	Ant5	ECI1	-	507000	2535	1	15.73	16.2	1.114			-0.07	0.417	0.465
	FR1 n7	50M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	507000	2535	1	19.12	20.00	1.225			0.03	0.492	0.603
	FR1 n7	50M	BPSK	135	68	Right Cheek	0mm	Ant6	ECI 1	-	507000	2535	1	19.10	20.00	1.23			0.01	0.479	0.589
	FR1 n7	50M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	507000	2535	1	19.12	20.00	1.225			-0.02	0.581	0.712
	FR1 n7	50M	BPSK	135	68	Right Tilted	0mm	Ant6	ECI 1	-	507000	2535	1	19.10	20.00	1.23			-0.14	0.573	0.705
	FR1 n7	50M	BPSK	1	1	Left Cheek	0mm	Ant6	ECI 1	-	507000	2535	1	19.12	20.00	1.225			-0.04	0.267	0.327
	FR1 n7	50M	BPSK	135	68	Left Cheek	0mm	Ant6	ECI 1	-	507000	2535	1	19.10	20.00	1.23			-0.04	0.262	0.322
	FR1 n7	50M	BPSK	1	1	Left Tilted	0mm	Ant6	ECI 1	-	507000	2535	1	19.12	20.00	1.225			0.10	0.350	0.429
	FR1 n7	50M	BPSK	135	68	Left Tilted	0mm	Ant6	ECI 1	-	507000	2535	1	19.10	20.00	1.23			-0.18	0.338	0.416
	FR1 n12	15M	BPSK	1	1	Right Cheek	0mm	Ant0	ECI 1	-	141500	707.5	1	24.78	25.70	1.236			-0.12	0.087	0.108
	FR1 n12	15M	BPSK	36	22	Right Cheek	0mm	Ant0	ECI 1	-	141500	707.5	1	24.71	25.70	1.256			-0.18	0.077	0.097
	FR1 n12	15M	BPSK	1	1	Right Tilted	0mm	Ant0	ECI 1	-	141500	707.5	1	24.78	25.70	1.236			0.16	0.064	0.079
	FR1 n12	15M	BPSK	36	22	Right Tilted	0mm	Ant0	ECI 1	-	141500	707.5	1	24.71	25.70	1.256			-0.15	0.059	0.074
	FR1 n12	15M	BPSK	1	1	Left Cheek	0mm	Ant0	ECI 1	-	141500	707.5	1	24.78	25.70	1.236			0.13	0.090	0.111
	FR1 n12	15M	BPSK	36	22	Left Cheek	0mm	Ant0	ECI 1	-	141500	707.5	1	24.71	25.70	1.256			-0.17	0.088	0.111
	FR1 n12	15M	BPSK	1	1	Left Tilted	0mm	Ant0	ECI 1	-	141500	707.5	1	24.78	25.70	1.236			-0.12	0.046	0.057
	FR1 n12	15M	BPSK	36	22	Left Tilted	0mm	Ant0	ECI 1	-	141500	707.5	1	24.71	25.70	1.256			0.00	0.039	0.049
	FR1 n12	15M	BPSK	1	1	Right Cheek	0mm	Ant2	ECI 1	-	141500	707.5	1	24.87	25.70	1.211			0.10	0.394	0.477
	FR1 n12	15M	BPSK	36	22	Right Cheek	0mm	Ant2	ECI 1	-	141500	707.5	1	24.81	25.70	1.227			0.09	0.389	0.477
	FR1 n12	15M	BPSK	1	1	Right Tilted	0mm	Ant2	ECI 1	-	141500	707.5	1	24.87	25.70	1.211			-0.03	0.067	0.081
	FR1 n12	15M	BPSK	36	22	Right Tilted	0mm	Ant2	ECI 1	-	141500	707.5	1	24.81	25.70	1.227			-0.04	0.059	0.072
17	FR1 n12	15M	BPSK	1	1	Left Cheek	0mm	Ant2	ECI 1	-	141500	707.5	1	24.87	25.70	1.211			-0.01	0.623	0.754
	FR1 n12	15M	BPSK	36	22	Left Cheek	0mm	Ant2	ECI 1	-	141500	707.5	1	24.81	25.70	1.227			-0.01	0.507	0.622
	FR1 n12	15M	BPSK	1	1	Left Tilted	0mm	Ant2	ECI 1	-	141500	707.5	1	24.87	25.70	1.211			-0.06	0.094	0.114
	FR1 n12	15M	BPSK	36	22	Left Tilted	0mm	Ant2	ECI 1	-	141500	707.5	1	24.81	25.70	1.227			0.16	0.081	0.099
	FR1 n26	20M	BPSK	1	1	Right Cheek	0mm	Ant0	ECI 1	-	166300	831.5	1	24.43	25.70	1.34			-0.12	0.192	0.257
	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant0	ECI 1	-	166300	831.5	1	24.33	25.70	1.371			0.08	0.217	0.298
	FR1 n26	20M	BPSK	1	1	Right Tilted	0mm	Ant0	ECI 1	-	166300	831.5	1	24.43	25.70	1.34			0.08	0.113	0.151
	FR1 n26	20M	BPSK	50	28	Right Tilted	0mm	Ant0	ECI 1	-	166300	831.5	1	24.33	25.70	1.371			0.15	0.128	0.175
	FR1 n26	20M	BPSK	1	1	Left Cheek	0mm	Ant0	ECI 1	-	166300	831.5	1	24.43	25.70	1.34			-0.01	0.142	0.190
	FR1 n26	20M	BPSK	50	28	Left Cheek	0mm	Ant0	ECI 1	-	166300	831.5	1	24.33	25.70	1.371			0.02	0.166	0.228
	FR1 n26	20M	BPSK	1	1	Left Tilted	0mm	Ant0	ECI 1	-	166300	831.5	1	24.43	25.70	1.34			0.09	0.089	0.119
	FR1 n26	20M	BPSK	50	28	Left Tilted	0mm	Ant0	ECI 1	-	166300	831.5	1	24.33	25.70	1.371			0.03	0.098	0.134
	FR1 n26	20M	BPSK	1	1	Right Cheek	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.43	25.7	1.34			0.01	0.173	0.232
	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.33	25.7	1.371			0.1	0.201	0.276
	FR1 n26	20M	BPSK	1	1	Right Tilted	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.43	25.7	1.34			-0.17	0.103	0.138
	FR1 n26	20M	BPSK	50	28	Right Tilted	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.33	25.7	1.371			0.04	0.119	0.163
	FR1 n26	20M	BPSK	1	1	Left Cheek	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.43	25.7	1.34			-0.01	0.132	0.177
	FR1 n26	20M	BPSK	50	28	Left Cheek	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.33	25.7	1.371			-0.08	0.159	0.218
	FR1 n26	20M	BPSK	1	1	Left Tilted	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.43	25.7	1.34			0.05	0.081	0.109
	FR1 n26	20M	BPSK	50	28	Left Tilted	0mm	Ant0	ECI 1	code 96	166300	831.5	1	24.33	25.7	1.371			0.06	0.091	0.125
	FR1 n26	20M	BPSK	1	1	Right Cheek	0mm	Ant2	ECI 1	-	166300	831.5	1	24.41	25.70	1.346			0.11	0.150	0.202
	FR1 n26	20M	BPSK	50	28	Right Cheek	0mm	Ant2	ECI 1	-	166300	831.5	1	24.07	25.70	1.455			0.19	0.130	0.189
	FR1 n26	20M	BPSK	1	1	Right Tilted	0mm	Ant2	ECI 1	-	166300	831.5	1	24.41	25.70	1.346			-0.02	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Right Tilted	0mm	Ant2	ECI 1	-	166300	831.5	1	24.07	25.70	1.455			-0.09	0.001	0.001
18	FR1 n26	20M	BPSK	1	1	Left Cheek	0mm	Ant2	ECI 1	-	166300	831.5	1	24.41	25.70	1.346			-0.02	0.245	0.330
	FR1 n26	20M	BPSK	50	28	Left Cheek	0mm	Ant2	ECI 1	-	166300	831.5	1	24.07	25.70	1.455			0.16	0.222	0.323
	FR1 n26	20M	BPSK	1	1	Left Tilted	0mm	Ant2	ECI 1	-	166300	831.5	1	24.41	25.70	1.346			0.18	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Left Tilted	0mm	Ant2	ECI 1	-	166300	831.5	1	24.07	25.70	1.455			0.07	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Left Cheek	0mm	Ant2	ECI 1	code D2	166300	831.5	1	24.41	25.7	1.346			0.02	0.21	0.283
	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant1	ECI 1	-	349000	1745	1	24.79	25.70	1.233			0.19	0.142	0.175
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant1	ECI 1	-	349000	1745	1	24.70	25.70	1.259			-0.04	0.123	0.155
	FR1 n66	45M	BPSK	1	1	Right Tilted	0mm	Ant1	ECI 1	-	349000	1745	1	24.79	25.70	1.233			-0.08	0.058	0.072
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant1	ECI 1	-	349000	1745	1	24.70	25.70	1.259			-0.11	0.048	0.060
	FR1 n66	45M	BPSK	1	1	Left Cheek	0mm	Ant1	ECI 1	-	349000	1745	1	24.79	25.70	1.233			-0.01	0.117	0.144
	FR1 n66	45M	BPSK	120	60	Left Cheek	0mm	Ant1	ECI 1	-	349000	1745	1	24.70	25.70	1.259			0.10	0.111	0.140
	FR1 n66	45M	BPSK	1	1	Left Tilted	0mm	Ant1	ECI 1	-	349000	1745	1	24.79	25.70	1.233			0.19	0.057	0.070
	FR1 n66	45M	BPSK	120	60	Left Tilted	0mm	Ant1	ECI 1	-	349000	1745	1	24.70	25.70	1.259			0.01	0.044	0.055
19	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI 1	-	349000	1745	1	18.73	19.70	1.25			-0.01	0.838	1.047
	FR1 n66	45M	BPSK	120	60	Right Cheek	0mm	Ant5	ECI 1	-	349000	1745	1	18.71	19.70	1.256			0.07	0.806	1.012
	FR1 n66	45M	BPSK	240	0	Right Cheek	0mm	Ant5	ECI 1	-	349000	1745	1	18.69	19.70	1.262			0.03	0.821	1.036
	FR1 n66	45M	BPSK	1	1	Right Tilted	0mm	Ant5	ECI 1	-	349000	1745	1	18.73	19.70	1.25			0.05	0.742	0.927
	FR1 n66	45M	BPSK	120	60	Right Tilted	0mm	Ant5	ECI 1	-	349000	1745	1	18.71	19.70	1.256			-0.19	0.773	0.971
	FR1 n66	45M	BPSK	240	0	Right Tilted	0mm	Ant5	ECI 1	-	349000	1745	1	18.69	19.70	1.262			-0.02	0.721	0.910
	FR1 n66	45M	BPSK	1	1	Left Cheek	0mm	Ant5	ECI 1	-	349000	1745	1	18.73	19.70	1.25			-0.04	0.413	0.516
	FR1 n66	45M	BPSK	120	60	Left Cheek	0mm	Ant5	ECI 1	-	349000	1745	1	18.71	19.70	1.256			0.13	0.428	0.538
	FR1 n66	45M	BPSK	1	1	Left Tilted	0mm	Ant5	ECI 1	-	349000	1745	1	18.73	19.70	1.25			0.18	0.403	0.504
	FR1 n66	45M	BPSK	120	60	Left Tilted	0mm	Ant5	ECI 1	-	349000	1745	1	18.71	19.70	1.256			0.01	0.422	0.530
	FR1 n66	45M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI 1	code 04	349000	1745	1	18.73	19.7	1.25			0.05	0.195	0.244
	FR1 n66 ENDC	45M	BPSK	1	1	Right Cheek	0mm	Ant5													



FCC SAR Test Report

Report No. : FA562503

	FR1 n41	100M	BPSK	135	69	Right Cheek	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.89	25.70	1.205			-0.06	0.100	0.121
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.94	25.70	1.191			0.11	0.066	0.079
	FR1 n41	100M	BPSK	135	69	Right Tilted	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.89	25.70	1.205			-0.08	0.054	0.065
	FR1 n41	100M	BPSK	1	1	Left Cheek	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.94	25.70	1.191			-0.17	0.183	0.218
	FR1 n41	100M	BPSK	135	69	Left Cheek	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.89	25.70	1.205			-0.05	0.163	0.196
	FR1 n41	100M	BPSK	1	1	Left Tilted	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.94	25.70	1.191			0.07	0.070	0.083
	FR1 n41	100M	BPSK	135	69	Left Tilted	0mm	Ant1	ECI 1	-	518598	2592.99	1	24.89	25.70	1.205			-0.12	0.065	0.078
	FR1 n41	100M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.89	17.70	1.205			0.02	0.810	0.976
20	FR1 n41	100M	BPSK	135	69	Right Cheek	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.86	17.70	1.213			-0.05	0.870	1.055
	FR1 n41	100M	BPSK	270	0	Right Cheek	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.85	17.70	1.216			-0.08	0.824	1.002
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.89	17.70	1.205			0.06	0.727	0.876
	FR1 n41	100M	BPSK	135	69	Right Tilted	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.86	17.70	1.213			-0.14	0.715	0.867
	FR1 n41	100M	BPSK	270	0	Right Tilted	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.85	17.70	1.216			0.11	0.711	0.865
	FR1 n41	100M	BPSK	1	1	Left Cheek	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.89	17.70	1.205			-0.17	0.335	0.404
	FR1 n41	100M	BPSK	135	69	Left Cheek	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.86	17.70	1.213			0.07	0.357	0.433
	FR1 n41	100M	BPSK	1	1	Left Tilted	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.89	17.70	1.205			0.03	0.366	0.441
	FR1 n41	100M	BPSK	135	69	Left Tilted	0mm	Ant5	ECI 1	-	518598	2592.99	1	16.86	17.70	1.213			-0.04	0.383	0.465
	FR1 n41 ENDC	100M	BPSK	1	1	Right Cheek	0mm	Ant5	ECI1	-	518598	2592.99	1	13.82	14.7	1.225			0.04	0.371	0.454
	FR1 n41 ENDC	100M	BPSK	135	69	Right Cheek	0mm	Ant5	ECI1	-	518598	2592.99	1	13.81	14.7	1.227			0.05	0.385	0.472
	FR1 n41	100M	BPSK	1	1	Right Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.10	19.50	1.38			0.13	0.724	0.999
	FR1 n41	100M	BPSK	135	69	Right Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.09	19.50	1.384			-0.13	0.654	0.905
	FR1 n41	100M	BPSK	270	0	Right Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	17.99	19.50	1.416			0.17	0.586	0.830
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.10	19.50	1.38			0.16	0.309	0.426
	FR1 n41	100M	BPSK	135	69	Right Tilted	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.09	19.50	1.384			0.01	0.298	0.412
	FR1 n41	100M	BPSK	1	1	Left Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.10	19.50	1.38			0.17	0.214	0.295
	FR1 n41	100M	BPSK	135	69	Left Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.09	19.50	1.384			-0.09	0.211	0.292
	FR1 n41	100M	BPSK	1	1	Left Tilted	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.10	19.50	1.38			0.11	0.143	0.197
	FR1 n41	100M	BPSK	135	69	Left Tilted	0mm	Ant3	ECI 1	-	518598	2592.99	1	18.09	19.50	1.384			0.07	0.140	0.194
	FR1 n41 ENDC	100M	BPSK	1	1	Right Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	15.44	16.5	1.276			0.05	0.365	0.466
	FR1 n41 ENDC	100M	BPSK	135	69	Right Cheek	0mm	Ant3	ECI 1	-	518598	2592.99	1	15.32	16.5	1.312			-0.08	0.352	0.462
	FR1 n41	100M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.66	20.50	1.213			0.01	0.533	0.647
	FR1 n41	100M	BPSK	135	69	Right Cheek	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.64	20.50	1.219			0.15	0.504	0.614
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.66	20.50	1.213			0.07	0.592	0.718
	FR1 n41	100M	BPSK	135	69	Right Tilted	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.64	20.50	1.219			-0.02	0.565	0.689
	FR1 n41	100M	BPSK	1	1	Left Cheek	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.66	20.50	1.213			0.14	0.319	0.387
	FR1 n41	100M	BPSK	135	69	Left Cheek	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.64	20.50	1.219			0.11	0.294	0.358
	FR1 n41	100M	BPSK	1	1	Left Tilted	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.66	20.50	1.213			0.19	0.356	0.432
	FR1 n41	100M	BPSK	135	69	Left Tilted	0mm	Ant6	ECI 1	-	518598	2592.99	1	19.64	20.50	1.219			-0.07	0.338	0.412
	FR1 n41	100M	BPSK	1	1	Right Cheek	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.58	23.00	1.387			-0.14	0.308	0.427
	FR1 n41	100M	BPSK	135	69	Right Cheek	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.44	23.00	1.432			0.17	0.274	0.392
	FR1 n41	100M	BPSK	1	1	Right Tilted	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.58	23.00	1.387			-0.00	0.044	0.061
	FR1 n41	100M	BPSK	135	69	Right Tilted	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.44	23.00	1.432			0.08	0.036	0.052
	FR1 n41	100M	BPSK	1	1	Left Cheek	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.58	23.00	1.387			-0.01	0.253	0.351
	FR1 n41	100M	BPSK	135	69	Left Cheek	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.44	23.00	1.432			-0.10	0.224	0.321
	FR1 n41	100M	BPSK	1	1	Left Tilted	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.58	23.00	1.387			0.14	0.099	0.137
	FR1 n41	100M	BPSK	135	69	Left Tilted	0mm	Ant10	ECI 1	-	518598	2592.99	1	21.44	23.00	1.432			-0.05	0.078	0.112
	FR1 n48	40M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.39	18.20	1.205			0.06	0.802	0.966
	FR1 n48	40M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	638000	3570	1	17.35	18.20	1.216			-0.07	0.695	0.845
	FR1 n48	40M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	645332	3679.98	1	17.33	18.20	1.222			0.15	0.618	0.755
	FR1 n48	40M	BPSK	50	28	Right Cheek	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.37	18.20	1.211			0.06	0.701	0.849
	FR1 n48	40M	BPSK	50	28	Right Cheek	0mm	Ant4	ECI 1	-	638000	3570	1	17.29	18.20	1.233			-0.10	0.625	0.771
	FR1 n48	40M	BPSK	50	28	Right Cheek	0mm	Ant4	ECI 1	-	645332	3679.98	1	17.19	18.20	1.262			-0.17	0.609	0.769
	FR1 n48	40M	BPSK	100	0	Right Cheek	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.29	18.20	1.233			0.17	0.589	0.726
	FR1 n48	40M	BPSK	1	1	Right Tilted	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.39	18.20	1.205			0.01	0.497	0.599
	FR1 n48	40M	BPSK	50	28	Right Tilted	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.37	18.20	1.211			0.03	0.495	0.599
	FR1 n48	40M	BPSK	1	1	Left Cheek	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.39	18.20	1.205			-0.02	0.200	0.241
	FR1 n48	40M	BPSK	50	28	Left Cheek	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.37	18.20	1.211			0.05	0.193	0.234
	FR1 n48	40M	BPSK	1	1	Left Tilted	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.39	18.20	1.205			-0.09	0.164	0.198
	FR1 n48	40M	BPSK	50	28	Left Tilted	0mm	Ant4	ECI 1	-	641666	3624.99	1	17.37	18.20	1.211			-0.16	0.159	0.193
	FR1 n48	40M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.37	21.70	1.358			-0.13	0.595	0.808
	FR1 n48	40M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	638000	3570	1	20.33	21.70	1.371			-0.04	0.581	0.797
	FR1 n48	40M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	645332	3679.98	1	20.35	21.70	1.365			-0.18	0.570	0.778
	FR1 n48	40M	BPSK	50	28	Right Cheek	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.36	21.70	1.361			-0.15	0.573	0.780
	FR1 n48	40M	BPSK	100	0	Right Cheek	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.33	21.70	1.371			-0.08	0.523	0.717
	FR1 n48	40M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.37	21.70	1.358			-0.06	0.763	1.036
	FR1 n48	40M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	638000	3570	1	20.33	21.70	1.371			-0.07	0.741	1.016
	FR1 n48	40M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	645332	3679.98	1	20.35	21.70	1.365			0.02	0.733	1.001
21	FR1 n48	40M	BPSK	50	28	Right Tilted	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.36	21.70	1.361			0.03	0.801	1.090
	FR1 n48	40M	BPSK																		



FCC SAR Test Report

Report No. : FA562503

FR1 n48	40M	BPSK	50	28	Left Cheek	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.36	21.70	1.361			-0.07	0.402	0.547
FR1 n48	40M	BPSK	1	1	Left Tilted	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.37	21.70	1.358			-0.18	0.541	0.735
FR1 n48	40M	BPSK	50	28	Left Tilted	0mm	Ant6	ECI 1	-	641666	3624.99	1	20.36	21.70	1.361			-0.11	0.534	0.727
FR1 n48	40M	BPSK	50	28	Right Tilted	0mm	Ant6	ECI 1	-	641666	3624.99	2	20.36	21.70	1.361			0.05	0.754	1.026
FR1 n48	40M	BPSK	50	28	Right Tilted	0mm	Ant6	ECI 1	-	641666	3624.99	4	20.36	21.70	1.361			-0.08	0.768	1.045
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.10	22.50	1.38			0.02	0.375	0.517
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.08	22.50	1.387			-0.05	0.369	0.512
FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.10	22.50	1.38			-0.07	0.144	0.199
FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.08	22.50	1.387			-0.01	0.156	0.216
FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.10	22.50	1.38			-0.11	0.196	0.270
FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.08	22.50	1.387			-0.10	0.191	0.265
FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.10	22.50	1.38			0.08	0.064	0.088
FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant2	ECI 1	-	633332	3499.98	1	21.08	22.50	1.387			-0.06	0.065	0.090
FR1 n77 HPUE	100M	BPSK	1	1	Right Cheek	0mm	Ant2	ECI 1	-	633332	3499.98	1	24.20	25.50	1.349	50.0	1.0	-0.01	0.387	0.522
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.06	17.00	1.242			0.06	0.712	0.884
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.05	17.00	1.245			-0.06	0.695	0.865
FR1 n77	100M	BPSK	270	0	Right Cheek	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.04	17.00	1.247			0.04	0.673	0.839
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI1	-	633332	3499.98	1	14.41	15.50	1.285			0.01	0.448	0.576
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant4	ECI1	-	633332	3499.98	1	14.37	15.50	1.297			0.05	0.427	0.554
FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.06	17.00	1.242			-0.10	0.472	0.586
FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.05	17.00	1.245			-0.07	0.419	0.522
FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.06	17.00	1.242			0.19	0.186	0.231
FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.05	17.00	1.245			-0.18	0.178	0.222
FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.06	17.00	1.242			-0.00	0.001	0.001
FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant4	ECI 1	-	633332	3499.98	1	16.05	17.00	1.245			0.13	0.001	0.001
FR1 n77 HPUE	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	633332	3499.98	1	19.11	20.00	1.227	50.0	1.0	-0.02	0.705	0.865
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.19	22.50	1.352			-0.10	0.595	0.804
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.18	22.50	1.355			-0.13	0.553	0.749
FR1 n77	100M	BPSK	270	0	Right Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.14	22.50	1.368			-0.12	0.530	0.725
FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.19	22.50	1.352			0.07	0.735	0.994
FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.18	22.50	1.355			-0.14	0.703	0.953
FR1 n77	100M	BPSK	270	0	Right Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.14	22.50	1.368			-0.19	0.674	0.922
FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.19	22.50	1.352			0.18	0.416	0.562
FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.18	22.50	1.355			0.07	0.385	0.522
FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.19	22.50	1.352			0.07	0.514	0.695
FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	21.18	22.50	1.355			-0.18	0.493	0.668
FR1 n77 HPUE	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	24.19	25.50	1.352	50.0	1.0	-0.13	0.708	0.957
FR1 n77 ENDC	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	18.07	19.5	1.390			0.02	0.371	0.516
FR1 n77 ENDC	100M	BPSK	135	69	Right Tilted	0mm	Ant6	ECI 1	-	633332	3499.98	1	17.98	19.5	1.419			0.08	0.351	0.498
FR1 n77 ENDC	100M	BPSK	1	1	Left Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	18.07	19.5	1.390			0.07	0.210	0.292
FR1 n77 ENDC	100M	BPSK	135	69	Left Cheek	0mm	Ant6	ECI 1	-	633332	3499.98	1	17.98	19.5	1.419			0.01	0.201	0.285
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.78	22.50	1.486			0.08	0.047	0.070
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.62	22.50	1.542			-0.12	0.041	0.063
FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.78	22.50	1.486			-0.01	0.001	0.001
FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.62	22.50	1.542			0.04	0.001	0.002
FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.78	22.50	1.486			0.05	0.173	0.257
FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.62	22.50	1.542			0.10	0.154	0.237
FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.78	22.50	1.486			0.11	0.080	0.119
FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant11	ECI 1	-	633332	3499.98	1	20.62	22.50	1.542			0.17	0.069	0.106
FR1 n77 HPUE	100M	BPSK	1	1	Left Cheek	0mm	Ant11	ECI 1	-	633332	3499.98	1	24.13	25.50	1.371	50.0	1.0	-0.18	0.179	0.245
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant2	ECI 1	-	656000	3840	1	20.96	22.50	1.426			-0.16	0.275	0.392
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant2	ECI 1	-	656000	3840	1	20.90	22.50	1.445			-0.14	0.222	0.321
FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant2	ECI 1	-	656000	3840	1	20.96	22.50	1.426			0.01	0.107	0.153
FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant2	ECI 1	-	656000	3840	1	20.90	22.50	1.445			-0.12	0.092	0.133
FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant2	ECI 1	-	656000	3840	1	20.96	22.50	1.426			0.01	0.097	0.138
FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant2	ECI 1	-	656000	3840	1	20.90	22.50	1.445			0.09	0.102	0.147
FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant2	ECI 1	-	656000	3840	1	20.96	22.50	1.426			0.11	0.043	0.061
FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant2	ECI 1	-	656000	3840	1	20.90	22.50	1.445			0.06	0.036	0.052
FR1 n77 HPUE	100M	BPSK	1	1	Right Cheek	0mm	Ant2	ECI 1	-	656000	3840	1	24.01	25.50	1.409	50.0	1.0	0.17	0.286	0.403
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	656000	3840	1	15.65	17.00	1.365			-0.09	0.673	0.919
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant4	ECI 1	-	656000	3840	1	15.63	17.00	1.371			0.11	0.587	0.805
FR1 n77	100M	BPSK	270	0	Right Cheek	0mm	Ant4	ECI 1	-	656000	3840	1	15.59	17.00	1.384			-0.09	0.618	0.855
FR1 n77 HPUE	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI 1	-	656000	3840	1	18.68	20.00	1.355	50.0	1.0	-0.04	0.690	0.935
FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI1	-	656000	3840	1	14.14	15.50	1.368			0.07	0.417	0.570
FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant4	ECI1	-	656000	3840	1	14.10	15.50	1.38			-0.07	0.440	0.607
FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant4	ECI 1	-	656000	3840	1	15.65	17.00	1.365			0.15	0.346	0.472
FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant4	ECI 1	-	656000	3840	1	15.63	17.00	1.371			0.18	0.325	0.446
FR1 n77 HPUE	100M	BPSK	1	1	Right Cheek	0mm	Ant4	ECI1	-	656000	3840	1	17.17	18.50	1.358	50.0	1.0	0.02	0.447	0.607
FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant4	ECI 1	-	656000	3840	1	15.65	17.00	1.365			-0.06	0.141	0.192
FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant4	ECI 1	-	656000	384									



FCC SAR Test Report

Report No. : FA562503

	FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant4	ECI 1	-	656000	3840	1	15.65	17.00	1.365			-0.19	0.117	0.160
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant4	ECI 1	-	656000	3840	1	15.63	17.00	1.371			-0.12	0.110	0.151
	FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant6	ECI 1	-	656000	3840	1	21.29	22.50	1.321			0.17	0.592	0.782
	FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant6	ECI 1	-	656000	3840	1	21.28	22.50	1.324			0.15	0.572	0.757
22	FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	656000	3840	1	21.29	22.50	1.321			0.03	0.763	1.008
	FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant6	ECI 1	-	656000	3840	1	21.28	22.50	1.324			-0.09	0.739	0.978
	FR1 n77	100M	BPSK	135	0	Right Tilted	0mm	Ant6	ECI 1	-	656000	3840	1	21.19	22.50	1.352			0.07	0.730	0.987
	FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant6	ECI 1	-	656000	3840	1	21.29	22.50	1.321			0.01	0.412	0.544
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant6	ECI 1	-	656000	3840	1	21.28	22.50	1.324			0.10	0.410	0.543
	FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant6	ECI 1	-	656000	3840	1	21.29	22.50	1.321			-0.18	0.517	0.683
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant6	ECI 1	-	656000	3840	1	21.28	22.50	1.324			0.05	0.496	0.657
	FR1 n77 HPUE	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1	-	656000	3840	1	24.27	25.50	1.327	50.0	1.0	-0.14	0.712	0.945
	FR1 n77 ENDC	100M	BPSK	1	1	Right Tilted	0mm	Ant6	ECI 1		656000	3840	1	18.15	19.5	1.365			-0.04	0.375	0.512
	FR1 n77 ENDC	100M	BPSK	135	69	Right Tilted	0mm	Ant6	ECI 1		656000	3840	1	18.01	19.5	1.409			-0.08	0.360	0.507
	FR1 n77 ENDC	100M	BPSK	1	1	Left Cheek	0mm	Ant6	ECI 1		656000	3840	1	18.15	19.5	1.365			0.01	0.200	0.273
	FR1 n77 ENDC	100M	BPSK	135	69	Left Cheek	0mm	Ant6	ECI 1		656000	3840	1	18.01	19.5	1.409			0.03	0.191	0.269
	FR1 n77	100M	BPSK	1	1	Right Cheek	0mm	Ant11	ECI 1	-	656000	3840	1	20.83	22.50	1.469			-0.00	0.054	0.079
	FR1 n77	100M	BPSK	135	69	Right Cheek	0mm	Ant11	ECI 1	-	656000	3840	1	20.78	22.50	1.486			0.11	0.044	0.065
	FR1 n77	100M	BPSK	1	1	Right Tilted	0mm	Ant11	ECI 1	-	656000	3840	1	20.83	22.50	1.469			-0.02	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Tilted	0mm	Ant11	ECI 1	-	656000	3840	1	20.78	22.50	1.486			0.10	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Left Cheek	0mm	Ant11	ECI 1	-	656000	3840	1	20.83	22.50	1.469			-0.17	0.078	0.115
	FR1 n77	100M	BPSK	135	69	Left Cheek	0mm	Ant11	ECI 1	-	656000	3840	1	20.78	22.50	1.486			0.04	0.071	0.106
	FR1 n77	100M	BPSK	1	1	Left Tilted	0mm	Ant11	ECI 1	-	656000	3840	1	20.83	22.50	1.469			-0.16	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Left Tilted	0mm	Ant11	ECI 1	-	656000	3840	1	20.78	22.50	1.486			0.04	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Left Cheek	0mm	Ant11	ECI 1	-	656000	3840	1	24.19	25.50	1.352	50.0	1.0	-0.19	0.082	0.111

【WLAN 2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant8	Receiver on	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.00	0.174	0.253
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant8	Receiver on	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.13	0.174	0.253
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant8	Simultaneous	6	2437	1	14.05	15.50	1.396	99.52	1.005	0.05	0.505	0.709
23	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant8	Receiver on	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.02	0.699	1.015
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant8	Receiver on	1	2412	1	14.90	16.50	1.445	99.52	1.005	-0.09	0.617	0.896
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant8	Receiver on	11	2462	1	15.39	17.00	1.449	99.52	1.005	-0.11	0.652	0.949
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant8	Receiver on	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.13	0.495	0.719
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant9	Receiver on	54	5270	1	14.82	16.00	1.312	91.18	1.097	-0.11	0.127	0.183
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant9	Receiver on	54	5270	1	14.82	16.00	1.312	91.18	1.097	0.09	0.096	0.138
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Simultaneous	54	5270	1	11.37	12.50	1.297	91.18	1.097	0.07	0.256	0.364
24	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Receiver on	54	5270	1	14.82	16.00	1.312	91.18	1.097	-0.02	0.661	0.951
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Receiver on	62	5310	1	12.35	13.50	1.303	91.18	1.097	0.00	0.591	0.845
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant9	Receiver on	54	5270	1	14.82	16.00	1.312	91.18	1.097	-0.09	0.366	0.527
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant9	Receiver on	110	5550	1	14.32	15.50	1.312	91.18	1.097	0.10	0.151	0.217
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant9	Receiver on	110	5550	1	14.32	15.50	1.312	91.18	1.097	-0.16	0.120	0.173
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant9	Simultaneous	106	5530	1	11.25	12.50	1.334	88.04	1.136	-0.14	0.268	0.406
25	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Receiver on	110	5550	1	14.32	15.50	1.312	91.18	1.097	-0.01	0.745	1.072
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Receiver on	142	5710	1	14.23	15.50	1.34	91.18	1.097	-0.04	0.727	1.069
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant9	Receiver on	110	5550	1	14.32	15.50	1.312	91.18	1.097	0.07	0.436	0.628
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant9	Receiver on	151	5755	1	14.61	16.00	1.377	91.18	1.097	0.06	0.139	0.210
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant9	Receiver on	151	5755	1	14.61	16.00	1.377	91.18	1.097	-0.19	0.102	0.154
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant9	Simultaneous	155	5775	1	11.28	12.50	1.324	88.04	1.136	0.13	0.274	0.412
26	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Receiver on	151	5755	1	14.61	16.00	1.377	91.18	1.097	0.09	0.680	1.027
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant9	Receiver on	159	5795	1	14.56	16.00	1.393	91.18	1.097	-0.11	0.655	1.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant9	Receiver on	151	5755	1	14.61	16.00	1.377	91.18	1.097	-0.01	0.369	0.557

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant8	Receiver on	39	2441	1	9.30	11.00	1.479	76.53	1.088	0.08	0.001	0.002
	Bluetooth	1Mbps	Right Tilted	0mm	Ant8	Receiver on	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.16	0.001	0.002
27	Bluetooth	1Mbps	Left Cheek	0mm	Ant8	Receiver on	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.01	0.131	0.211
	Bluetooth	1Mbps	Left Tilted	0mm	Ant8	Receiver on	39	2441	1	9.30	11.00	1.479	76.53	1.088	0.15	0.096	0.154



15.2 Hotspot SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Front	10mm	Ant0	ECI 5	-	189	836.4	1	26.44	27.50	1.276	0.06	0.142	0.181
	GSM850	GPRS 4 Tx slots	Back	10mm	Ant0	ECI 5	-	189	836.4	1	26.44	27.50	1.276	0.06	0.197	0.251
	GSM850	GPRS 4 Tx slots	Left Edge	10mm	Ant0	ECI 5	-	189	836.4	1	26.44	27.50	1.276	0.17	0.084	0.107
	GSM850	GPRS 4 Tx slots	Right Edge	10mm	Ant0	ECI 5	-	189	836.4	1	26.44	27.50	1.276	0.02	0.202	0.258
	GSM850	GPRS 4 Tx slots	Top Edge	10mm	Ant0	ECI 5	-	189	836.4	1	26.44	27.50	1.276	-0.10	0.001	0.001
	GSM850	GPRS 4 Tx slots	Bottom Edge	10mm	Ant0	ECI 5	-	189	836.4	1	26.44	27.50	1.276	-0.12	0.116	0.148
	GSM850	GPRS 4 Tx slots	Front	10mm	Ant0	ECI 5	code 96	189	836.4	1	26.44	27.5	1.276	-0.09	0.12	0.153
	GSM850	GPRS 4 Tx slots	Back	10mm	Ant0	ECI 5	code 96	189	836.4	1	26.44	27.5	1.276	-0.08	0.18	0.23
	GSM850	GPRS 4 Tx slots	Left Edge	10mm	Ant0	ECI 5	code 96	189	836.4	1	26.44	27.5	1.276	0.13	0.071	0.091
	GSM850	GPRS 4 Tx slots	Right Edge	10mm	Ant0	ECI 5	code 96	189	836.4	1	26.44	27.5	1.276	0.12	0.189	0.241
	GSM850	GPRS 4 Tx slots	Top Edge	10mm	Ant0	ECI 5	code 96	189	836.4	1	26.44	27.5	1.276	0.03	0.001	0.001
	GSM850	GPRS 4 Tx slots	Bottom Edge	10mm	Ant0	ECI 5	code 96	189	836.4	1	26.44	27.5	1.276	0.18	0.129	0.165
	GSM850	GPRS 4 Tx slots	Front	10mm	Ant2	ECI 5	-	189	836.4	1	26.11	27.00	1.227	-0.01	0.243	0.298
	GSM850	GPRS 4 Tx slots	Back	10mm	Ant2	ECI 5	-	189	836.4	1	26.11	27.00	1.227	0.12	0.368	0.452
28	GSM850	GPRS 4 Tx slots	Left Edge	10mm	Ant2	ECI 5	-	189	836.4	1	26.11	27.00	1.227	-0.10	0.472	0.579
	GSM850	GPRS 4 Tx slots	Right Edge	10mm	Ant2	ECI 5	-	189	836.4	1	26.11	27.00	1.227	0.12	0.001	0.001
	GSM850	GPRS 4 Tx slots	Top Edge	10mm	Ant2	ECI 5	-	189	836.4	1	26.11	27.00	1.227	-0.04	0.001	0.001
	GSM850	GPRS 4 Tx slots	Bottom Edge	10mm	Ant2	ECI 5	-	189	836.4	1	26.11	27.00	1.227	0.07	0.001	0.001
	GSM850	GPRS 4 Tx slots	Left Edge	10mm	Ant2	ECI 5	code D2	189	836.4	1	26.11	27	1.227	0.06	0.074	0.091
	GSM1900	GPRS 4 Tx slots	Front	10mm	Ant1	ECI 5	-	661	1880	1	21.67	22.50	1.211	0.04	0.164	0.199
	GSM1900	GPRS 4 Tx slots	Back	10mm	Ant1	ECI 5	-	661	1880	1	21.67	22.50	1.211	-0.09	0.194	0.235
	GSM1900	GPRS 4 Tx slots	Left Edge	10mm	Ant1	ECI 5	-	661	1880	1	21.67	22.50	1.211	0.12	0.059	0.071
	GSM1900	GPRS 4 Tx slots	Right Edge	10mm	Ant1	ECI 5	-	661	1880	1	21.67	22.50	1.211	0.10	0.001	0.001
	GSM1900	GPRS 4 Tx slots	Top Edge	10mm	Ant1	ECI 5	-	661	1880	1	21.67	22.50	1.211	0.13	0.001	0.001
	GSM1900	GPRS 4 Tx slots	Bottom Edge	10mm	Ant1	ECI 5	-	661	1880	1	21.67	22.50	1.211	0.01	0.323	0.391
	GSM1900	GPRS 4 Tx slots	Front	10mm	Ant5	ECI 5	-	661	1880	1	22.27	23.00	1.183	0.08	0.173	0.205
	GSM1900	GPRS 4 Tx slots	Back	10mm	Ant5	ECI 5	-	661	1880	1	22.27	23.00	1.183	0.07	0.292	0.345
	GSM1900	GPRS 4 Tx slots	Left Edge	10mm	Ant5	ECI 5	-	661	1880	1	22.27	23.00	1.183	0.08	0.090	0.106
	GSM1900	GPRS 4 Tx slots	Right Edge	10mm	Ant5	ECI 5	-	661	1880	1	22.27	23.00	1.183	0.06	0.001	0.001
29	GSM1900	GPRS 4 Tx slots	Top Edge	10mm	Ant5	ECI 5	-	661	1880	1	22.27	23.00	1.183	-0.12	0.336	0.397
	GSM1900	GPRS 4 Tx slots	Bottom Edge	10mm	Ant5	ECI 5	-	661	1880	1	22.27	23.00	1.183	0.12	0.001	0.001

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Front	10mm	Ant1	ECI 5	-	9400	1880	1	19.93	20.50	1.14	-0.01	0.144	0.164
	WCDMA II	RMC 12.2Kbps	Back	10mm	Ant1	ECI 5	-	9400	1880	1	19.93	20.50	1.14	-0.04	0.170	0.194
	WCDMA II	RMC 12.2Kbps	Left Edge	10mm	Ant1	ECI 5	-	9400	1880	1	19.93	20.50	1.14	0.06	0.052	0.059
	WCDMA II	RMC 12.2Kbps	Right Edge	10mm	Ant1	ECI 5	-	9400	1880	1	19.93	20.50	1.14	-0.04	0.001	0.001
	WCDMA II	RMC 12.2Kbps	Top Edge	10mm	Ant1	ECI 5	-	9400	1880	1	19.93	20.50	1.14	-0.16	0.001	0.001
30	WCDMA II	RMC 12.2Kbps	Bottom Edge	10mm	Ant1	ECI 5	-	9400	1880	1	19.93	20.50	1.14	0.01	0.283	0.323
	WCDMA II	RMC 12.2Kbps	Front	10mm	Ant5	ECI 5	-	9400	1880	1	18.58	19.00	1.102	0.12	0.164	0.181
	WCDMA II	RMC 12.2Kbps	Back	10mm	Ant5	ECI 5	-	9400	1880	1	18.58	19.00	1.102	-0.07	0.263	0.290
	WCDMA II	RMC 12.2Kbps	Left Edge	10mm	Ant5	ECI 5	-	9400	1880	1	18.58	19.00	1.102	-0.13	0.086	0.095
	WCDMA II	RMC 12.2Kbps	Right Edge	10mm	Ant5	ECI 5	-	9400	1880	1	18.58	19.00	1.102	0.15	0.044	0.048
	WCDMA II	RMC 12.2Kbps	Top Edge	10mm	Ant5	ECI 5	-	9400	1880	1	18.58	19.00	1.102	-0.01	0.275	0.303
	WCDMA II	RMC 12.2Kbps	Bottom Edge	10mm	Ant5	ECI 5	-	9400	1880	1	18.58	19.00	1.102	-0.16	0.001	0.001
	WCDMA IV	RMC 12.2Kbps	Front	10mm	Ant1	ECI 5	-	1413	1732.6	1	19.77	20.50	1.183	-0.07	0.220	0.260
	WCDMA IV	RMC 12.2Kbps	Back	10mm	Ant1	ECI 5	-	1413	1732.6	1	19.77	20.50	1.183	0.00	0.257	0.304
	WCDMA IV	RMC 12.2Kbps	Left Edge	10mm	Ant1	ECI 5	-	1413	1732.6	1	19.77	20.50	1.183	0.04	0.067	0.079
	WCDMA IV	RMC 12.2Kbps	Right Edge	10mm	Ant1	ECI 5	-	1413	1732.6	1	19.77	20.50	1.183	-0.18	0.046	0.054
	WCDMA IV	RMC 12.2Kbps	Top Edge	10mm	Ant1	ECI 5	-	1413	1732.6	1	19.77	20.50	1.183	0.09	0.001	0.001
31	WCDMA IV	RMC 12.2Kbps	Bottom Edge	10mm	Ant1	ECI 5	-	1413	1732.6	1	19.77	20.50	1.183	-0.03	0.381	0.451
	WCDMA IV	RMC 12.2Kbps	Front	10mm	Ant5	ECI 5	-	1413	1732.6	1	19.58	20.00	1.102	0.17	0.117	0.129
	WCDMA IV	RMC 12.2Kbps	Back	10mm	Ant5	ECI 5	-	1413	1732.6	1	19.58	20.00	1.102	-0.04	0.196	0.216
	WCDMA IV	RMC 12.2Kbps	Left Edge	10mm	Ant5	ECI 5	-	1413	1732.6	1	19.58	20.00	1.102	0.18	0.056	0.062
	WCDMA IV	RMC 12.2Kbps	Right Edge	10mm	Ant5	ECI 5	-	1413	1732.6	1	19.58	20.00	1.102	0.16	0.001	0.001
	WCDMA IV	RMC 12.2Kbps	Top Edge	10mm	Ant5	ECI 5	-	1413	1732.6	1	19.58	20.00	1.102	-0.01	0.197	0.217
	WCDMA IV	RMC 12.2Kbps	Bottom Edge	10mm	Ant5	ECI 5	-	1413	1732.6	1	19.58	20.00	1.102	-0.04	0.001	0.001
	WCDMA V	RMC 12.2Kbps	Front	10mm	Ant0	ECI 5	-	4182	836.4	1	24.14	25.00	1.219	0.18	0.187	0.228
	WCDMA V	RMC 12.2Kbps	Back	10mm	Ant0	ECI 5	-	4182	836.4	1	24.14	25.00	1.219	-0.09	0.261	0.318
	WCDMA V	RMC 12.2Kbps	Left Edge	10mm	Ant0	ECI 5	-	4182	836.4	1	24.14	25.00	1.219	-0.17	0.089	0.108
	WCDMA V	RMC 12.2Kbps	Right Edge	10mm	Ant0	ECI 5	-	4182	836.4	1	24.14	25.00	1.219	0.14	0.279	0.340
	WCDMA V	RMC 12.2Kbps	Top Edge	10mm	Ant0	ECI 5	-	4182	836.4	1	24.14	25.00	1.219	-0.03	0.001	0.001



FCC SAR Test Report

Report No. : FA562503

	WCDMA V	RMC 12.2Kbps	Bottom Edge	10mm	Ant0	ECI 5	-	4182	836.4	1	24.14	25.00	1.219	-0.06	0.170	0.207
	WCDMA V	RMC 12.2Kbps	Front	10mm	Ant2	ECI 5	-	4182	836.4	1	23.07	24.00	1.239	-0.18	0.280	0.347
	WCDMA V	RMC 12.2Kbps	Back	10mm	Ant2	ECI 5	-	4182	836.4	1	23.07	24.00	1.239	0.12	0.299	0.370
32	WCDMA V	RMC 12.2Kbps	Left Edge	10mm	Ant2	ECI 5	-	4182	836.4	1	23.07	24.00	1.239	0.00	0.557	0.690
	WCDMA V	RMC 12.2Kbps	Right Edge	10mm	Ant2	ECI 5	-	4182	836.4	1	23.07	24.00	1.239	-0.14	0.001	0.001
	WCDMA V	RMC 12.2Kbps	Top Edge	10mm	Ant2	ECI 5	-	4182	836.4	1	23.07	24.00	1.239	-0.08	0.001	0.001
	WCDMA V	RMC 12.2Kbps	Bottom Edge	10mm	Ant2	ECI 5	-	4182	836.4	1	23.07	24.00	1.239	0.13	0.001	0.001

[LTE SAR]

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	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)
	LTE Band 2	20M	QPSK	1	0	Front	10mm	Ant1	ECI 5	-	18900	1880	1	18.53	19.50	1.25			-0.15	0.221	0.276
	LTE Band 2	20M	QPSK	50	0	Front	10mm	Ant1	ECI 5	-	18900	1880	1	18.51	19.50	1.256			-0.01	0.221	0.278
	LTE Band 2	20M	QPSK	1	0	Back	10mm	Ant1	ECI 5	-	18900	1880	1	18.53	19.50	1.25			-0.11	0.266	0.333
	LTE Band 2	20M	QPSK	50	0	Back	10mm	Ant1	ECI 5	-	18900	1880	1	18.51	19.50	1.256			0.00	0.266	0.334
	LTE Band 2	20M	QPSK	1	0	Left Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.53	19.50	1.25			-0.07	0.077	0.096
	LTE Band 2	20M	QPSK	50	0	Left Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.51	19.50	1.256			-0.13	0.077	0.097
	LTE Band 2	20M	QPSK	1	0	Right Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.53	19.50	1.25			0.08	0.001	0.001
	LTE Band 2	20M	QPSK	50	0	Right Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.51	19.50	1.256			0.02	0.001	0.001
	LTE Band 2	20M	QPSK	1	0	Top Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.53	19.50	1.25			-0.00	0.001	0.001
	LTE Band 2	20M	QPSK	50	0	Top Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.51	19.50	1.256			-0.18	0.001	0.001
	LTE Band 2	20M	QPSK	1	0	Bottom Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.53	19.50	1.25			0.04	0.427	0.534
33	LTE Band 2	20M	QPSK	50	0	Bottom Edge	10mm	Ant1	ECI 5	-	18900	1880	1	18.51	19.50	1.256			-0.02	0.431	0.541
	LTE Band 2	20M	QPSK	1	0	Front	10mm	Ant5	ECI 5	-	18900	1880	1	18.23	19.00	1.194			-0.14	0.165	0.197
	LTE Band 2	20M	QPSK	50	0	Front	10mm	Ant5	ECI 5	-	18900	1880	1	18.16	19.00	1.213			0.18	0.163	0.198
	LTE Band 2	20M	QPSK	1	0	Back	10mm	Ant5	ECI 5	-	18900	1880	1	18.23	19.00	1.194			0.16	0.285	0.340
	LTE Band 2	20M	QPSK	50	0	Back	10mm	Ant5	ECI 5	-	18900	1880	1	18.16	19.00	1.213			-0.15	0.282	0.342
	LTE Band 2	20M	QPSK	1	0	Left Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.23	19.00	1.194			0.04	0.098	0.117
	LTE Band 2	20M	QPSK	50	0	Left Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.16	19.00	1.213			0.16	0.097	0.118
	LTE Band 2	20M	QPSK	1	0	Right Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.23	19.00	1.194			0.18	0.048	0.057
	LTE Band 2	20M	QPSK	50	0	Right Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.16	19.00	1.213			-0.11	0.048	0.058
	LTE Band 2	20M	QPSK	1	0	Top Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.23	19.00	1.194			-0.06	0.298	0.356
	LTE Band 2	20M	QPSK	50	0	Top Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.16	19.00	1.213			0.01	0.294	0.357
	LTE Band 2	20M	QPSK	1	0	Bottom Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.23	19.00	1.194			0.01	0.001	0.001
	LTE Band 2	20M	QPSK	50	0	Bottom Edge	10mm	Ant5	ECI 5	-	18900	1880	1	18.16	19.00	1.213			-0.14	0.001	0.001
	LTE Band 2	20M	QPSK	1	0	Front	10mm	Ant3	ECI 5	-	18900	1880	1	17.65	19.00	1.365			0.17	0.089	0.121
	LTE Band 2	20M	QPSK	50	0	Front	10mm	Ant3	ECI 5	-	18900	1880	1	17.62	19.00	1.374			-0.05	0.096	0.132
	LTE Band 2	20M	QPSK	1	0	Back	10mm	Ant3	ECI 5	-	18900	1880	1	17.65	19.00	1.365			0.17	0.115	0.157
	LTE Band 2	20M	QPSK	50	0	Back	10mm	Ant3	ECI 5	-	18900	1880	1	17.62	19.00	1.374			0.12	0.146	0.201
	LTE Band 2	20M	QPSK	1	0	Left Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.65	19.00	1.365			-0.01	0.070	0.096
	LTE Band 2	20M	QPSK	50	0	Left Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.62	19.00	1.374			0.06	0.186	0.256
	LTE Band 2	20M	QPSK	1	0	Right Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.65	19.00	1.365			-0.06	0.001	0.001
	LTE Band 2	20M	QPSK	50	0	Right Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.62	19.00	1.374			-0.07	0.001	0.001
	LTE Band 2	20M	QPSK	1	0	Top Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.65	19.00	1.365			0.02	0.001	0.001
	LTE Band 2	20M	QPSK	50	0	Top Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.62	19.00	1.374			-0.15	0.001	0.001
	LTE Band 2	20M	QPSK	1	0	Bottom Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.65	19.00	1.365			0.04	0.001	0.001
	LTE Band 2	20M	QPSK	50	0	Bottom Edge	10mm	Ant3	ECI 5	-	18900	1880	1	17.62	19.00	1.374			-0.16	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant1	ECI 5	-	21100	2535	1	21.34	22.00	1.164			-0.07	0.218	0.254
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant1	ECI 5	-	21100	2535	1	21.33	22.00	1.167			-0.08	0.218	0.254
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant1	ECI 5	-	21100	2535	1	21.34	22.00	1.164			-0.01	0.287	0.334
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant1	ECI 5	-	21100	2535	1	21.33	22.00	1.167			-0.05	0.283	0.330
	LTE Band 7	20M	QPSK	1	0	Left Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.34	22.00	1.164			-0.18	0.066	0.077
	LTE Band 7	20M	QPSK	50	0	Left Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.33	22.00	1.167			-0.04	0.064	0.075
	LTE Band 7	20M	QPSK	1	0	Right Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.34	22.00	1.164			0.02	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Right Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.33	22.00	1.167			0.17	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Top Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.34	22.00	1.164			0.09	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Top Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.33	22.00	1.167			-0.07	0.001	0.001
34	LTE Band 7	20M	QPSK	1	0	Bottom Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.34	22.00	1.164			0.01	0.295	0.343
	LTE Band 7	20M	QPSK	50	0	Bottom Edge	10mm	Ant1	ECI 5	-	21100	2535	1	21.33	22.00	1.167			0.09	0.289	0.337
	LTE Band 7C	20M	QPSK	1	99	Bottom Edge	10mm	Ant1	ECI 5	-	21100+21298	2535+2554.8	1	21.33	22	1.167			0.08	0.267	0.312
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant5	ECI 5	-	21100	2535	1	17.76	18.00	1.057			-0.10	0.161	0.170
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant5	ECI 5	-	21100	2535	1	17.67	18.00	1.079			-0.01	0.156	0.168
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant5	ECI 5	-	21100	2535	1	17.76	18.00	1.057			0.08	0.216	0.228
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant5	ECI 5	-	21100	2535	1	17.67	18.00	1.079			-0.01	0.203	0.219
	LTE Band 7	20M	QPSK	1	0	Left Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.76	18.00	1.057			-0.04	0.101	0.107
	LTE Band 7	20M	QPSK	50	0	Left Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.67	18.00	1.079			0.10	0.098	0.106
	LTE Band 7	20M	QPSK	1	0	Right Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.76	18.00	1.057			-0.10	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Right Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.67	18.00	1.079			0.16	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Top Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.76	18.00	1.057			0.08	0.234	0.247
	LTE Band 7	20M	QPSK	50	0	Top Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.67	18.00	1.079			0.00	0.222	0.240



FCC SAR Test Report

Report No. : FA562503

	LTE Band 7	20M	QPSK	1	0	Bottom Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.76	18.00	1.057			0.13	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Bottom Edge	10mm	Ant5	ECI 5	-	21100	2535	1	17.67	18.00	1.079			-0.13	0.001	0.001
	LTE Band 7C	20M	QPSK	1	99	Top Edge	10mm	Ant5	ECI 5	-	21100+21298	2535+2554.8	1	17.44	18	1.138			0.06	0.212	0.241
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant3	ECI 5	-	21100	2535	1	15.28	16.50	1.324			-0.06	0.033	0.044
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant3	ECI 5	-	21100	2535	1	15.26	16.50	1.33			0.18	0.031	0.041
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant3	ECI 5	-	21100	2535	1	15.28	16.50	1.324			-0.10	0.055	0.073
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant3	ECI 5	-	21100	2535	1	15.26	16.50	1.33			0.13	0.054	0.072
	LTE Band 7	20M	QPSK	1	0	Left Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.28	16.50	1.324			0.18	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Left Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.26	16.50	1.33			0.15	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Right Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.28	16.50	1.324			-0.01	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Right Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.26	16.50	1.33			-0.03	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Top Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.28	16.50	1.324			-0.12	0.056	0.074
	LTE Band 7	20M	QPSK	50	0	Top Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.26	16.50	1.33			-0.17	0.054	0.072
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.28	16.50	1.324			0.01	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Bottom Edge	10mm	Ant3	ECI 5	-	21100	2535	1	15.26	16.50	1.33			0.16	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Front	10mm	Ant6	ECI 5	-	21100	2535	1	16.76	17.50	1.186			-0.17	0.063	0.075
	LTE Band 7	20M	QPSK	50	0	Front	10mm	Ant6	ECI 5	-	21100	2535	1	16.72	17.50	1.197			-0.00	0.059	0.071
	LTE Band 7	20M	QPSK	1	0	Back	10mm	Ant6	ECI 5	-	21100	2535	1	16.76	17.50	1.186			0.09	0.121	0.144
	LTE Band 7	20M	QPSK	50	0	Back	10mm	Ant6	ECI 5	-	21100	2535	1	16.72	17.50	1.197			0.02	0.119	0.142
	LTE Band 7	20M	QPSK	1	0	Left Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.76	17.50	1.186			0.09	0.017	0.020
	LTE Band 7	20M	QPSK	50	0	Left Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.72	17.50	1.197			-0.04	0.017	0.020
	LTE Band 7	20M	QPSK	1	0	Right Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.76	17.50	1.186			-0.04	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Right Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.72	17.50	1.197			0.15	0.001	0.001
	LTE Band 7	20M	QPSK	1	0	Top Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.76	17.50	1.186			-0.01	0.089	0.106
	LTE Band 7	20M	QPSK	50	0	Top Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.72	17.50	1.197			-0.11	0.093	0.111
	LTE Band 7	20M	QPSK	1	0	Bottom Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.76	17.50	1.186			0.18	0.001	0.001
	LTE Band 7	20M	QPSK	50	0	Bottom Edge	10mm	Ant6	ECI 5	-	21100	2535	1	16.72	17.50	1.197			0.03	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Front	10mm	Ant0	ECI 5	-	23095	707.5	1	24.43	25.50	1.279			0.18	0.154	0.197
	LTE Band 12	10M	QPSK	25	0	Front	10mm	Ant0	ECI 5	-	23095	707.5	1	23.32	24.50	1.312			0.17	0.125	0.164
	LTE Band 12	10M	QPSK	1	0	Back	10mm	Ant0	ECI 5	-	23095	707.5	1	24.43	25.50	1.279			-0.13	0.211	0.270
	LTE Band 12	10M	QPSK	25	0	Back	10mm	Ant0	ECI 5	-	23095	707.5	1	23.32	24.50	1.312			-0.18	0.168	0.220
	LTE Band 12	10M	QPSK	1	0	Left Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	24.43	25.50	1.279			-0.04	0.103	0.132
	LTE Band 12	10M	QPSK	25	0	Left Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	23.32	24.50	1.312			-0.18	0.081	0.106
	LTE Band 12	10M	QPSK	1	0	Right Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	24.43	25.50	1.279			0.00	0.261	0.334
	LTE Band 12	10M	QPSK	25	0	Right Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	23.32	24.50	1.312			0.17	0.202	0.265
	LTE Band 12	10M	QPSK	1	0	Top Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	24.43	25.50	1.279			0.13	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Top Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	23.32	24.50	1.312			0.05	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Bottom Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	24.43	25.50	1.279			-0.05	0.085	0.109
	LTE Band 12	10M	QPSK	25	0	Bottom Edge	10mm	Ant0	ECI 5	-	23095	707.5	1	23.32	24.50	1.312			0.17	0.066	0.087
	LTE Band 12	10M	QPSK	1	0	Front	10mm	Ant2	ECI 5	-	23095	707.5	1	21.94	23.00	1.276			-0.02	0.245	0.313
	LTE Band 12	10M	QPSK	25	0	Front	10mm	Ant2	ECI 5	-	23095	707.5	1	21.87	23.00	1.297			0.17	0.238	0.309
	LTE Band 12	10M	QPSK	1	0	Back	10mm	Ant2	ECI 5	-	23095	707.5	1	21.94	23.00	1.276			0.11	0.336	0.429
	LTE Band 12	10M	QPSK	25	0	Back	10mm	Ant2	ECI 5	-	23095	707.5	1	21.87	23.00	1.297			0.06	0.331	0.429
	LTE Band 12	10M	QPSK	1	0	Left Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.94	23.00	1.276			-0.05	0.481	0.614
35	LTE Band 12	10M	QPSK	25	0	Left Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.87	23.00	1.297			0.03	0.496	0.643
	LTE Band 12	10M	QPSK	1	0	Right Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.94	23.00	1.276			0.17	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Right Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.87	23.00	1.297			0.14	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Top Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.94	23.00	1.276			0.03	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Top Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.87	23.00	1.297			0.10	0.001	0.001
	LTE Band 12	10M	QPSK	1	0	Bottom Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.94	23.00	1.276			-0.16	0.001	0.001
	LTE Band 12	10M	QPSK	25	0	Bottom Edge	10mm	Ant2	ECI 5	-	23095	707.5	1	21.87	23.00	1.297			0.00	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Front	10mm	Ant0	ECI 5	-	23230	782	1	24.33	25.50	1.309			-0.11	0.191	0.250
	LTE Band 13	10M	QPSK	25	0	Front	10mm	Ant0	ECI 5	-	23230	782	1	23.27	24.50	1.327			0.03	0.186	0.247
	LTE Band 13	10M	QPSK	1	0	Back	10mm	Ant0	ECI 5	-	23230	782	1	24.33	25.50	1.309			-0.09	0.246	0.322
	LTE Band 13	10M	QPSK	25	0	Back	10mm	Ant0	ECI 5	-	23230	782	1	23.27	24.50	1.327			-0.18	0.234	0.311
	LTE Band 13	10M	QPSK	1	0	Left Edge	10mm	Ant0	ECI 5	-	23230	782	1	24.33	25.50	1.309			-0.12	0.118	0.154
	LTE Band 13	10M	QPSK	25	0	Left Edge	10mm	Ant0	ECI 5	-	23230	782	1	23.27	24.50	1.327			-0.00	0.110	0.146
	LTE Band 13	10M	QPSK	1	0	Right Edge	10mm	Ant0	ECI 5	-	23230	782	1	24.33	25.50	1.309			-0.07	0.310	0.406
	LTE Band 13	10M	QPSK	25	0	Right Edge	10mm	Ant0	ECI 5	-	23230	782	1	23.27	24.50	1.327			0.11	0.297	0.394
	LTE Band 13	10M	QPSK	1	0	Top Edge	10mm	Ant0	ECI 5	-	23230	782	1	24.33	25.50	1.309			0.11	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Top Edge	10mm	Ant0	ECI 5	-	23230	782	1	23.27	24.50	1.327			0.04	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Bottom Edge	10mm	Ant0	ECI 5	-	23230	782	1	24.33	25.50	1.309			0.13	0.150	0.196
	LTE Band 13	10M	QPSK	25	0	Bottom Edge	10mm	Ant0	ECI 5	-	23230	782	1	23.27	24.50	1.327			-0.14	0.142	0.188
	LTE Band 13	10M	QPSK	1	0	Front	10mm	Ant0	ECI 5	code 3C	23230	782	1	24.33	25.5	1.309			0.16	0.139	0.182
	LTE Band 13	10M	QPSK	25	0	Front	10mm	Ant0	ECI 5	code 3C	23230	782	1	23.27	24.5	1.327			-0.1	0.107	0.142
	LTE Band 13	10M	QPSK	1	0	Back	10mm	Ant0	ECI 5	code 3C	23230	782	1	24.33	25.5	1.309			0.07	0.168	0.22
	LTE Band 13	10M	QPSK	25	0	Back	10mm	Ant0	ECI 5	code 3C	23230	782	1	23.27	24.5	1.327			0.18	0.128	0.17
	LTE Band 13	10M	QPSK	1	0	Left Edge	10mm	Ant0	ECI 5	code 3C	23230	782	1	24.33	25.5	1.309			-0.1	0.1	0.131
	LTE Band 13	10M	QPSK	25	0	Left Edge	10mm	Ant0	ECI 5	code 3C	23230	782	1	23.27	24.5	1.327			0.01	0.079	0.105
	LTE Band 13	10M	QPSK	1	0	Right Edge	10mm	Ant0	ECI 5	code 3C	23230	782	1	24.33	25.5	1.309			-0.15	0.203	0.266
	LTE Band 13	10M	QPSK	25	0	Right Edge															



FCC SAR Test Report

Report No. : FA562503

	LTE Band 13	10M	QPSK	1	0	Bottom Edge	10mm	Ant0	ECI 5	code 3C	23230	782	1	24.33	25.5	1.309			0.03	0.095	0.124
	LTE Band 13	10M	QPSK	25	0	Bottom Edge	10mm	Ant0	ECI 5	code 3C	23230	782	1	23.27	24.5	1.327			-0.15	0.072	0.096
	LTE Band 13	10M	QPSK	1	0	Front	10mm	Ant2	ECI 5	-	23230	782	1	23.09	24.00	1.233			0.05	0.291	0.359
	LTE Band 13	10M	QPSK	25	0	Front	10mm	Ant2	ECI 5	-	23230	782	1	23.06	24.00	1.242			-0.13	0.286	0.355
	LTE Band 13	10M	QPSK	1	0	Back	10mm	Ant2	ECI 5	-	23230	782	1	23.09	24.00	1.233			0.02	0.386	0.476
	LTE Band 13	10M	QPSK	25	0	Back	10mm	Ant2	ECI 5	-	23230	782	1	23.06	24.00	1.242			0.13	0.373	0.463
36	LTE Band 13	10M	QPSK	1	0	Left Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.09	24.00	1.233			-0.07	0.603	0.743
	LTE Band 13	10M	QPSK	25	0	Left Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.06	24.00	1.242			0.02	0.595	0.739
	LTE Band 13	10M	QPSK	1	0	Right Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.09	24.00	1.233			-0.09	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Right Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.06	24.00	1.242			0.08	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Top Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.09	24.00	1.233			-0.10	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Top Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.06	24.00	1.242			0.03	0.001	0.001
	LTE Band 13	10M	QPSK	1	0	Bottom Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.09	24.00	1.233			0.14	0.001	0.001
	LTE Band 13	10M	QPSK	25	0	Bottom Edge	10mm	Ant2	ECI 5	-	23230	782	1	23.06	24.00	1.242			-0.04	0.001	0.001
	LTE Band 26	15M	QPSK	1	0	Front	10mm	Ant0	ECI 5	-	26865	831.5	1	24.52	25.50	1.253			0.12	0.185	0.232
	LTE Band 26	15M	QPSK	36	0	Front	10mm	Ant0	ECI 5	-	26865	831.5	1	23.30	24.50	1.318			0.15	0.177	0.233
	LTE Band 26	15M	QPSK	1	0	Back	10mm	Ant0	ECI 5	-	26865	831.5	1	24.52	25.50	1.253			-0.17	0.242	0.303
	LTE Band 26	15M	QPSK	36	0	Back	10mm	Ant0	ECI 5	-	26865	831.5	1	23.30	24.50	1.318			-0.14	0.234	0.308
	LTE Band 26	15M	QPSK	1	0	Left Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	24.52	25.50	1.253			0.11	0.086	0.108
	LTE Band 26	15M	QPSK	36	0	Left Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	23.30	24.50	1.318			0.01	0.075	0.099
	LTE Band 26	15M	QPSK	1	0	Right Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	24.52	25.50	1.253			-0.11	0.276	0.346
	LTE Band 26	15M	QPSK	36	0	Right Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	23.30	24.50	1.318			0.09	0.263	0.347
	LTE Band 26	15M	QPSK	1	0	Top Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	24.52	25.50	1.253			0.15	0.001	0.001
	LTE Band 26	15M	QPSK	36	0	Top Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	23.30	24.50	1.318			-0.11	0.001	0.001
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	24.52	25.50	1.253			-0.15	0.181	0.227
	LTE Band 26	15M	QPSK	36	0	Bottom Edge	10mm	Ant0	ECI 5	-	26865	831.5	1	23.30	24.50	1.318			-0.01	0.172	0.227
	LTE Band 26	15M	QPSK	1	0	Front	10mm	Ant0	ECI 5	code 96	26865	831.5	1	24.52	25.5	1.253			-0.15	0.165	0.207
	LTE Band 26	15M	QPSK	36	0	Front	10mm	Ant0	ECI 5	code 96	26865	831.5	1	23.3	24.5	1.318			0.11	0.136	0.179
	LTE Band 26	15M	QPSK	1	0	Back	10mm	Ant0	ECI 5	code 96	26865	831.5	1	24.52	25.5	1.253			-0.08	0.226	0.283
	LTE Band 26	15M	QPSK	36	0	Back	10mm	Ant0	ECI 5	code 96	26865	831.5	1	23.3	24.5	1.318			-0.17	0.193	0.254
	LTE Band 26	15M	QPSK	1	0	Left Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	24.52	25.5	1.253			-0.08	0.119	0.149
	LTE Band 26	15M	QPSK	36	0	Left Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	23.3	24.5	1.318			-0.04	0.095	0.125
	LTE Band 26	15M	QPSK	1	0	Right Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	24.52	25.5	1.253			-0.08	0.274	0.343
	LTE Band 26	15M	QPSK	36	0	Right Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	23.3	24.5	1.318			0.17	0.218	0.287
	LTE Band 26	15M	QPSK	1	0	Top Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	24.52	25.5	1.253			0.18	0.001	0.001
	LTE Band 26	15M	QPSK	36	0	Top Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	23.3	24.5	1.318			-0.04	0.001	0.001
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	24.52	25.5	1.253			-0.08	0.179	0.224
	LTE Band 26	15M	QPSK	36	0	Bottom Edge	10mm	Ant0	ECI 5	code 96	26865	831.5	1	23.3	24.5	1.318			-0.13	0.147	0.194
	LTE Band 26	15M	QPSK	1	0	Front	10mm	Ant2	ECI 5	-	26865	831.5	1	23.48	24.50	1.265			-0.08	0.319	0.404
	LTE Band 26	15M	QPSK	36	0	Front	10mm	Ant2	ECI 5	-	26865	831.5	1	23.40	24.50	1.288			0.06	0.309	0.398
	LTE Band 26	15M	QPSK	1	0	Back	10mm	Ant2	ECI 5	-	26865	831.5	1	23.48	24.50	1.265			0.02	0.451	0.571
	LTE Band 26	15M	QPSK	36	0	Back	10mm	Ant2	ECI 5	-	26865	831.5	1	23.40	24.50	1.288			-0.17	0.448	0.570
37	LTE Band 26	15M	QPSK	1	0	Left Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.48	24.50	1.265			-0.01	0.577	0.730
	LTE Band 26	15M	QPSK	36	0	Left Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.40	24.50	1.288			-0.01	0.565	0.728
	LTE Band 26	15M	QPSK	1	0	Right Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.48	24.50	1.265			0.15	0.003	0.004
	LTE Band 26	15M	QPSK	36	0	Right Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.40	24.50	1.288			-0.05	0.003	0.004
	LTE Band 26	15M	QPSK	1	0	Top Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.48	24.50	1.265			0.08	0.003	0.004
	LTE Band 26	15M	QPSK	36	0	Top Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.40	24.50	1.288			0.07	0.003	0.004
	LTE Band 26	15M	QPSK	1	0	Bottom Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.48	24.50	1.265			0.17	0.003	0.004
	LTE Band 26	15M	QPSK	36	0	Bottom Edge	10mm	Ant2	ECI 5	-	26865	831.5	1	23.40	24.50	1.288			0.07	0.003	0.004
	LTE Band 26	15M	QPSK	1	0	Left Edge	10mm	Ant2	ECI 5	code D2	26865	831.5	1	23.48	24.5	1.265			-0.08	0.149	0.188
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant1	ECI 5	-	132322	1745	1	19.45	20.50	1.274			0.04	0.193	0.246
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant1	ECI 5	-	132322	1745	1	19.33	20.50	1.309			-0.09	0.191	0.250
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant1	ECI 5	-	132322	1745	1	19.45	20.50	1.274			-0.16	0.249	0.317
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant1	ECI 5	-	132322	1745	1	19.33	20.50	1.309			0.03	0.247	0.323
	LTE Band 66	20M	QPSK	1	0	Left Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.45	20.50	1.274			0.09	0.061	0.078
	LTE Band 66	20M	QPSK	50	0	Left Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.33	20.50	1.309			0.04	0.062	0.081
	LTE Band 66	20M	QPSK	1	0	Right Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.45	20.50	1.274			-0.16	0.001	0.001
	LTE Band 66	20M	QPSK	50	0	Right Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.33	20.50	1.309			-0.17	0.046	0.060
	LTE Band 66	20M	QPSK	1	0	Top Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.45	20.50	1.274			-0.08	0.001	0.001
	LTE Band 66	20M	QPSK	50	0	Top Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.33	20.50	1.309			-0.05	0.001	0.001
	LTE Band 66	20M	QPSK	1	0	Bottom Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.45	20.50	1.274			-0.09	0.360	0.459
38	LTE Band 66	20M	QPSK	50	0	Bottom Edge	10mm	Ant1	ECI 5	-	132322	1745	1	19.33	20.50	1.309			-0.02	0.361	0.473
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant5	ECI 5	-	132322	1745	1	18.82	19.50	1.169			0.16	0.162	0.189
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant5	ECI 5	-	132322	1745	1	18.79	19.50	1.178			0.15	0.162	0.191
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant5	ECI 5	-	132322	1745	1	18.82	19.50	1.169			-0.10	0.281	0.328
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant5	ECI 5	-	132322	1745	1	18.79	19.50	1.178			-0.12	0.284	0.335
	LTE Band 66	20M	QPSK	1	0	Left Edge	10mm	Ant5	ECI 5	-	132322	1745	1	18.82	19.50	1.169			-0.16	0.076	0.089
	LTE Band 66	20M	QPSK	50	0	Left Edge	10mm	Ant5	ECI 5	-	132322	1745	1	18.79	19.50	1.178			-0.01	0.077	0.091
	LTE Band 66	20M	QPSK	1	0	Right Edge	10mm	Ant5	ECI 5	-	132322	1745	1	18.82	19.50	1.169					



FCC SAR Test Report

Report No. : FA562503

	LTE Band 66	20M	QPSK	1	0	Bottom Edge	10mm	Ant5	ECI 5	-	132322	1745	1	18.82	19.50	1.169			-0.03	0.001	0.001
	LTE Band 66	20M	QPSK	50	0	Bottom Edge	10mm	Ant5	ECI 5	-	132322	1745	1	18.79	19.50	1.178			0.15	0.001	0.001
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant5	ECI 5	code 04	132322	1745	1	18.79	19.5	1.178			0.09	0.242	0.285
	LTE Band 66	20M	QPSK	1	0	Front	10mm	Ant3	ECI 5	-	132322	1745	1	19.69	21.00	1.352			0.11	0.004	0.005
	LTE Band 66	20M	QPSK	50	0	Front	10mm	Ant3	ECI 5	-	132322	1745	1	19.65	21.00	1.365			-0.06	0.004	0.005
	LTE Band 66	20M	QPSK	1	0	Back	10mm	Ant3	ECI 5	-	132322	1745	1	19.69	21.00	1.352			0.05	0.182	0.246
	LTE Band 66	20M	QPSK	50	0	Back	10mm	Ant3	ECI 5	-	132322	1745	1	19.65	21.00	1.365			0.18	0.174	0.238
	LTE Band 66	20M	QPSK	1	0	Left Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.69	21.00	1.352			-0.03	0.226	0.306
	LTE Band 66	20M	QPSK	50	0	Left Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.65	21.00	1.365			-0.15	0.222	0.303
	LTE Band 66	20M	QPSK	1	0	Right Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.69	21.00	1.352			-0.05	0.004	0.005
	LTE Band 66	20M	QPSK	50	0	Right Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.65	21.00	1.365			0.09	0.004	0.005
	LTE Band 66	20M	QPSK	1	0	Top Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.69	21.00	1.352			-0.12	0.004	0.005
	LTE Band 66	20M	QPSK	50	0	Top Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.65	21.00	1.365			-0.15	0.004	0.005
	LTE Band 66	20M	QPSK	1	0	Bottom Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.69	21.00	1.352			0.04	0.004	0.005
	LTE Band 66	20M	QPSK	50	0	Bottom Edge	10mm	Ant3	ECI 5	-	132322	1745	1	19.65	21.00	1.365			0.16	0.004	0.005
	LTE Band 41	20M	QPSK	1	0	Front	10mm	Ant1	ECI 5	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	0.10	0.164	0.190
	LTE Band 41	20M	QPSK	50	0	Front	10mm	Ant1	ECI 5	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	0.01	0.163	0.193
	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant1	ECI 5	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	0.08	0.232	0.269
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant1	ECI 5	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	-0.16	0.225	0.267
	LTE Band 41	20M	QPSK	1	0	Left Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	0.07	0.050	0.058
	LTE Band 41	20M	QPSK	50	0	Left Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	0.01	0.049	0.058
	LTE Band 41	20M	QPSK	1	0	Right Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	-0.01	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Right Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	0.15	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Top Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	-0.12	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Top Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	-0.05	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	-0.11	0.223	0.259
	LTE Band 41	20M	QPSK	50	0	Bottom Edge	10mm	Ant1	ECI 5	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	-0.02	0.225	0.267
	LTE Band 38C	20M	QPSK	1	99	Back	10mm	Ant1	ECI 5	-	37901+38099	2585.1+2604.9	1	21.83	22.5	1.167	62.9	1.006	0.08	0.216	0.254
	LTE Band 41	20M	QPSK	1	0	Front	10mm	Ant5	ECI 5	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	-0.19	0.230	0.252
	LTE Band 41	20M	QPSK	50	0	Front	10mm	Ant5	ECI 5	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.05	0.232	0.258
	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant5	ECI 5	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	-0.04	0.308	0.337
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant5	ECI 5	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.11	0.336	0.373
	LTE Band 41	20M	QPSK	1	0	Left Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	0.04	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Left Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	-0.06	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Right Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	0.05	0.094	0.103
	LTE Band 41	20M	QPSK	50	0	Right Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.18	0.001	0.001
39	LTE Band 41	20M	QPSK	1	0	Top Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	-0.06	0.357	0.391
	LTE Band 41	20M	QPSK	50	0	Top Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	0.01	0.326	0.362
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.63	20.00	1.089	62.9	1.006	-0.13	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Bottom Edge	10mm	Ant5	ECI 5	-	40620	2593	1	19.57	20.00	1.104	62.9	1.006	-0.14	0.001	0.001
	LTE Band 38C	20M	QPSK	1	99	Top Edge	10mm	Ant5	ECI 5	-	37901+38099	2585.1+2604.9	1	19.48	20	1.127	62.9	1.006	-0.06	0.328	0.372
	LTE Band 41	20M	QPSK	1	0	Front	10mm	Ant3	ECI 5	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	0.09	0.027	0.036
	LTE Band 41	20M	QPSK	50	0	Front	10mm	Ant3	ECI 5	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	-0.12	0.028	0.038
	LTE Band 41	20M	QPSK	1	0	Back	10mm	Ant3	ECI 5	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	0.15	0.046	0.062
	LTE Band 41	20M	QPSK	50	0	Back	10mm	Ant3	ECI 5	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	-0.03	0.044	0.059
	LTE Band 41	20M	QPSK	1	0	Left Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	0.18	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Left Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	0.11	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Right Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	-0.09	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Right Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	0.14	0.001	0.001
	LTE Band 41	20M	QPSK	1	0	Top Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	0.01	0.054	0.072
	LTE Band 41	20M	QPSK	50	0	Top Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	0.07	0.050	0.067
	LTE Band 41	20M	QPSK	1	0	Bottom Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	0.01	0.001	0.001
	LTE Band 41	20M	QPSK	50	0	Bottom Edge	10mm	Ant3	ECI 5	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	-0.05	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Front	10mm	Ant4	ECI 5	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	-0.12	0.169	0.206
	LTE Band 42	20M	QPSK	50	0	Front	10mm	Ant4	ECI 5	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	0.04	0.169	0.209
	LTE Band 42	20M	QPSK	1	0	Back	10mm	Ant4	ECI 5	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	0.04	0.307	0.375
	LTE Band 42	20M	QPSK	50	0	Back	10mm	Ant4	ECI 5	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	0.18	0.363	0.449
	LTE Band 42	20M	QPSK	1	0	Left Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	-0.06	0.455	0.555
40	LTE Band 42	20M	QPSK	50	0	Left Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.16	0.494	0.611
	LTE Band 42	20M	QPSK	1	0	Right Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	-0.05	0.001	0.001
	LTE Band 42	20M	QPSK	50	0	Right Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.05	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Top Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	-0.00	0.171	0.209
	LTE Band 42	20M	QPSK	50	0	Top Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.15	0.171	0.212
	LTE Band 42	20M	QPSK	1	0	Bottom Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	0.03	0.047	0.057
	LTE Band 42	20M	QPSK	50	0	Bottom Edge	10mm	Ant4	ECI 5	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.19	0.001	0.001
	LTE Band 42	20M	QPSK	1	0	Front	10mm	Ant6	ECI 5	-	42590	3500	1	21.66	23.00	1.361	62.9	1.006	0.06	0.115	0.157
	LTE Band 42	20M	QPSK	50	0	Front	10mm	Ant6	ECI 5	-	42590	3500	1	21.70	23.00	1.349	62.9	1			



FCC SAR Test Report

Report No. : FA562503

	LTE Band 42	20M	QPSK	1	0	Top Edge	10mm	Ant6	ECI 5	-	42590	3500	1	21.66	23.00	1.361	62.9	1.006	-0.01	0.321	0.440
	LTE Band 42	20M	QPSK	50	0	Top Edge	10mm	Ant6	ECI 5	-	42590	3500	1	21.70	23.00	1.349	62.9	1.006	0.00	0.279	0.379
	LTE Band 42	20M	QPSK	1	0	Bottom Edge	10mm	Ant6	ECI 5	-	42590	3500	1	21.66	23.00	1.361	62.9	1.006	0.00	0.016	0.022
	LTE Band 42	20M	QPSK	50	0	Bottom Edge	10mm	Ant6	ECI 5	-	42590	3500	1	21.70	23.00	1.349	62.9	1.006	0.05	0.001	0.001
	LTE Band 48	20M	QPSK	1	0	Front	10mm	Ant4	ECI 5	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	-0.01	0.134	0.153
	LTE Band 48	20M	QPSK	50	0	Front	10mm	Ant4	ECI 5	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	-0.05	0.136	0.156
	LTE Band 48	20M	QPSK	1	0	Back	10mm	Ant4	ECI 5	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	0.01	0.270	0.307
	LTE Band 48	20M	QPSK	50	0	Back	10mm	Ant4	ECI 5	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	0.16	0.275	0.316
	LTE Band 48	20M	QPSK	1	0	Left Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	0.03	0.427	0.486
41	LTE Band 48	20M	QPSK	50	0	Left Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	0.08	0.430	0.494
	LTE Band 48	20M	QPSK	1	0	Right Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	0.09	0.001	0.001
	LTE Band 48	20M	QPSK	50	0	Right Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	-0.17	0.029	0.033
	LTE Band 48	20M	QPSK	1	0	Top Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	0.06	0.140	0.159
	LTE Band 48	20M	QPSK	50	0	Top Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	0.11	0.140	0.161
	LTE Band 48	20M	QPSK	1	0	Bottom Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	-0.05	0.042	0.048
	LTE Band 48	20M	QPSK	50	0	Bottom Edge	10mm	Ant4	ECI 5	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	-0.06	0.043	0.049
	LTE Band 48	20M	QPSK	1	0	Front	10mm	Ant6	ECI 5	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	-0.13	0.127	0.167
	LTE Band 48	20M	QPSK	50	0	Front	10mm	Ant6	ECI 5	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	0.09	0.137	0.181
	LTE Band 48	20M	QPSK	1	0	Back	10mm	Ant6	ECI 5	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	-0.06	0.264	0.347
	LTE Band 48	20M	QPSK	50	0	Back	10mm	Ant6	ECI 5	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	0.09	0.287	0.379
	LTE Band 48	20M	QPSK	1	0	Left Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	-0.06	0.053	0.070
	LTE Band 48	20M	QPSK	50	0	Left Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	0.10	0.051	0.067
	LTE Band 48	20M	QPSK	1	0	Right Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	0.15	0.046	0.060
	LTE Band 48	20M	QPSK	50	0	Right Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	0.16	0.048	0.063
	LTE Band 48	20M	QPSK	1	0	Top Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	-0.16	0.303	0.398
	LTE Band 48	20M	QPSK	50	0	Top Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	-0.02	0.342	0.451
	LTE Band 48	20M	QPSK	1	0	Bottom Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	0.16	0.001	0.001
	LTE Band 48	20M	QPSK	50	0	Bottom Edge	10mm	Ant6	ECI 5	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	-0.15	0.001	0.001

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq.(MHz)	Sample	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)
	FR1 n2	40M	BPSK	1	1	Front	10mm	Ant1	ECI 5	-	376000	1880	1	20.16	21.20	1.271			0.16	0.195	0.248
	FR1 n2	40M	BPSK	108	54	Front	10mm	Ant1	ECI 5	-	376000	1880	1	20.15	21.20	1.274			-0.13	0.211	0.269
	FR1 n2	40M	BPSK	1	1	Back	10mm	Ant1	ECI 5	-	376000	1880	1	20.16	21.20	1.271			0.13	0.242	0.308
	FR1 n2	40M	BPSK	108	54	Back	10mm	Ant1	ECI 5	-	376000	1880	1	20.15	21.20	1.274			-0.09	0.249	0.317
	FR1 n2	40M	BPSK	1	1	Left Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.16	21.20	1.271			0.09	0.073	0.093
	FR1 n2	40M	BPSK	108	54	Left Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.15	21.20	1.274			-0.04	0.078	0.099
	FR1 n2	40M	BPSK	1	1	Right Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.16	21.20	1.271			-0.09	0.035	0.044
	FR1 n2	40M	BPSK	108	54	Right Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.15	21.20	1.274			-0.15	0.039	0.050
	FR1 n2	40M	BPSK	1	1	Top Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.16	21.20	1.271			0.10	0.001	0.001
	FR1 n2	40M	BPSK	108	54	Top Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.15	21.20	1.274			-0.18	0.001	0.001
	FR1 n2	40M	BPSK	1	1	Bottom Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.16	21.20	1.271			-0.03	0.386	0.491
42	FR1 n2	40M	BPSK	108	54	Bottom Edge	10mm	Ant1	ECI 5	-	376000	1880	1	20.15	21.20	1.274			0.01	0.438	0.558
	FR1 n2	40M	BPSK	1	1	Front	10mm	Ant5	ECI 5	-	376000	1880	1	18.87	19.70	1.211			0.12	0.171	0.207
	FR1 n2	40M	BPSK	108	54	Front	10mm	Ant5	ECI 5	-	376000	1880	1	18.85	19.70	1.216			-0.11	0.181	0.220
	FR1 n2	40M	BPSK	1	1	Back	10mm	Ant5	ECI 5	-	376000	1880	1	18.87	19.70	1.211			-0.04	0.270	0.327
	FR1 n2	40M	BPSK	108	54	Back	10mm	Ant5	ECI 5	-	376000	1880	1	18.85	19.70	1.216			0.11	0.275	0.334
	FR1 n2	40M	BPSK	1	1	Left Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.87	19.70	1.211			-0.05	0.111	0.134
	FR1 n2	40M	BPSK	108	54	Left Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.85	19.70	1.216			-0.14	0.098	0.119
	FR1 n2	40M	BPSK	1	1	Right Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.87	19.70	1.211			0.01	0.040	0.048
	FR1 n2	40M	BPSK	108	54	Right Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.85	19.70	1.216			-0.04	0.045	0.055
	FR1 n2	40M	BPSK	1	1	Top Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.87	19.70	1.211			0.16	0.291	0.352
	FR1 n2	40M	BPSK	108	54	Top Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.85	19.70	1.216			0.01	0.311	0.378
	FR1 n2	40M	BPSK	1	1	Bottom Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.87	19.70	1.211			-0.03	0.001	0.001
	FR1 n2	40M	BPSK	108	54	Bottom Edge	10mm	Ant5	ECI 5	-	376000	1880	1	18.85	19.70	1.216			0.18	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Front	10mm	Ant1	ECI 5	-	507000	2535	1	20.93	21.70	1.194			0.03	0.163	0.195
	FR1 n7	50M	BPSK	135	68	Front	10mm	Ant1	ECI 5	-	507000	2535	1	20.92	21.70	1.197			0.05	0.162	0.194
	FR1 n7	50M	BPSK	1	1	Back	10mm	Ant1	ECI 5	-	507000	2535	1	20.93	21.70	1.194			0.06	0.254	0.303
	FR1 n7	50M	BPSK	135	68	Back	10mm	Ant1	ECI 5	-	507000	2535	1	20.92	21.70	1.197			-0.13	0.246	0.294
	FR1 n7	50M	BPSK	1	1	Left Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.93	21.70	1.194			-0.04	0.066	0.079
	FR1 n7	50M	BPSK	135	68	Left Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.92	21.70	1.197			0.15	0.066	0.079
	FR1 n7	50M	BPSK	1	1	Right Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.93	21.70	1.194			0.15	0.033	0.039
	FR1 n7	50M	BPSK	135	68	Right Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.92	21.70	1.197			-0.17	0.037	0.044
	FR1 n7	50M	BPSK	1	1	Top Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.93	21.70	1.194			0.13	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Top Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.92	21.70	1.197			0.15	0.001	0.001
43	FR1 n7	50M	BPSK	1	1	Bottom Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.93	21.70	1.194			-0.00	0.274	0.327
	FR1 n7	50M	BPSK	135	68	Bottom Edge	10mm	Ant1	ECI 5	-	507000	2535	1	20.92	21.70	1.197			-0.03	0.247	0.296
	FR1 n7	50M	BPSK	1	1	Front	10mm	Ant5	ECI 5	-	507000	2535	1	18.71	19.20	1.119			0.14	0.198	0.222
	FR1 n7	50M	BPSK	135	68	Front	10mm	Ant5	ECI 5	-	507000	2535	1	18.68	19.20	1.127			0.09	0.187	0.211



FCC SAR Test Report

Report No. : FA562503

	FR1 n7	50M	BPSK	1	1	Back	10mm	Ant5	ECI 5	-	507000	2535	1	18.71	19.20	1.119			0.09	0.286	0.320
	FR1 n7	50M	BPSK	135	68	Back	10mm	Ant5	ECI 5	-	507000	2535	1	18.68	19.20	1.127			-0.14	0.277	0.312
	FR1 n7	50M	BPSK	1	1	Left Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.71	19.20	1.119			0.02	0.113	0.126
	FR1 n7	50M	BPSK	135	68	Left Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.68	19.20	1.127			-0.17	0.111	0.125
	FR1 n7	50M	BPSK	1	1	Right Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.71	19.20	1.119			-0.06	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Right Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.68	19.20	1.127			-0.06	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Top Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.71	19.20	1.119			0.06	0.291	0.326
	FR1 n7	50M	BPSK	135	68	Top Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.68	19.20	1.127			0.03	0.283	0.319
	FR1 n7	50M	BPSK	1	1	Bottom Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.71	19.20	1.119			-0.05	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Bottom Edge	10mm	Ant5	ECI 5	-	507000	2535	1	18.68	19.20	1.127			-0.16	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Front	10mm	Ant6	ECI 5	-	507000	2535	1	16.93	18.00	1.279			-0.09	0.095	0.122
	FR1 n7	50M	BPSK	135	68	Front	10mm	Ant6	ECI 5	-	507000	2535	1	16.89	18.00	1.291			0.11	0.095	0.123
	FR1 n7	50M	BPSK	1	1	Back	10mm	Ant6	ECI 5	-	507000	2535	1	16.93	18.00	1.279			0.01	0.211	0.270
	FR1 n7	50M	BPSK	135	68	Back	10mm	Ant6	ECI 5	-	507000	2535	1	16.89	18.00	1.291			0.08	0.175	0.226
	FR1 n7	50M	BPSK	1	1	Left Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.93	18.00	1.279			-0.04	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Left Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.89	18.00	1.291			0.18	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Right Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.93	18.00	1.279			-0.17	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Right Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.89	18.00	1.291			-0.06	0.001	0.001
	FR1 n7	50M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.93	18.00	1.279			0.11	0.131	0.168
	FR1 n7	50M	BPSK	135	68	Top Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.89	18.00	1.291			0.00	0.123	0.159
	FR1 n7	50M	BPSK	1	1	Bottom Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.93	18.00	1.279			0.07	0.001	0.001
	FR1 n7	50M	BPSK	135	68	Bottom Edge	10mm	Ant6	ECI 5	-	507000	2535	1	16.89	18.00	1.291			-0.01	0.001	0.001
	FR1 n12	15M	BPSK	1	1	Front	10mm	Ant0	ECI 5	-	141500	707.5	1	24.78	25.70	1.236			0.04	0.137	0.169
	FR1 n12	15M	BPSK	36	22	Front	10mm	Ant0	ECI 5	-	141500	707.5	1	24.71	25.70	1.256			-0.05	0.164	0.206
	FR1 n12	15M	BPSK	1	1	Back	10mm	Ant0	ECI 5	-	141500	707.5	1	24.78	25.70	1.236			-0.13	0.183	0.226
	FR1 n12	15M	BPSK	36	22	Back	10mm	Ant0	ECI 5	-	141500	707.5	1	24.71	25.70	1.256			-0.01	0.211	0.265
	FR1 n12	15M	BPSK	1	1	Left Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.78	25.70	1.236			-0.15	0.085	0.105
	FR1 n12	15M	BPSK	36	22	Left Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.71	25.70	1.256			-0.02	0.108	0.136
	FR1 n12	15M	BPSK	1	1	Right Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.78	25.70	1.236			-0.01	0.260	0.321
	FR1 n12	15M	BPSK	36	22	Right Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.71	25.70	1.256			-0.02	0.293	0.368
	FR1 n12	15M	BPSK	1	1	Top Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.78	25.70	1.236			-0.16	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Top Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.71	25.70	1.256			0.18	0.001	0.001
	FR1 n12	15M	BPSK	1	1	Bottom Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.78	25.70	1.236			-0.12	0.072	0.089
	FR1 n12	15M	BPSK	36	22	Bottom Edge	10mm	Ant0	ECI 5	-	141500	707.5	1	24.71	25.70	1.256			0.05	0.104	0.131
	FR1 n12	15M	BPSK	1	1	Front	10mm	Ant2	ECI 5	-	141500	707.5	1	22.38	23.20	1.208			0.18	0.324	0.391
	FR1 n12	15M	BPSK	36	22	Front	10mm	Ant2	ECI 5	-	141500	707.5	1	22.35	23.20	1.216			-0.06	0.346	0.421
	FR1 n12	15M	BPSK	1	1	Back	10mm	Ant2	ECI 5	-	141500	707.5	1	22.38	23.20	1.208			-0.08	0.398	0.481
	FR1 n12	15M	BPSK	36	22	Back	10mm	Ant2	ECI 5	-	141500	707.5	1	22.35	23.20	1.216			0.07	0.457	0.556
	FR1 n12	15M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.38	23.20	1.208			0.02	0.641	0.774
44	FR1 n12	15M	BPSK	36	22	Left Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.35	23.20	1.216			-0.01	0.707	0.860
	FR1 n12	15M	BPSK	75	0	Left Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.32	23.20	1.225			0.17	0.666	0.816
	FR1 n12	15M	BPSK	1	1	Right Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.38	23.20	1.208			-0.10	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Right Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.35	23.20	1.216			0.15	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Left Edge	10mm	Ant2	ECI 5	-	141500	707.5	2	22.35	23.20	1.216			-0.04	0.675	0.821
	FR1 n12	15M	BPSK	1	1	Top Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.38	23.20	1.208			0.13	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Top Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.35	23.20	1.216			0.09	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Left Edge	10mm	Ant2	ECI 5	-	141500	707.5	4	22.35	23.20	1.216			0.18	0.681	0.828
	FR1 n12	15M	BPSK	1	1	Bottom Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.38	23.20	1.208			-0.03	0.001	0.001
	FR1 n12	15M	BPSK	36	22	Bottom Edge	10mm	Ant2	ECI 5	-	141500	707.5	1	22.35	23.20	1.216			-0.07	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Front	10mm	Ant0	ECI 5	-	166300	831.5	1	24.43	25.70	1.34			0.18	0.169	0.226
	FR1 n26	20M	BPSK	50	28	Front	10mm	Ant0	ECI 5	-	166300	831.5	1	24.33	25.70	1.371			0.15	0.172	0.236
	FR1 n26	20M	BPSK	1	1	Back	10mm	Ant0	ECI 5	-	166300	831.5	1	24.43	25.70	1.34			-0.08	0.221	0.296
	FR1 n26	20M	BPSK	50	28	Back	10mm	Ant0	ECI 5	-	166300	831.5	1	24.33	25.70	1.371			0.14	0.214	0.293
	FR1 n26	20M	BPSK	1	1	Left Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.43	25.70	1.34			-0.13	0.119	0.159
	FR1 n26	20M	BPSK	50	28	Left Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.33	25.70	1.371			0.12	0.112	0.154
	FR1 n26	20M	BPSK	1	1	Right Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.43	25.70	1.34			-0.03	0.298	0.399
	FR1 n26	20M	BPSK	50	28	Right Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.33	25.70	1.371			-0.04	0.284	0.389
	FR1 n26	20M	BPSK	1	1	Top Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.43	25.70	1.34			0.01	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Top Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.33	25.70	1.371			-0.10	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Bottom Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.43	25.70	1.34			0.06	0.095	0.127
	FR1 n26	20M	BPSK	50	28	Bottom Edge	10mm	Ant0	ECI 5	-	166300	831.5	1	24.33	25.70	1.371			0.05	0.081	0.111
	FR1 n26	20M	BPSK	1	1	Front	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.43	25.7	1.34			-0.13	0.165	0.221
	FR1 n26	20M	BPSK	50	28	Front	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.33	25.7	1.371			0.06	0.192	0.263
	FR1 n26	20M	BPSK	1	1	Back	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.43	25.7	1.34			-0.03	0.249	0.334
	FR1 n26	20M	BPSK	50	28	Back	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.33	25.7	1.371			-0.03	0.278	0.381
	FR1 n26	20M	BPSK	1	1	Left Edge	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.43	25.7	1.34			0.08	0.12	0.161
	FR1 n26	20M	BPSK	50	28	Left Edge	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.33	25.7	1.371			-0.07	0.138	0.189
	FR1 n26	20M	BPSK	1	1	Right Edge	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.43	25.7	1.34			0.05	0.258	0.346
	FR1 n26	20M	BPSK	50	28	Right Edge	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.33	25.7	1.371			-0.11	0.277	0.38
	FR1 n26	20M	BPSK	1	1	Top Edge	10mm	Ant0	ECI 5	code 96	166300	831.5	1	24.43	25.7	1.34					



FCC SAR Test Report

Report No. : FA562503

	FR1 n26	20M	BPSK	1	1	Front	10mm	Ant2	ECI 5	-	166300	831.5	1	23.84	25.20	1.368			0.01	0.154	0.211
	FR1 n26	20M	BPSK	50	28	Front	10mm	Ant2	ECI 5	-	166300	831.5	1	23.81	25.20	1.377			0.12	0.091	0.125
	FR1 n26	20M	BPSK	1	1	Back	10mm	Ant2	ECI 5	-	166300	831.5	1	23.84	25.20	1.368			-0.12	0.210	0.287
	FR1 n26	20M	BPSK	50	28	Back	10mm	Ant2	ECI 5	-	166300	831.5	1	23.81	25.20	1.377			0.19	0.186	0.256
45	FR1 n26	20M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.84	25.20	1.368			0.08	0.297	0.406
	FR1 n26	20M	BPSK	50	28	Left Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.81	25.20	1.377			-0.05	0.079	0.109
	FR1 n26	20M	BPSK	1	1	Right Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.84	25.20	1.368			-0.08	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Right Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.81	25.20	1.377			-0.02	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Top Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.84	25.20	1.368			-0.02	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Top Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.81	25.20	1.377			-0.15	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Bottom Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.84	25.20	1.368			-0.06	0.001	0.001
	FR1 n26	20M	BPSK	50	28	Bottom Edge	10mm	Ant2	ECI 5	-	166300	831.5	1	23.81	25.20	1.377			0.13	0.001	0.001
	FR1 n26	20M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	code D2	166300	831.5	1	23.84	25.2	1.368			-0.15	0.186	0.254
	FR1 n66	45M	BPSK	1	1	Front	10mm	Ant1	ECI 5	-	349000	1745	1	19.89	20.70	1.205			-0.01	0.172	0.207
	FR1 n66	45M	BPSK	120	60	Front	10mm	Ant1	ECI 5	-	349000	1745	1	19.86	20.70	1.213			-0.10	0.190	0.230
	FR1 n66	45M	BPSK	1	1	Back	10mm	Ant1	ECI 5	-	349000	1745	1	19.89	20.70	1.205			-0.06	0.239	0.288
	FR1 n66	45M	BPSK	120	60	Back	10mm	Ant1	ECI 5	-	349000	1745	1	19.86	20.70	1.213			0.01	0.246	0.298
	FR1 n66	45M	BPSK	1	1	Left Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.89	20.70	1.205			0.12	0.058	0.070
	FR1 n66	45M	BPSK	120	60	Left Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.86	20.70	1.213			-0.05	0.060	0.073
	FR1 n66	45M	BPSK	1	1	Right Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.89	20.70	1.205			0.01	0.001	0.001
	FR1 n66	45M	BPSK	120	60	Right Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.86	20.70	1.213			-0.09	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Top Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.89	20.70	1.205			-0.17	0.001	0.001
	FR1 n66	45M	BPSK	120	60	Top Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.86	20.70	1.213			-0.11	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Bottom Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.89	20.70	1.205			-0.01	0.332	0.400
	FR1 n66	45M	BPSK	120	60	Bottom Edge	10mm	Ant1	ECI 5	-	349000	1745	1	19.86	20.70	1.213			-0.07	0.324	0.393
	FR1 n66	45M	BPSK	1	1	Front	10mm	Ant5	ECI 5	-	349000	1745	1	18.73	19.70	1.25			0.07	0.203	0.254
	FR1 n66	45M	BPSK	120	60	Front	10mm	Ant5	ECI 5	-	349000	1745	1	18.71	19.70	1.256			0.14	0.126	0.158
46	FR1 n66	45M	BPSK	1	1	Back	10mm	Ant5	ECI 5	-	349000	1745	1	18.73	19.70	1.25			-0.12	0.337	0.421
	FR1 n66	45M	BPSK	120	60	Back	10mm	Ant5	ECI 5	-	349000	1745	1	18.71	19.70	1.256			0.05	0.291	0.365
	FR1 n66	45M	BPSK	1	1	Left Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.73	19.70	1.25			0.01	0.052	0.065
	FR1 n66	45M	BPSK	120	60	Left Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.71	19.70	1.256			0.13	0.063	0.079
	FR1 n66	45M	BPSK	1	1	Right Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.73	19.70	1.25			0.02	0.001	0.001
	FR1 n66	45M	BPSK	120	60	Right Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.71	19.70	1.256			-0.05	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Top Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.73	19.70	1.25			-0.11	0.295	0.369
	FR1 n66	45M	BPSK	120	60	Top Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.71	19.70	1.256			-0.07	0.326	0.409
	FR1 n66	45M	BPSK	1	1	Bottom Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.73	19.70	1.25			-0.04	0.001	0.001
	FR1 n66	45M	BPSK	120	60	Bottom Edge	10mm	Ant5	ECI 5	-	349000	1745	1	18.71	19.70	1.256			-0.06	0.001	0.001
	FR1 n66	45M	BPSK	1	1	Back	10mm	Ant5	ECI 5	code 04	349000	1745	1	18.73	19.7	1.25			0.09	0.07	0.088
	FR1 n41	100M	BPSK	1	1	Front	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.57	21.20	1.156			0.03	0.152	0.176
	FR1 n41	100M	BPSK	135	69	Front	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.55	21.20	1.161			-0.09	0.165	0.192
	FR1 n41	100M	BPSK	1	1	Back	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.57	21.20	1.156			0.13	0.227	0.262
	FR1 n41	100M	BPSK	135	69	Back	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.55	21.20	1.161			0.09	0.230	0.267
	FR1 n41	100M	BPSK	1	1	Left Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.57	21.20	1.156			-0.05	0.059	0.068
	FR1 n41	100M	BPSK	135	69	Left Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.55	21.20	1.161			0.07	0.057	0.066
	FR1 n41	100M	BPSK	1	1	Right Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.57	21.20	1.156			0.03	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Right Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.55	21.20	1.161			-0.02	0.042	0.049
	FR1 n41	100M	BPSK	1	1	Top Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.57	21.20	1.156			-0.04	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Top Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.55	21.20	1.161			0.02	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Bottom Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.57	21.20	1.156			0.09	0.231	0.267
	FR1 n41	100M	BPSK	135	69	Bottom Edge	10mm	Ant1	ECI 5	-	518598	2592.99	1	20.55	21.20	1.161			-0.00	0.231	0.268
	FR1 n41	100M	BPSK	1	1	Front	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.89	17.70	1.205			0.08	0.250	0.301
	FR1 n41	100M	BPSK	135	69	Front	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.86	17.70	1.213			0.01	0.246	0.298
	FR1 n41	100M	BPSK	1	1	Back	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.89	17.70	1.205			0.03	0.375	0.452
	FR1 n41	100M	BPSK	135	69	Back	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.86	17.70	1.213			-0.08	0.355	0.431
	FR1 n41	100M	BPSK	1	1	Left Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.89	17.70	1.205			-0.08	0.138	0.166
	FR1 n41	100M	BPSK	135	69	Left Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.86	17.70	1.213			0.10	0.130	0.158
	FR1 n41	100M	BPSK	1	1	Right Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.89	17.70	1.205			-0.18	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Right Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.86	17.70	1.213			0.10	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Top Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.89	17.70	1.205			0.12	0.379	0.457
	FR1 n41	100M	BPSK	135	69	Top Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.86	17.70	1.213			0.08	0.390	0.473
	FR1 n41	100M	BPSK	1	1	Bottom Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.89	17.70	1.205			-0.17	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Bottom Edge	10mm	Ant5	ECI 5	-	518598	2592.99	1	16.86	17.70	1.213			-0.03	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Front	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.60	19.00	1.38			0.19	0.237	0.327
	FR1 n41	100M	BPSK	135	69	Front	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.57	19.00	1.39			-0.06	0.168	0.234
	FR1 n41	100M	BPSK	1	1	Back	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.60	19.00	1.38			-0.09	0.328	0.453
	FR1 n41	100M	BPSK	135	69	Back	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.57	19.00	1.39			0.11	0.222	0.309
47	FR1 n41	100M	BPSK	1	1	Left Edge	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.60	19.00	1.38			0.03	0.444	0.613
	FR1 n41	100M	BPSK	135	69	Left Edge	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.57	19.00	1.39			-0.15	0.298	0.414
	FR1 n41	100M	BPSK	1	1	Right Edge	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.60	19.00	1.38			-0.15	0.001	0.001
	FR1 n41	100M	BPSK																		



FCC SAR Test Report

Report No. : FA562503

	FR1 n41	100M	BPSK	135	69	Bottom Edge	10mm	Ant3	ECI 5	-	518598	2592.99	1	17.57	19.00	1.39			0.02	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Front	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.48	18.50	1.265			-0.06	0.106	0.134
	FR1 n41	100M	BPSK	135	69	Front	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.46	18.50	1.271			-0.09	0.110	0.140
	FR1 n41	100M	BPSK	1	1	Back	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.48	18.50	1.265			0.10	0.166	0.210
	FR1 n41	100M	BPSK	135	69	Back	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.46	18.50	1.271			0.12	0.195	0.248
	FR1 n41	100M	BPSK	1	1	Left Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.48	18.50	1.265			0.09	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Left Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.46	18.50	1.271			0.00	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Right Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.48	18.50	1.265			0.16	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Right Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.46	18.50	1.271			-0.05	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.48	18.50	1.265			-0.08	0.177	0.224
	FR1 n41	100M	BPSK	135	69	Top Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.46	18.50	1.271			-0.09	0.197	0.250
	FR1 n41	100M	BPSK	1	1	Bottom Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.48	18.50	1.265			0.07	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Bottom Edge	10mm	Ant6	ECI 5	-	518598	2592.99	1	17.46	18.50	1.271			0.07	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Front	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.58	23.00	1.387			-0.11	0.058	0.080
	FR1 n41	100M	BPSK	135	69	Front	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.44	23.00	1.432			0.05	0.062	0.089
	FR1 n41	100M	BPSK	1	1	Back	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.58	23.00	1.387			-0.02	0.084	0.117
	FR1 n41	100M	BPSK	135	69	Back	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.44	23.00	1.432			-0.09	0.079	0.113
	FR1 n41	100M	BPSK	1	1	Left Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.58	23.00	1.387			0.11	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Left Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.44	23.00	1.432			-0.06	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Right Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.58	23.00	1.387			-0.15	0.079	0.110
	FR1 n41	100M	BPSK	135	69	Right Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.44	23.00	1.432			0.05	0.077	0.110
	FR1 n41	100M	BPSK	1	1	Top Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.58	23.00	1.387			0.12	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Top Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.44	23.00	1.432			0.13	0.001	0.001
	FR1 n41	100M	BPSK	1	1	Bottom Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.58	23.00	1.387			0.05	0.001	0.001
	FR1 n41	100M	BPSK	135	69	Bottom Edge	10mm	Ant10	ECI 5	-	518598	2592.99	1	21.44	23.00	1.432			0.10	0.001	0.001
	FR1 n48	40M	BPSK	1	1	Front	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.89	17.70	1.205			0.07	0.147	0.177
	FR1 n48	40M	BPSK	50	28	Front	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.86	17.70	1.213			-0.18	0.151	0.183
	FR1 n48	40M	BPSK	1	1	Back	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.89	17.70	1.205			-0.17	0.234	0.282
	FR1 n48	40M	BPSK	50	28	Back	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.86	17.70	1.213			-0.02	0.257	0.312
48	FR1 n48	40M	BPSK	1	1	Left Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.89	17.70	1.205			0.09	0.456	0.549
	FR1 n48	40M	BPSK	50	28	Left Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.86	17.70	1.213			-0.07	0.436	0.529
	FR1 n48	40M	BPSK	1	1	Right Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.89	17.70	1.205			-0.13	0.001	0.001
	FR1 n48	40M	BPSK	50	28	Right Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.86	17.70	1.213			0.17	0.001	0.001
	FR1 n48	40M	BPSK	1	1	Top Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.89	17.70	1.205			0.07	0.151	0.182
	FR1 n48	40M	BPSK	50	28	Top Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.86	17.70	1.213			-0.01	0.137	0.166
	FR1 n48	40M	BPSK	1	1	Bottom Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.89	17.70	1.205			-0.08	0.034	0.041
	FR1 n48	40M	BPSK	50	28	Bottom Edge	10mm	Ant4	ECI 5	-	641666	3624.99	1	16.86	17.70	1.213			-0.04	0.041	0.050
	FR1 n48	40M	BPSK	1	1	Front	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.38	20.70	1.355			-0.14	0.159	0.215
	FR1 n48	40M	BPSK	50	28	Front	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.36	20.70	1.361			0.12	0.174	0.237
	FR1 n48	40M	BPSK	1	1	Back	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.38	20.70	1.355			0.16	0.284	0.385
	FR1 n48	40M	BPSK	50	28	Back	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.36	20.70	1.361			-0.05	0.251	0.342
	FR1 n48	40M	BPSK	1	1	Left Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.38	20.70	1.355			0.05	0.060	0.081
	FR1 n48	40M	BPSK	50	28	Left Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.36	20.70	1.361			0.16	0.068	0.093
	FR1 n48	40M	BPSK	1	1	Right Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.38	20.70	1.355			-0.04	0.056	0.076
	FR1 n48	40M	BPSK	50	28	Right Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.36	20.70	1.361			-0.12	0.052	0.071
	FR1 n48	40M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.38	20.70	1.355			-0.01	0.323	0.438
	FR1 n48	40M	BPSK	50	28	Top Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.36	20.70	1.361			0.03	0.328	0.446
	FR1 n48	40M	BPSK	1	1	Bottom Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.38	20.70	1.355			0.04	0.001	0.001
	FR1 n48	40M	BPSK	50	28	Bottom Edge	10mm	Ant6	ECI 5	-	641666	3624.99	1	19.36	20.70	1.361			-0.17	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.10	22.50	1.38			-0.08	0.083	0.115
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.08	22.50	1.387			0.13	0.079	0.110
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.10	22.50	1.38			0.04	0.115	0.159
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.08	22.50	1.387			0.12	0.093	0.129
	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.10	22.50	1.38			0.04	0.167	0.230
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.08	22.50	1.387			0.01	0.138	0.191
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.10	22.50	1.38			-0.09	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.08	22.50	1.387			-0.07	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.10	22.50	1.38			-0.08	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.08	22.50	1.387			0.18	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.10	22.50	1.38			-0.08	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	21.08	22.50	1.387			0.13	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	-	633332	3499.98	1	24.20	25.50	1.349	50.0	1.0	0.03	0.159	0.214
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.68	16.50	1.208			-0.01	0.095	0.115
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.65	16.50	1.216			-0.10	0.092	0.112
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.68	16.50	1.208			0.14	0.158	0.191
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.65	16.50	1.216			-0.13	0.143	0.174
	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.68	16.50	1.208			-0.05	0.267	0.323
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.65	16.50	1.216			0.03	0.269	0.327
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant4	ECI 5	-</											



FCC SAR Test Report

Report No. : FA562503

	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant4	ECI 5	-	633332	3499.98	1	15.65	16.50	1.216			0.10	0.024	0.029
	FR1 n77 HPUE	100M	BPSK	1	1	Left Edge	10mm	Ant4	ECI 5	-	633332	3499.98	1	18.69	19.50	1.205	50.0	1.0	-0.16	0.251	0.302
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.68	21.00	1.355			-0.02	0.105	0.142
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.67	21.00	1.358			0.12	0.103	0.140
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.68	21.00	1.355			-0.00	0.172	0.233
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.67	21.00	1.358			0.04	0.177	0.240
	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.68	21.00	1.355			-0.10	0.047	0.064
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.67	21.00	1.358			0.16	0.043	0.058
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.68	21.00	1.355			0.14	0.042	0.057
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.67	21.00	1.358			-0.17	0.034	0.046
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.68	21.00	1.355			-0.02	0.215	0.291
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.67	21.00	1.358			0.08	0.221	0.300
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.68	21.00	1.355			0.02	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	19.67	21.00	1.358			0.07	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	633332	3499.98	1	22.64	24.00	1.368	50.0	1.0	0.03	0.218	0.298
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.04	16.50	1.4			0.12	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.02	16.50	1.406			-0.14	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.04	16.50	1.4			-0.02	0.117	0.164
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.02	16.50	1.406			-0.00	0.111	0.156
	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.04	16.50	1.4			-0.13	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.02	16.50	1.406			-0.05	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.04	16.50	1.4			0.02	0.061	0.085
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.02	16.50	1.406			-0.19	0.060	0.084
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.04	16.50	1.4			0.00	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.02	16.50	1.406			0.08	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.04	16.50	1.4			0.15	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant11	ECI 5	-	633332	3499.98	1	15.02	16.50	1.406			0.11	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Back	10mm	Ant11	ECI 5	-	633332	3499.98	1	18.02	19.50	1.406	50.0	1.0	-0.14	0.106	0.149
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant2	ECI 5	-	656000	3840	1	20.96	22.50	1.426			0.10	0.062	0.088
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant2	ECI 5	-	656000	3840	1	20.90	22.50	1.445			0.09	0.053	0.077
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant2	ECI 5	-	656000	3840	1	20.96	22.50	1.426			0.19	0.083	0.118
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant2	ECI 5	-	656000	3840	1	20.90	22.50	1.445			-0.14	0.074	0.107
	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.96	22.50	1.426			-0.14	0.132	0.188
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.90	22.50	1.445			0.06	0.107	0.155
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.96	22.50	1.426			0.01	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.90	22.50	1.445			0.06	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.96	22.50	1.426			0.07	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.90	22.50	1.445			-0.04	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.96	22.50	1.426			-0.11	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant2	ECI 5	-	656000	3840	1	20.90	22.50	1.445			-0.07	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Left Edge	10mm	Ant2	ECI 5	-	656000	3840	1	24.01	25.50	1.409	50.0	1.0	0.09	0.140	0.197
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant4	ECI 5	-	656000	3840	1	15.27	16.50	1.327			-0.10	0.111	0.147
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant4	ECI 5	-	656000	3840	1	15.25	16.50	1.334			-0.08	0.103	0.137
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant4	ECI 5	-	656000	3840	1	15.27	16.50	1.327			-0.03	0.161	0.214
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant4	ECI 5	-	656000	3840	1	15.25	16.50	1.334			0.14	0.173	0.231
49	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.27	16.50	1.327			-0.01	0.336	0.446
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.25	16.50	1.334			-0.16	0.298	0.398
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.27	16.50	1.327			0.07	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.25	16.50	1.334			-0.00	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.27	16.50	1.327			-0.14	0.070	0.093
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.25	16.50	1.334			0.10	0.059	0.079
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.27	16.50	1.327			-0.13	0.036	0.048
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant4	ECI 5	-	656000	3840	1	15.25	16.50	1.334			0.19	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Left Edge	10mm	Ant4	ECI 5	-	656000	3840	1	18.31	19.50	1.315	50.0	1.0	0.05	0.321	0.422
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant6	ECI 5	-	656000	3840	1	19.80	21.00	1.318			0.00	0.096	0.127
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant6	ECI 5	-	656000	3840	1	19.75	21.00	1.334			0.05	0.115	0.153
	FR1 n77	100M	BPSK	1	1	Back	10mm	Ant6	ECI 5	-	656000	3840	1	19.80	21.00	1.318			0.14	0.166	0.219
	FR1 n77	100M	BPSK	135	69	Back	10mm	Ant6	ECI 5	-	656000	3840	1	19.75	21.00	1.334			-0.15	0.195	0.260
	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.80	21.00	1.318			-0.16	0.043	0.057
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.75	21.00	1.334			-0.18	0.051	0.068
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.80	21.00	1.318			-0.18	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.75	21.00	1.334			0.01	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.80	21.00	1.318			-0.13	0.193	0.254
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.75	21.00	1.334			-0.05	0.235	0.313
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.80	21.00	1.318			0.12	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant6	ECI 5	-	656000	3840	1	19.75	21.00	1.334			-0.15	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Top Edge	10mm	Ant6	ECI 5	-	656000	3840	1	22.81	24.00	1.315	50.0	1.0	0.03	0.224	0.295
	FR1 n77	100M	BPSK	1	1	Front	10mm	Ant11	ECI 5	-	656000	3840	1	15.08	16.50	1.387			-0.15	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Front	10mm	Ant11	ECI 5	-	656000	3840	1	15.07</							



FCC SAR Test Report

Report No. : FA562503

	FR1 n77	100M	BPSK	1	1	Left Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.08	16.50	1.387			-0.18	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Left Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.07	16.50	1.39			0.11	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Right Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.08	16.50	1.387			-0.15	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Right Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.07	16.50	1.39			-0.12	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Top Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.08	16.50	1.387			0.17	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Top Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.07	16.50	1.39			-0.17	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Bottom Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.08	16.50	1.387			-0.18	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Bottom Edge	10mm	Ant11	ECI 5	-	656000	3840	1	15.07	16.50	1.39			-0.16	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Back	10mm	Ant11	ECI 5	-	656000	3840	1	18.11	19.50	1.377	50.0	1.0	0.15	0.039	0.054

【WLAN2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.18	0.168	0.244
50	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	-0.03	0.341	0.495
	WLAN2.4GHz	802.11b 1Mbps	Left Edge	10mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.10	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Edge	10mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	-0.12	0.280	0.407
	WLAN2.4GHz	802.11b 1Mbps	Top Edge	10mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.07	0.226	0.328
	WLAN2.4GHz	802.11b 1Mbps	Bottom Edge	10mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	-0.11	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant9	Receiver off	44	5220	1	17.35	18.50	1.303	96.5	1.036	-0.10	0.155	0.209
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant9	Receiver off	44	5220	1	17.35	18.50	1.303	96.5	1.036	-0.02	0.199	0.269
	WLAN5GHz	802.11a 6Mbps	Left Edge	10mm	Ant9	Receiver off	44	5220	1	17.35	18.50	1.303	96.5	1.036	-0.03	0.043	0.058
51	WLAN5GHz	802.11a 6Mbps	Right Edge	10mm	Ant9	Receiver off	44	5220	1	17.35	18.50	1.303	96.5	1.036	-0.05	0.303	0.409
	WLAN5GHz	802.11a 6Mbps	Top Edge	10mm	Ant9	Receiver off	44	5220	1	17.35	18.50	1.303	96.5	1.036	-0.11	0.083	0.112
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	10mm	Ant9	Receiver off	44	5220	1	17.35	18.50	1.303	96.5	1.036	-0.11	0.070	0.094
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	0.14	0.178	0.256
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	0.15	0.199	0.287
	WLAN5GHz	802.11a 6Mbps	Left Edge	10mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	-0.11	0.059	0.085
52	WLAN5GHz	802.11a 6Mbps	Right Edge	10mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	-0.06	0.378	0.544
	WLAN5GHz	802.11a 6Mbps	Top Edge	10mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	0.16	0.110	0.158
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	10mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	-0.07	0.040	0.058

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	Bluetooth	1Mbps	Front	10mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	0.05	0.001	0.002
53	Bluetooth	1Mbps	Back	10mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.04	0.057	0.092
	Bluetooth	1Mbps	Left Edge	10mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.02	0.001	0.002
	Bluetooth	1Mbps	Right Edge	10mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.13	0.039	0.063
	Bluetooth	1Mbps	Top Edge	10mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	0.04	0.001	0.002
	Bluetooth	1Mbps	Bottom Edge	10mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.09	0.001	0.002



15.3 Body Worn Accessory SAR

【GSM SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 4 Tx slots	Front	5mm	Ant0	ECI 3	-	189	836.4	1	26.44	27.50	1.276	0.10	0.280	0.357
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant0	ECI 3	-	189	836.4	1	26.44	27.50	1.276	-0.02	0.413	0.527
	GSM850	GPRS 4 Tx slots	Front	5mm	Ant0	ECI 3	code 96	189	836.4	1	26.44	27.5	1.276	0.14	0.262	0.334
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant0	ECI 3	code 96	189	836.4	1	26.44	27.5	1.276	0.15	0.402	0.513
	GSM850	GPRS 4 Tx slots	Front	5mm	Ant2	ECI 3	-	189	836.4	1	26.40	27.50	1.288	-0.01	0.479	0.617
54	GSM850	GPRS 4 Tx slots	Back	5mm	Ant2	ECI 3	-	189	836.4	1	26.40	27.50	1.288	-0.12	0.734	0.945
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant2	ECI 3	-	128	824.2	1	26.27	27.50	1.327	0.03	0.712	0.945
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant2	ECI 3	-	251	848.8	1	26.35	27.50	1.303	-0.04	0.709	0.924
	GSM850	GPRS 4 Tx slots	Back	5mm	Ant2	ECI 3	code D2	189	836.4	1	26.4	27.5	1.288	-0.09	0.143	0.184
	GSM1900	GPRS 4 Tx slots	Front	5mm	Ant1	ECI 3	-	661	1880	1	21.67	22.50	1.211	-0.09	0.512	0.620
55	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant1	ECI 3	-	661	1880	1	21.67	22.50	1.211	-0.05	0.741	0.897
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant1	ECI 3	-	512	1850.2	1	21.63	22.50	1.222	0.13	0.721	0.881
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant1	ECI 3	-	810	1909.8	1	21.58	22.50	1.236	0.06	0.642	0.794
	GSM1900	GPRS 4 Tx slots	Front	15mm	Ant1	ECI 4	-	661	1880	1	23.51	24.50	1.256	0.02	0.080	0.100
	GSM1900	GPRS 4 Tx slots	Back	15mm	Ant1	ECI 4	-	661	1880	1	23.51	24.50	1.256	-0.02	0.108	0.136
	GSM1900	GPRS 4 Tx slots	Front	5mm	Ant5	ECI 3	-	661	1880	1	22.27	23.00	1.183	-0.10	0.430	0.509
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant5	ECI 3	-	661	1880	1	22.27	23.00	1.183	-0.05	0.741	0.877
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant5	ECI 3	-	512	1850.2	1	22.26	23.00	1.186	0.09	0.729	0.865
	GSM1900	GPRS 4 Tx slots	Back	5mm	Ant5	ECI 3	-	810	1909.8	1	22.25	23.00	1.189	0.08	0.726	0.863
	GSM1900	GPRS 4 Tx slots	Front	8mm	Ant5	ECI 4	-	661	1880	1	23.82	24.50	1.169	0.02	0.319	0.373
	GSM1900	GPRS 4 Tx slots	Back	14mm	Ant5	ECI 4	-	661	1880	1	23.82	24.50	1.169	-0.16	0.192	0.224

【WCDMA SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II	RMC 12.2Kbps	Front	5mm	Ant1	ECI 3	-	9400	1880	1	19.93	20.50	1.14	-0.07	0.424	0.483
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant1	ECI 3	-	9400	1880	1	19.93	20.50	1.14	-0.03	0.617	0.703
	WCDMA II	RMC 12.2Kbps	Front	15mm	Ant1	ECI 4	-	9400	1880	1	24.43	25.00	1.14	0.05	0.249	0.284
	WCDMA II	RMC 12.2Kbps	Back	15mm	Ant1	ECI 4	-	9400	1880	1	24.43	25.00	1.14	-0.14	0.313	0.357
	WCDMA II	RMC 12.2Kbps	Front	5mm	Ant5	ECI 3	-	9400	1880	1	18.58	19.00	1.102	-0.13	0.345	0.380
	WCDMA II	RMC 12.2Kbps	Back	5mm	Ant5	ECI 3	-	9400	1880	1	18.58	19.00	1.102	-0.05	0.677	0.746
56	WCDMA II	RMC 12.2Kbps	Front	8mm	Ant5	ECI 4	-	9400	1880	1	24.12	24.50	1.091	-0.02	0.766	0.836
	WCDMA II	RMC 12.2Kbps	Front	8mm	Ant5	ECI 4	-	9262	1852.4	1	24.09	24.50	1.099	-0.04	0.751	0.825
	WCDMA II	RMC 12.2Kbps	Front	8mm	Ant5	ECI 4	-	9538	1907.6	1	23.80	24.50	1.175	-0.04	0.706	0.830
	WCDMA II	RMC 12.2Kbps	Back	14mm	Ant5	ECI 4	-	9400	1880	1	24.12	24.50	1.091	-0.17	0.499	0.544
	WCDMA IV	RMC 12.2Kbps	Front	5mm	Ant1	ECI 3	-	1413	1732.6	1	19.77	20.50	1.183	-0.14	0.531	0.628
57	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant1	ECI 3	-	1413	1732.6	1	19.77	20.50	1.183	-0.06	0.661	0.782
	WCDMA IV	RMC 12.2Kbps	Front	15mm	Ant1	ECI 4	-	1413	1732.6	1	24.27	25.00	1.183	0.14	0.280	0.331
	WCDMA IV	RMC 12.2Kbps	Back	15mm	Ant1	ECI 4	-	1413	1732.6	1	24.27	25.00	1.183	0.02	0.349	0.413
	WCDMA IV	RMC 12.2Kbps	Front	5mm	Ant5	ECI 3	-	1413	1732.6	1	19.58	20.00	1.102	0.12	0.267	0.294
	WCDMA IV	RMC 12.2Kbps	Back	5mm	Ant5	ECI 3	-	1413	1732.6	1	19.58	20.00	1.102	-0.04	0.515	0.568
	WCDMA IV	RMC 12.2Kbps	Front	8mm	Ant5	ECI 4	-	1413	1732.6	1	24.58	25.00	1.102	-0.17	0.501	0.552
	WCDMA IV	RMC 12.2Kbps	Back	14mm	Ant5	ECI 4	-	1413	1732.6	1	24.58	25.00	1.102	0.11	0.272	0.300
	WCDMA V	RMC 12.2Kbps	Front	5mm	Ant0	ECI 3	-	4182	836.4	1	24.14	25.00	1.219	-0.18	0.361	0.440
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant0	ECI 3	-	4182	836.4	1	24.14	25.00	1.219	-0.07	0.578	0.705
	WCDMA V	RMC 12.2Kbps	Front	5mm	Ant2	ECI 3	-	4182	836.4	1	23.07	24.00	1.239	0.13	0.626	0.776
58	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant2	ECI 3	-	4182	836.4	1	23.07	24.00	1.239	-0.16	0.862	1.068
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant2	ECI 3	-	4132	826.4	1	22.91	24.00	1.285	0.03	0.821	1.055
	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant2	ECI 3	-	4233	846.6	1	23.01	24.00	1.256	-0.07	0.837	1.051



【LTE SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	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)
	LTE Band 2	20M	QPSK	1	0	Front	5mm	Ant1	ECI 3	-	18900	1880	1	18.53	19.50	1.25			0.01	0.333	0.416
	LTE Band 2	20M	QPSK	50	0	Front	5mm	Ant1	ECI 3	-	18900	1880	1	18.51	19.50	1.256			-0.04	0.325	0.408
	LTE Band 2	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	18900	1880	1	18.53	19.50	1.25			-0.07	0.437	0.546
	LTE Band 2	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	18900	1880	1	18.51	19.50	1.256			-0.03	0.439	0.551
	LTE Band 2	20M	QPSK	1	0	Front	15mm	Ant1	ECI 4	-	18900	1880	1	24.35	25.50	1.303			0.06	0.207	0.270
	LTE Band 2	20M	QPSK	1	0	Back	15mm	Ant1	ECI 4	-	18900	1880	1	24.35	25.50	1.303			0.14	0.316	0.412
	LTE Band 2	20M	QPSK	1	0	Front	5mm	Ant5	ECI 3	-	18900	1880	1	18.78	19.50	1.18			0.05	0.383	0.452
	LTE Band 2	20M	QPSK	50	0	Front	5mm	Ant5	ECI 3	-	18900	1880	1	18.71	19.50	1.199			-0.17	0.456	0.547
	LTE Band 2	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	18900	1880	1	18.78	19.50	1.18			0.15	0.773	0.912
	LTE Band 2	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	18700	1860	1	18.73	19.50	1.194			-0.04	0.704	0.841
	LTE Band 2	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	19100	1900	1	18.75	19.50	1.189			-0.03	0.727	0.864
	LTE Band 2	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	18900	1880	1	18.71	19.50	1.199			-0.06	0.778	0.933
	LTE Band 2	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	18700	1860	1	18.59	19.50	1.233			-0.01	0.702	0.866
	LTE Band 2	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	19100	1900	1	18.66	19.50	1.213			-0.10	0.728	0.883
	LTE Band 2	20M	QPSK	100	0	Back	5mm	Ant5	ECI 3	-	18900	1880	1	18.63	19.50	1.222			-0.11	0.762	0.931
	LTE Band 2	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	18900	1880	1	24.27	25.00	1.183			-0.09	0.744	0.880
	LTE Band 2	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	18700	1860	1	24.18	25.00	1.208			0.06	0.723	0.873
59	LTE Band 2	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	19100	1900	1	24.25	25.00	1.189			0.02	0.803	0.955
	LTE Band 2	20M	QPSK	50	0	Front	8mm	Ant5	ECI 4	-	18900	1880	1	23.76	24.50	1.186			-0.01	0.718	0.852
	LTE Band 2	20M	QPSK	50	0	Front	8mm	Ant5	ECI 4	-	18700	1860	1	23.65	24.50	1.216			0.00	0.661	0.804
	LTE Band 2	20M	QPSK	50	0	Front	8mm	Ant5	ECI 4	-	19100	1900	1	23.73	24.50	1.194			-0.10	0.720	0.860
	LTE Band 2	20M	QPSK	100	0	Front	8mm	Ant5	ECI 4	-	19100	1900	1	23.74	24.50	1.191			-0.08	0.713	0.849
	LTE Band 2	20M	QPSK	1	0	Back	14mm	Ant5	ECI 4	-	18900	1880	1	24.27	25.00	1.183			-0.15	0.455	0.538
	LTE Band 2	20M	QPSK	1	0	Front	5mm	Ant3	ECI 3	-	18900	1880	1	17.65	19.00	1.365			0.17	0.220	0.300
	LTE Band 2	20M	QPSK	50	0	Front	5mm	Ant3	ECI 3	-	18900	1880	1	17.62	19.00	1.374			-0.14	0.211	0.290
	LTE Band 2	20M	QPSK	1	0	Back	5mm	Ant3	ECI 3	-	18900	1880	1	17.65	19.00	1.365			-0.07	0.371	0.506
	LTE Band 2	20M	QPSK	50	0	Back	5mm	Ant3	ECI 3	-	18900	1880	1	17.62	19.00	1.374			0.16	0.307	0.422
	LTE Band 2	20M	QPSK	1	0	Front	8mm	Ant3	ECI 4	-	18900	1880	1	23.58	25.00	1.387			-0.17	0.413	0.573
	LTE Band 2	20M	QPSK	1	0	Back	14mm	Ant3	ECI 4	-	18900	1880	1	23.58	25.00	1.387			0.01	0.319	0.442
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant1	ECI 3	-	21100	2535	1	21.34	22.00	1.164			0.06	0.492	0.573
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant1	ECI 3	-	21100	2535	1	21.33	22.00	1.167			-0.15	0.485	0.566
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	21100	2535	1	21.34	22.00	1.164			-0.18	0.698	0.812
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	20850	2510	1	21.29	22.00	1.178			-0.12	0.677	0.798
60	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	21350	2560	1	21.11	22.00	1.227			-0.02	0.671	0.823
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	21100	2535	1	21.33	22.00	1.167			-0.03	0.667	0.778
	LTE Band 7	20M	QPSK	100	0	Back	5mm	Ant1	ECI 3	-	21100	2535	1	21.31	22.00	1.172			-0.14	0.665	0.779
	LTE Band 7 ENDC	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	21350	2560	1	18.71	19.5	1.199			-0.03	0.44	0.528
	LTE Band 7 ENDC	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	21350+	2560+	1	18.64	19.5	1.219			0.14	0.423	0.516
	LTE Band 7C	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	21350+	2540.2	1	21.08	22	1.236			0.08	0.642	0.794
	LTE Band 7	20M	QPSK	1	0	Front	15mm	Ant1	ECI 4	-	21100	2535	1	24.84	25.50	1.164			-0.10	0.207	0.241
	LTE Band 7	20M	QPSK	1	0	Back	15mm	Ant1	ECI 4	-	21100	2535	1	24.84	25.50	1.164			0.16	0.275	0.320
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant5	ECI 3	-	21100	2535	1	17.69	18.50	1.205			0.14	0.375	0.452
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant5	ECI 3	-	21100	2535	1	17.67	18.50	1.211			0.01	0.372	0.450
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	21100	2535	1	17.69	18.50	1.205			0.13	0.626	0.754
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	21100	2535	1	17.67	18.50	1.211			-0.07	0.606	0.734
	LTE Band 7C	20M	QPSK	1	99	Back	5mm	Ant5	ECI 3	-	21100+	2535+	1	17.56	18.5	1.242			0.13	0.587	0.729
	LTE Band 7 ENDC	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	21100	2535	1	14.77	15.5	1.183			-0.17	0.327	0.387
	LTE Band 7 ENDC	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	21100	2535	1	14.72	15.5	1.197			0.17	0.318	0.381
	LTE Band 7	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	21100	2535	1	22.83	23.50	1.167			-0.05	0.587	0.685
	LTE Band 7	20M	QPSK	1	0	Back	14mm	Ant5	ECI 4	-	21100	2535	1	22.83	23.50	1.167			0.14	0.345	0.403
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant3	ECI 3	-	21100	2535	1	15.28	16.50	1.324			-0.02	0.248	0.328
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant3	ECI 3	-	21100	2535	1	15.26	16.50	1.33			0.17	0.230	0.306
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant3	ECI 3	-	21100	2535	1	15.28	16.50	1.324			-0.04	0.387	0.512
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant3	ECI 3	-	21100	2535	1	15.26	16.50	1.33			0.16	0.383	0.509
	LTE Band 7	20M	QPSK	1	0	Front	8mm	Ant3	ECI 4	-	21100	2535	1	23.75	25.00	1.334			-0.11	0.611	0.815
	LTE Band 7	20M	QPSK	1	0	Front	8mm	Ant3	ECI 4	-	20850	2510	1	23.74	25.00	1.337			-0.03	0.603	0.806
	LTE Band 7	20M	QPSK	1	0	Front	8mm	Ant3	ECI 4	-	21350	2560	1	23.70	25.00	1.349			-0.14	0.609	0.822
	LTE Band 7	20M	QPSK	50	0	Front	8mm	Ant3	ECI 4	-	21100	2535	1	22.74	24.00	1.337			0.02	0.596	0.797
	LTE Band 7	20M	QPSK	100	0	Front	8mm	Ant3	ECI 4	-	21100	2535	1	22.71	24.00	1.346			0.06	0.604	0.813
	LTE Band 7	20M	QPSK	1	0	Back	14mm	Ant3	ECI 4	-	21100	2535	1	23.75	25.00	1.334			-0.12	0.393	0.524
	LTE Band 7	20M	QPSK	1	0	Front	5mm	Ant6	ECI 3	-	21100	2535	1	16.76	17.50	1.186			-0.12	0.178	0.211
	LTE Band 7	20M	QPSK	50	0	Front	5mm	Ant6	ECI 3	-	21100	2535	1	16.72	17.50	1.197			-0.00	0.158	0.189
	LTE Band 7	20M	QPSK	1	0	Back	5mm	Ant6	ECI 3	-	21100	2535	1	16.76	17.50	1.186			0.05	0.463	0.549
	LTE Band 7	20M	QPSK	50	0	Back	5mm	Ant6	ECI 3	-	21100	2535	1	16.72	17.50	1.197			0.16	0.403	0.482
	LTE Band 7	20M	QPSK	1	0	Front	8mm	Ant6	ECI 4	-	21100	2535	1	23.44	24.00	1.138			0.10	0.454	0.517



FCC SAR Test Report

Report No. : FA562503

	LTE Band 7	20M	QPSK	1	0	Back	14mm	Ant6	ECI 4	-	21100	2535	1	23.44	24.00	1.138		0.08	0.249	0.283
	LTE Band 12	10M	QPSK	1	0	Front	5mm	Ant0	ECI 3	-	23095	707.5	1	24.43	25.50	1.279		-0.09	0.274	0.350
	LTE Band 12	10M	QPSK	25	0	Front	5mm	Ant0	ECI 3	-	23095	707.5	1	23.32	24.50	1.312		0.13	0.218	0.286
	LTE Band 12	10M	QPSK	1	0	Back	5mm	Ant0	ECI 3	-	23095	707.5	1	24.43	25.50	1.279		-0.07	0.366	0.468
	LTE Band 12	10M	QPSK	25	0	Back	5mm	Ant0	ECI 3	-	23095	707.5	1	23.32	24.50	1.312		-0.17	0.292	0.383
	LTE Band 12	10M	QPSK	1	0	Front	15mm	Ant0	ECI 4	-	23095	707.5	1	24.43	25.50	1.279		0.02	0.138	0.177
	LTE Band 12	10M	QPSK	1	0	Back	15mm	Ant0	ECI 4	-	23095	707.5	1	24.43	25.50	1.279		0.08	0.167	0.214
	LTE Band 12	10M	QPSK	1	0	Front	5mm	Ant2	ECI 3	-	23095	707.5	1	21.94	23.00	1.276		-0.11	0.476	0.607
	LTE Band 12	10M	QPSK	25	0	Front	5mm	Ant2	ECI 3	-	23095	707.5	1	21.87	23.00	1.297		-0.13	0.469	0.608
61	LTE Band 12	10M	QPSK	1	0	Back	5mm	Ant2	ECI 3	-	23095	707.5	1	21.94	23.00	1.276		-0.15	0.774	0.988
	LTE Band 12	10M	QPSK	25	0	Back	5mm	Ant2	ECI 3	-	23095	707.5	1	21.87	23.00	1.297		-0.05	0.728	0.944
	LTE Band 12	10M	QPSK	50	0	Back	5mm	Ant2	ECI 3	-	23095	707.5	1	21.90	23.00	1.288		0.17	0.760	0.979
	LTE Band 12	10M	QPSK	1	0	Front	8mm	Ant2	ECI 4	-	23095	707.5	1	24.47	25.50	1.268		0.02	0.455	0.577
	LTE Band 12	10M	QPSK	1	0	Back	14mm	Ant2	ECI 4	-	23095	707.5	1	24.47	25.50	1.268		-0.07	0.302	0.383
	LTE Band 13	10M	QPSK	1	0	Front	5mm	Ant0	ECI 3	-	23230	782	1	24.33	25.50	1.309		-0.05	0.387	0.507
	LTE Band 13	10M	QPSK	25	0	Front	5mm	Ant0	ECI 3	-	23230	782	1	23.27	24.50	1.327		-0.18	0.306	0.406
	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant0	ECI 3	-	23230	782	1	24.33	25.50	1.309		-0.06	0.453	0.593
	LTE Band 13	10M	QPSK	25	0	Back	5mm	Ant0	ECI 3	-	23230	782	1	23.27	24.50	1.327		-0.10	0.360	0.478
	LTE Band 13	10M	QPSK	1	0	Front	5mm	Ant0	ECI 3	code 3C	23230	782	1	24.33	25.5	1.309		-0.11	0.258	0.338
	LTE Band 13	10M	QPSK	25	0	Front	5mm	Ant0	ECI 3	code 3C	23230	782	1	23.27	24.5	1.327		-0.13	0.198	0.263
	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant0	ECI 3	code 3C	23230	782	1	24.33	25.5	1.309		-0.15	0.35	0.458
	LTE Band 13	10M	QPSK	25	0	Back	5mm	Ant0	ECI 3	code 3C	23230	782	1	23.27	24.5	1.327		-0.05	0.266	0.353
	LTE Band 13	10M	QPSK	1	0	Front	15mm	Ant0	ECI 4	-	23230	782	1	24.33	25.50	1.309		0.04	0.240	0.314
	LTE Band 13	10M	QPSK	1	0	Back	15mm	Ant0	ECI 4	-	23230	782	1	24.33	25.50	1.309		-0.18	0.205	0.268
	LTE Band 13	10M	QPSK	1	0	Front	5mm	Ant2	ECI 3	-	23230	782	1	23.09	24.00	1.233		0.19	0.591	0.729
	LTE Band 13	10M	QPSK	25	0	Front	5mm	Ant2	ECI 3	-	23230	782	1	23.06	24.00	1.242		-0.12	0.571	0.709
62	LTE Band 13	10M	QPSK	1	0	Back	5mm	Ant2	ECI 3	-	23230	782	1	23.09	24.00	1.233		0.09	0.873	1.076
	LTE Band 13	10M	QPSK	25	0	Back	5mm	Ant2	ECI 3	-	23230	782	1	23.06	24.00	1.242		0.17	0.802	0.996
	LTE Band 13	10M	QPSK	50	0	Back	5mm	Ant2	ECI 3	-	23230	782	1	22.99	24.00	1.262		0.03	0.818	1.032
	LTE Band 13	10M	QPSK	1	0	Front	8mm	Ant2	ECI 4	-	23230	782	1	24.55	25.50	1.245		-0.14	0.564	0.702
	LTE Band 13	10M	QPSK	1	0	Back	14mm	Ant2	ECI 4	-	23230	782	1	24.55	25.50	1.245		0.03	0.391	0.487
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant0	ECI 3	-	26865	831.5	1	24.52	25.50	1.253		0.14	0.275	0.345
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant0	ECI 3	-	26865	831.5	1	23.30	24.50	1.318		-0.11	0.264	0.348
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant0	ECI 3	-	26865	831.5	1	24.52	25.50	1.253		-0.07	0.397	0.497
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant0	ECI 3	-	26865	831.5	1	23.30	24.50	1.318		0.03	0.317	0.418
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant0	ECI 3	code 96	26865	831.5	1	24.52	25.5	1.253		0.15	0.342	0.429
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant0	ECI 3	code 96	26865	831.5	1	23.3	24.5	1.318		-0.09	0.283	0.373
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant0	ECI 3	code 96	26865	831.5	1	24.52	25.5	1.253		0.11	0.362	0.454
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant0	ECI 3	code 96	26865	831.5	1	23.3	24.5	1.318		-0.05	0.357	0.471
	LTE Band 26	15M	QPSK	1	0	Front	5mm	Ant2	ECI 3	-	26865	831.5	1	23.48	24.50	1.265		0.15	0.604	0.764
	LTE Band 26	15M	QPSK	36	0	Front	5mm	Ant2	ECI 3	-	26865	831.5	1	23.40	24.50	1.288		-0.13	0.598	0.770
63	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant2	ECI 3	-	26865	831.5	1	23.48	24.50	1.265		0.10	0.850	1.075
	LTE Band 26	15M	QPSK	36	0	Back	5mm	Ant2	ECI 3	-	26865	831.5	1	23.40	24.50	1.288		0.09	0.834	1.074
	LTE Band 26	15M	QPSK	75	0	Back	5mm	Ant2	ECI 3	-	26865	831.5	1	23.37	24.50	1.297		0.02	0.815	1.057
	LTE Band 26	15M	QPSK	1	0	Back	5mm	Ant2	ECI 3	code D2	26865	831.5	1	23.48	24.5	1.265		0.1	0.251	0.318
	LTE Band 26 ENDC	15M	QPSK	1	0	Back	5mm	Ant2	ECI 3	-	26865	831.5	1	20.57	21.5	1.239		-0.08	0.417	0.517
	LTE Band 26 ENDC	15M	QPSK	36	0	Back	5mm	Ant2	ECI 3	-	26865	831.5	1	20.48	21.5	1.265		0.1	0.405	0.512
	LTE Band 26	15M	QPSK	1	0	Front	8mm	Ant2	ECI 4	-	26865	831.5	1	24.47	25.50	1.268		0.02	0.385	0.488
	LTE Band 26	15M	QPSK	1	0	Back	14mm	Ant2	ECI 4	-	26865	831.5	1	24.47	25.50	1.268		-0.15	0.253	0.321
	LTE Band 26	15M	QPSK	1	0	Front	8mm	Ant2	ECI 4	code D2	26865	831.5	1	24.47	25.5	1.268		-0.08	0.124	0.157
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant1	ECI 3	-	132322	1745	1	19.45	20.50	1.274		-0.16	0.583	0.743
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant1	ECI 3	-	132322	1745	1	19.33	20.50	1.309		0.06	0.571	0.747
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	132322	1745	1	19.45	20.50	1.274		-0.07	0.793	1.010
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	132072	1720	1	19.33	20.50	1.309		0.16	0.706	0.924
64	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	132572	1770	1	19.36	20.50	1.3		0.11	0.819	1.065
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	132322	1745	1	19.33	20.50	1.309		-0.10	0.732	0.958
	LTE Band 4	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	20175	1732.5	1	17.45	18.50	1.274		-0.18	0.415	0.529
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	132072	1720	1	19.07	20.50	1.39		0.06	0.715	0.994
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	132572	1770	1	19.10	20.50	1.38		-0.17	0.719	0.992
	LTE Band 66	20M	QPSK	100	0	Back	5mm	Ant1	ECI 3	-	132322	1745	1	19.38	20.50	1.294		-0.14	0.731	0.946
	LTE Band 66	20M	QPSK	1	0	Front	15mm	Ant1	ECI 4	-	132322	1745	1	24.45	25.50	1.274		0.06	0.315	0.401
	LTE Band 66	20M	QPSK	1	0	Back	15mm	Ant1	ECI 4	-	132322	1745	1	24.45	25.50	1.274		-0.10	0.372	0.474
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant5	ECI 3	-	132322	1745	1	18.82	19.50	1.169		0.17	0.417	0.487
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant5	ECI 3	-	132322	1745	1	18.79	19.50	1.178		-0.11	0.433	0.510
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	132322	1745	1	18.82	19.50	1.169		-0.14	0.781	0.913
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	132072	1720	1	18.60	19.50	1.23		0.08	0.736	0.905
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	132572	1770	1	18.78	19.50	1.18		-0.04	0.502	0.592
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	132322	1745	1	18.79	19.50	1.178		0.01	0.764	0.900
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	132072	1720	1	18.56	19.50	1.242		0.06	0.723	0.898
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	132572	1770	1	18.64	19.50	1.219		-0.14	0.718	0.875
	LTE Band 66	20M	QPSK	100	0	Back	5mm	Ant5	ECI 3	-	132322	1745	1	18.73	19.50	1.194		0.05	0.721	0.861
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	code 04	132322	1745	1	18.82	19.5	1.169		0.02	0.217	0.254



FCC SAR Test Report

Report No. : FA562503

	LTE Band 66	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	132322	1745	1	24.18	25.00	1.208			-0.10	0.657	0.794
	LTE Band 66	20M	QPSK	1	0	Back	14mm	Ant5	ECI 4	-	132322	1745	1	24.18	25.00	1.208			0.12	0.516	0.623
	LTE Band 66	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	code 04	132322	1745	1	24.18	25	1.208			-0.09	0.211	0.255
	LTE Band 66	20M	QPSK	1	0	Front	5mm	Ant3	ECI 3	-	132322	1745	1	19.69	21.00	1.352			0.08	0.165	0.223
	LTE Band 66	20M	QPSK	50	0	Front	5mm	Ant3	ECI 3	-	132322	1745	1	19.65	21.00	1.365			-0.10	0.157	0.214
	LTE Band 66	20M	QPSK	1	0	Back	5mm	Ant3	ECI 3	-	132322	1745	1	19.69	21.00	1.352			-0.03	0.337	0.456
	LTE Band 66	20M	QPSK	50	0	Back	5mm	Ant3	ECI 3	-	132322	1745	1	19.65	21.00	1.365			0.07	0.375	0.512
	LTE Band 4	20M	QPSK	1	0	Back	5mm	Ant3	ECI 3	-	20175	1732.5	1	19.65	21.00	1.365			-0.16	0.365	0.498
	LTE Band 66	20M	QPSK	1	0	Front	8mm	Ant3	ECI 4	-	132322	1745	1	23.62	25.00	1.374			0.05	0.203	0.279
	LTE Band 66	20M	QPSK	1	0	Back	14mm	Ant3	ECI 4	-	132322	1745	1	23.62	25.00	1.374			-0.14	0.114	0.157
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant1	ECI 3	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	-0.16	0.495	0.574
	LTE Band 41	20M	QPSK	50	0	Front	5mm	Ant1	ECI 3	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	0.06	0.487	0.577
65	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	40620	2593	1	22.38	23.00	1.153	62.9	1.006	-0.09	0.797	0.924
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	39750	2506	1	22.24	23.00	1.191	62.9	1.006	0.06	0.651	0.780
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	40185	2549.5	1	22.34	23.00	1.164	62.9	1.006	-0.08	0.617	0.722
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	41055	2636.5	1	22.23	23.00	1.194	62.9	1.006	-0.07	0.700	0.841
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant1	ECI 3	-	41490	2680	1	22.34	23.00	1.164	62.9	1.006	0.06	0.706	0.827
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	40620	2593	1	22.29	23.00	1.178	62.9	1.006	0.17	0.665	0.788
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	39750	2506	1	22.02	23.00	1.253	62.9	1.006	-0.11	0.654	0.824
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	40185	2549.5	1	22.14	23.00	1.219	62.9	1.006	0.14	0.622	0.763
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	41055	2636.5	1	22.03	23.00	1.25	62.9	1.006	-0.15	0.691	0.869
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant1	ECI 3	-	41490	2680	1	22.21	23.00	1.199	62.9	1.006	-0.15	0.763	0.920
	LTE Band 41	20M	QPSK	100	0	Back	5mm	Ant1	ECI 3	-	40620	2593	1	22.24	23.00	1.191	62.9	1.006	-0.12	0.672	0.805
	LTE Band 38C	20M	QPSK	1	99	Back	5mm	Ant1	ECI 3	-	37901+38099	2585.1+2604.9	1	21.83	22.5	1.167	62.9	1.006	0.12	0.745	0.875
	LTE Band 41	20M	QPSK	1	0	Front	15mm	Ant1	ECI 4	-	40620	2593	1	24.88	25.50	1.153	62.9	1.006	-0.15	0.130	0.151
	LTE Band 41	20M	QPSK	1	0	Back	15mm	Ant1	ECI 4	-	40620	2593	1	24.88	25.50	1.153	62.9	1.006	0.03	0.182	0.211
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant5	ECI 3	-	40620	2593	1	21.31	21.50	1.045	62.9	1.006	-0.06	0.520	0.547
	LTE Band 41	20M	QPSK	50	0	Front	5mm	Ant5	ECI 3	-	40620	2593	1	21.29	21.50	1.05	62.9	1.006	-0.14	0.473	0.500
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	40620	2593	1	21.31	21.50	1.045	62.9	1.006	-0.01	0.655	0.689
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	39750	2506	1	21.11	21.50	1.094	62.9	1.006	0.08	0.612	0.674
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	40185	2549.5	1	21.10	21.50	1.096	62.9	1.006	0.06	0.598	0.659
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	41055	2636.5	1	21.19	21.50	1.074	62.9	1.006	0.15	0.576	0.622
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant5	ECI 3	-	41490	2680	1	21.27	21.50	1.054	62.9	1.006	-0.10	0.602	0.638
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	40620	2593	1	21.29	21.50	1.05	62.9	1.006	0.09	0.609	0.643
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	39750	2506	1	21.25	21.50	1.059	62.9	1.006	0.05	0.576	0.614
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	40185	2549.5	1	21.16	21.50	1.081	62.9	1.006	-0.14	0.586	0.637
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	41055	2636.5	1	21.23	21.50	1.064	62.9	1.006	0.05	0.591	0.633
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant5	ECI 3	-	41490	2680	1	21.26	21.50	1.057	62.9	1.006	-0.07	0.567	0.603
	LTE Band 38C	20M	QPSK	1	99	Back	5mm	Ant5	ECI 3	-	37901+38099	2585.1+2604.9	1	21.02	21.5	1.117	62.9	1.006	-0.16	0.603	0.678
	LTE Band 41	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	40620	2593	1	24.78	25.00	1.052	62.9	1.006	-0.03	0.641	0.678
	LTE Band 41	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	39750	2506	1	24.44	25.00	1.138	62.9	1.006	0.08	0.578	0.662
	LTE Band 41	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	40185	2549.5	1	24.55	25.00	1.109	62.9	1.006	0.01	0.596	0.665
	LTE Band 41	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	41055	2636.5	1	24.72	25.00	1.067	62.9	1.006	0.03	0.605	0.649
	LTE Band 41	20M	QPSK	1	0	Front	8mm	Ant5	ECI 4	-	41490	2680	1	24.70	25.00	1.072	62.9	1.006	-0.08	0.597	0.644
	LTE Band 41	20M	QPSK	50	0	Front	8mm	Ant5	ECI 4	-	40620	2593	1	23.99	24.50	1.125	62.9	1.006	-0.08	0.528	0.598
	LTE Band 41	20M	QPSK	1	0	Back	14mm	Ant5	ECI 4	-	40620	2593	1	24.78	25.00	1.052	62.9	1.006	0.12	0.429	0.454
	LTE Band 41	20M	QPSK	1	0	Front	5mm	Ant3	ECI 3	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	-0.14	0.145	0.194
	LTE Band 41	20M	QPSK	50	0	Front	5mm	Ant3	ECI 3	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	-0.10	0.157	0.211
	LTE Band 41	20M	QPSK	1	0	Back	5mm	Ant3	ECI 3	-	40620	2593	1	20.26	21.50	1.33	62.9	1.006	0.11	0.357	0.478
	LTE Band 41	20M	QPSK	50	0	Back	5mm	Ant3	ECI 3	-	40620	2593	1	20.25	21.50	1.334	62.9	1.006	-0.17	0.364	0.488
	LTE Band 41	20M	QPSK	1	0	Front	8mm	Ant3	ECI 4	-	40620	2593	1	23.79	25.00	1.321	62.9	1.006	-0.15	0.302	0.401
	LTE Band 41	20M	QPSK	1	0	Back	14mm	Ant3	ECI 4	-	40620	2593	1	23.79	25.00	1.321	62.9	1.006	0.03	0.183	0.243
	LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant4	ECI 3	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	0.06	0.356	0.434
	LTE Band 42	20M	QPSK	50	0	Front	5mm	Ant4	ECI 3	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.08	0.353	0.437
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	42590	3500	1	18.66	19.50	1.213	62.9	1.006	-0.02	0.776	0.947
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	42190	3460	1	18.49	19.50	1.262	62.9	1.006	0.16	0.734	0.932
	LTE Band 42	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	42990	3540	1	18.53	19.50	1.25	62.9	1.006	0.17	0.814	1.024
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	42590	3500	1	18.60	19.50	1.23	62.9	1.006	-0.18	0.775	0.959
	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	42190	3460	1	18.47	19.50	1.268	62.9	1.006	-0.08	0.756	0.964
66	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	42990	3540	1	18.52	19.50	1.253	62.9	1.006	-0.04	0.815	1.027
	LTE Band 42	20M	QPSK	100	0	Back	5mm	Ant4	ECI 3	-	42590	3500	1	18.55	19.50	1.245	62.9	1.006	-0.17	0.738	0.924
	LTE Band 42	20M	QPSK	1	0	Front	8mm	Ant4	ECI 4	-	42590	3500	1	23.66	24.50	1.213	62.9	1.006	0.07	0.516	0.630
	LTE Band 42	20M	QPSK	50	0	Front	8mm	Ant4	ECI 4	-	42590	3500	1	23.61	24.50	1.227	62.9	1.006	-0.12	0.506	0.625
	LTE Band 42	20M	QPSK	1	0	Back	14mm	Ant4	ECI 4	-	42590	3500	1	23.66	24.50	1.213	62.9	1.006	0.09	0.530	0.647
	LTE Band 42	20M	QPSK	50	0	Back	14mm	Ant4	ECI 4	-	42590	3500	1	23.61	24.50	1.227	62.9	1.006	-0.15	0.518	0.639
	LTE Band 42	20M	QPSK	1	0	Front	5mm	Ant6	ECI 3	-	42590	3500	1	21.66	23.00	1.361	62.9	1.006	-0.01	0.317	0.434
	LTE Band 42	20M	QPSK	50	0	Front	5mm	Ant6	ECI 3	-	42590	3500	1	21.70	23.00	1.349	62.9	1.006	0.00	0.276	0.375



FCC SAR Test Report

Report No. : FA562503

	LTE Band 42	20M	QPSK	50	0	Back	5mm	Ant6	ECI 3	-	42990	3540	1	21.54	23.00	1.4	62.9	1.006	-0.02	0.714	1.006
	LTE Band 42	20M	QPSK	100	0	Back	5mm	Ant6	ECI 3	-	42590	3500	1	21.71	23.00	1.346	62.9	1.006	0.13	0.692	0.937
	LTE Band 42	20M	QPSK	1	0	Front	8mm	Ant6	ECI 4	-	42590	3500	1	24.16	25.50	1.361	62.9	1.006	0.06	0.279	0.382
	LTE Band 42	20M	QPSK	1	0	Back	14mm	Ant6	ECI 4	-	42590	3500	1	24.16	25.50	1.361	62.9	1.006	-0.10	0.343	0.470
	LTE Band 48	20M	QPSK	1	0	Front	5mm	Ant4	ECI 3	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	-0.10	0.344	0.392
	LTE Band 48	20M	QPSK	50	0	Front	5mm	Ant4	ECI 3	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	-0.08	0.332	0.382
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	55830	3609	1	18.46	19.00	1.132	62.9	1.006	0.08	0.712	0.811
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	55340	3560	1	18.36	19.00	1.159	62.9	1.006	0.07	0.720	0.839
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	56150	3641	1	18.43	19.00	1.14	62.9	1.006	0.17	0.689	0.790
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant4	ECI 3	-	56640	3690	1	18.35	19.00	1.161	62.9	1.006	0.14	0.649	0.758
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	55830	3609	1	18.42	19.00	1.143	62.9	1.006	-0.01	0.739	0.850
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	55340	3560	1	18.39	19.00	1.151	62.9	1.006	-0.05	0.718	0.831
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	56150	3641	1	18.41	19.00	1.146	62.9	1.006	0.11	0.709	0.817
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant4	ECI 3	-	56640	3690	1	18.37	19.00	1.156	62.9	1.006	0.06	0.721	0.838
	LTE Band 48	20M	QPSK	100	0	Back	5mm	Ant4	ECI 3	-	55830	3609	1	18.36	19.00	1.159	62.9	1.006	-0.15	0.693	0.808
	LTE Band 48	20M	QPSK	1	0	Front	8mm	Ant4	ECI 4	-	55830	3609	1	23.82	24.50	1.169	62.9	1.006	-0.11	0.562	0.661
	LTE Band 48	20M	QPSK	1	0	Front	8mm	Ant4	ECI 4	-	55340	3560	1	23.61	24.50	1.227	62.9	1.006	0.04	0.556	0.686
	LTE Band 48	20M	QPSK	1	0	Front	8mm	Ant4	ECI 4	-	56150	3641	1	23.66	24.50	1.213	62.9	1.006	0.08	0.563	0.687
	LTE Band 48	20M	QPSK	1	0	Front	8mm	Ant4	ECI 4	-	56640	3690	1	23.71	24.50	1.199	62.9	1.006	0.12	0.541	0.653
	LTE Band 48	20M	QPSK	50	0	Front	8mm	Ant4	ECI 4	-	55830	3609	1	23.74	24.50	1.191	62.9	1.006	0.19	0.544	0.652
	LTE Band 48	20M	QPSK	50	0	Front	8mm	Ant4	ECI 4	-	55340	3560	1	23.57	24.50	1.239	62.9	1.006	0.15	0.559	0.697
	LTE Band 48	20M	QPSK	50	0	Front	8mm	Ant4	ECI 4	-	56150	3641	1	23.58	24.50	1.236	62.9	1.006	-0.06	0.545	0.678
	LTE Band 48	20M	QPSK	50	0	Front	8mm	Ant4	ECI 4	-	56640	3690	1	23.50	24.50	1.259	62.9	1.006	-0.00	0.533	0.675
	LTE Band 48	20M	QPSK	1	0	Back	14mm	Ant4	ECI 4	-	55830	3609	1	23.82	24.50	1.169	62.9	1.006	0.08	0.384	0.452
	LTE Band 48	20M	QPSK	50	0	Back	14mm	Ant4	ECI 4	-	55830	3609	1	23.74	24.50	1.191	62.9	1.006	-0.06	0.369	0.442
	LTE Band 48	20M	QPSK	1	0	Front	5mm	Ant6	ECI 3	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	-0.03	0.221	0.290
	LTE Band 48	20M	QPSK	50	0	Front	5mm	Ant6	ECI 3	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	-0.14	0.221	0.292
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant6	ECI 3	-	55830	3609	1	22.34	23.50	1.306	62.9	1.006	-0.07	0.762	1.001
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant6	ECI 3	-	55340	3560	1	22.23	23.50	1.34	62.9	1.006	-0.06	0.764	1.030
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant6	ECI 3	-	56150	3641	1	22.25	23.50	1.334	62.9	1.006	0.09	0.765	1.027
	LTE Band 48	20M	QPSK	1	0	Back	5mm	Ant6	ECI 3	-	56640	3690	1	22.27	23.50	1.327	62.9	1.006	0.15	0.730	0.975
67	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant6	ECI 3	-	55830	3609	1	22.32	23.50	1.312	62.9	1.006	-0.08	0.782	1.032
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant6	ECI 3	-	55340	3560	1	22.22	23.50	1.343	62.9	1.006	0.18	0.762	1.030
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant6	ECI 3	-	56150	3641	1	22.23	23.50	1.34	62.9	1.006	-0.18	0.763	1.029
	LTE Band 48	20M	QPSK	50	0	Back	5mm	Ant6	ECI 3	-	56640	3690	1	22.26	23.50	1.33	62.9	1.006	0.14	0.716	0.958
	LTE Band 48	20M	QPSK	100	0	Back	5mm	Ant6	ECI 3	-	55830	3609	1	22.31	23.50	1.315	62.9	1.006	-0.12	0.773	1.023
	LTE Band 48	20M	QPSK	1	0	Front	8mm	Ant6	ECI 4	-	55830	3609	1	24.34	25.50	1.306	62.9	1.006	-0.05	0.267	0.351
	LTE Band 48	20M	QPSK	1	0	Back	14mm	Ant6	ECI 4	-	55830	3609	1	24.34	25.50	1.306	62.9	1.006	0.04	0.350	0.460

【FR1 SAR】

Plot No	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap(mm)	Antenna	Power State	Code	Ch.	Freq. (MHz)	Sample	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)
	FR1 n2	40M	BPSK	1	1	Front	5mm	Ant1	ECI 3	-	376000	1880	1	20.16	21.20	1.271			0.03	0.566	0.719
	FR1 n2	40M	BPSK	108	54	Front	5mm	Ant1	ECI 3	-	376000	1880	1	20.15	21.20	1.274			-0.04	0.581	0.740
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant1	ECI 3	-	376000	1880	1	20.16	21.20	1.271			0.08	0.689	0.876
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant1	ECI 3	-	376000	1880	1	20.15	21.20	1.274			0.03	0.754	0.961
	FR1 n2	40M	BPSK	216	0	Back	5mm	Ant1	ECI 3	-	376000	1880	1	20.15	21.20	1.274			0.06	0.748	0.953
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant1	ECI3	-	376000	1880	1	17.62	18.70	1.282			0.04	0.411	0.527
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant1	ECI3	-	376000	1880	1	17.58	18.70	1.294			-0.08	0.408	0.528
	FR1 n2	40M	BPSK	1	1	Front	15mm	Ant1	ECI 4	-	376000	1880	1	24.75	25.70	1.245			0.02	0.269	0.335
	FR1 n2	40M	BPSK	1	1	Back	15mm	Ant1	ECI 4	-	376000	1880	1	24.75	25.70	1.245			-0.14	0.366	0.456
	FR1 n2	40M	BPSK	1	1	Front	5mm	Ant5	ECI 3	-	376000	1880	1	18.87	19.70	1.211			0.17	0.463	0.561
	FR1 n2	40M	BPSK	108	54	Front	5mm	Ant5	ECI 3	-	376000	1880	1	18.85	19.70	1.216			-0.14	0.477	0.580
	FR1 n2	40M	BPSK	1	1	Back	5mm	Ant5	ECI 3	-	376000	1880	1	18.87	19.70	1.211			0.04	0.707	0.856
	FR1 n2	40M	BPSK	108	54	Back	5mm	Ant5	ECI 3	-	376000	1880	1	18.85	19.70	1.216			-0.14	0.819	0.996
	FR1 n2	40M	BPSK	216	0	Back	5mm	Ant5	ECI 3	-	376000	1880	1	18.82	19.70	1.225			-0.05	0.805	0.986
	FR1 n2 ENDC	40M	BPSK	1	1	Back	5mm	Ant5	ECI 3	-	376000	1880	1	15.97	16.7	1.183			0.11	0.341	0.403
	FR1 n2 ENDC	40M	BPSK	108	54	Back	5mm	Ant5	ECI 3	-	376000	1880	1	15.88	16.7	1.208			-0.05	0.421	0.509
68	FR1 n2	40M	BPSK	1	1	Front	8mm	Ant5	ECI 4	-	376000	1880	1	24.87	25.70	1.211			-0.02	0.894	1.083
	FR1 n2	40M	BPSK	108	54	Front	8mm	Ant5	ECI 4	-	376000	1880	1	24.78	25.70	1.236			0.07	0.834	1.031
	FR1 n2	40M	BPSK	216	0	Front	8mm	Ant5	ECI 4	-	376000	1880	1	24.27	25.20	1.239			0.00	0.722	0.895
	FR1 n2	40M	BPSK	1	1	Back	14mm	Ant5	ECI 4	-	376000	1880	1	24.87	25.70	1.211			0.16	0.524	0.635
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant1	ECI 3	-	507000	2535	1	20.93	21.70	1.194			0.12	0.468	0.559
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant1	ECI 3	-	507000	2535	1	20.92	21.70	1.197			-0.19	0.548	0.656
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant1	ECI 3	-	507000	2535	1	20.93	21.70	1.194			0.06	0.626	0.747
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant1	ECI 3	-	507000	2535	1	20.92	21.70	1.197			-0.06	0.721	0.863
	FR1 n7	50M	BPSK	270	0	Back	5mm	Ant1	ECI 3	-	507000	2535	1	20.82	21.70	1.225			-0.18	0.627	0.768
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant1	ECI3	-	507000	2535	1	18.10	19.20	1.288			-0.07	0.402	0.518
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant1	ECI3	-	507000	2535	1	18.08	19.20	1.294			0.08	0.408	0.528
	FR1 n7	50M	BPSK	1	1	Front	15mm	Ant1	ECI 4	-	507000	2535	1	24.88	25.70	1.208			0.02	0.307	0.371



FCC SAR Test Report

Report No. : FA562503

	FR1 n7	50M	BPSK	1	1	Back	15mm	Ant1	ECI 4	-	507000	2535	1	24.88	25.70	1.208			-0.14	0.379	0.458
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant5	ECI 3	-	507000	2535	1	18.71	19.20	1.119			0.16	0.541	0.605
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant5	ECI 3	-	507000	2535	1	18.68	19.20	1.127			0.13	0.581	0.655
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant5	ECI 3	-	507000	2535	1	18.71	19.20	1.119			-0.02	0.778	0.871
69	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant5	ECI 3	-	507000	2535	1	18.68	19.20	1.127			0.07	0.837	0.943
	FR1 n7	50M	BPSK	270	0	Back	5mm	Ant5	ECI 3	-	507000	2535	1	18.60	19.20	1.148			-0.12	0.815	0.936
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant5	ECI3	-	507000	2535	1	15.34	16.20	1.219			0.07	0.437	0.533
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant5	ECI3	-	507000	2535	1	15.33	16.20	1.222			-0.15	0.429	0.524
	FR1 n7	50M	BPSK	1	1	Front	8mm	Ant5	ECI 4	-	507000	2535	1	23.61	24.20	1.146			-0.12	0.795	0.911
	FR1 n7	50M	BPSK	135	68	Front	8mm	Ant5	ECI 4	-	507000	2535	1	23.59	24.20	1.151			-0.02	0.721	0.830
	FR1 n7	50M	BPSK	270	0	Front	8mm	Ant5	ECI 4	-	507000	2535	1	23.58	24.20	1.153			0.08	0.738	0.851
	FR1 n7	50M	BPSK	1	1	Back	14mm	Ant5	ECI 4	-	507000	2535	1	23.61	24.20	1.146			0.02	0.454	0.520
	FR1 n7	50M	BPSK	1	1	Front	5mm	Ant6	ECI 3	-	507000	2535	1	16.93	18.00	1.279			-0.07	0.175	0.224
	FR1 n7	50M	BPSK	135	68	Front	5mm	Ant6	ECI 3	-	507000	2535	1	16.89	18.00	1.291			-0.07	0.156	0.201
	FR1 n7	50M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	507000	2535	1	16.93	18.00	1.279			-0.17	0.409	0.523
	FR1 n7	50M	BPSK	135	68	Back	5mm	Ant6	ECI 3	-	507000	2535	1	16.89	18.00	1.291			-0.06	0.389	0.502
	FR1 n7	50M	BPSK	1	1	Front	8mm	Ant6	ECI 4	-	507000	2535	1	23.72	24.50	1.197			0.12	0.396	0.474
	FR1 n7	50M	BPSK	1	1	Back	14mm	Ant6	ECI 4	-	507000	2535	1	23.72	24.50	1.197			-0.16	0.271	0.324
	FR1 n12	15M	BPSK	1	1	Front	5mm	Ant0	ECI 3	-	141500	707.5	1	24.78	25.70	1.236			0.13	0.234	0.289
	FR1 n12	15M	BPSK	36	22	Front	5mm	Ant0	ECI 3	-	141500	707.5	1	24.71	25.70	1.256			0.13	0.320	0.402
	FR1 n12	15M	BPSK	1	1	Back	5mm	Ant0	ECI 3	-	141500	707.5	1	24.78	25.70	1.236			-0.05	0.341	0.421
	FR1 n12	15M	BPSK	36	22	Back	5mm	Ant0	ECI 3	-	141500	707.5	1	24.71	25.70	1.256			-0.11	0.425	0.534
	FR1 n12	15M	BPSK	1	1	Front	15mm	Ant0	ECI 4	-	141500	707.5	1	24.78	25.70	1.236			0.01	0.145	0.179
	FR1 n12	15M	BPSK	1	1	Back	15mm	Ant0	ECI 4	-	141500	707.5	1	24.78	25.70	1.236			-0.17	0.175	0.216
	FR1 n12	15M	BPSK	1	1	Front	5mm	Ant2	ECI 3	-	141500	707.5	1	22.38	23.20	1.208			-0.05	0.450	0.544
	FR1 n12	15M	BPSK	36	22	Front	5mm	Ant2	ECI 3	-	141500	707.5	1	22.35	23.20	1.216			-0.15	0.511	0.621
	FR1 n12	15M	BPSK	1	1	Back	5mm	Ant2	ECI 3	-	141500	707.5	1	22.38	23.20	1.208			0.05	0.714	0.863
70	FR1 n12	15M	BPSK	36	22	Back	5mm	Ant2	ECI 3	-	141500	707.5	1	22.35	23.20	1.216			-0.16	0.780	0.948
	FR1 n12	15M	BPSK	75	0	Back	5mm	Ant2	ECI 3	-	141500	707.5	1	22.32	23.20	1.225			0.12	0.771	0.944
	FR1 n12	15M	BPSK	1	1	Front	8mm	Ant2	ECI 4	-	141500	707.5	1	24.87	25.70	1.211			0.02	0.476	0.576
	FR1 n12	15M	BPSK	1	1	Back	14mm	Ant2	ECI 4	-	141500	707.5	1	24.87	25.70	1.211			-0.17	0.341	0.413
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant0	ECI 3	-	166300	831.5	1	24.43	25.70	1.34			-0.02	0.401	0.537
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant0	ECI 3	-	166300	831.5	1	24.33	25.70	1.371			0.13	0.459	0.629
71	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant0	ECI 3	-	166300	831.5	1	24.43	25.70	1.34			-0.16	0.666	0.892
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant0	ECI 3	-	166300	831.5	1	24.33	25.70	1.371			-0.06	0.635	0.871
	FR1 n26	20M	BPSK	100	0	Back	5mm	Ant0	ECI 3	-	166300	831.5	1	23.89	25.20	1.352			0.02	0.627	0.848
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant0	ECI3	-	166300	831.5	1	22.48	23.70	1.324			-0.05	0.412	0.545
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant0	ECI3	-	166300	831.5	1	22.47	23.70	1.327			0.08	0.405	0.537
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant0	ECI 3	code 96	166300	831.5	1	24.43	25.7	1.34			-0.02	0.359	0.481
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant0	ECI 3	code 96	166300	831.5	1	24.33	25.7	1.371			0.13	0.389	0.533
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant0	ECI 3	code 96	166300	831.5	1	24.43	25.7	1.34			-0.16	0.603	0.808
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant0	ECI 3	code 96	166300	831.5	1	24.33	25.7	1.371			-0.06	0.608	0.834
	FR1 n26	20M	BPSK	100	0	Back	5mm	Ant0	ECI 3	code 96	166300	831.5	1	23.89	25.2	1.352			0.02	0.586	0.792
	FR1 n26	20M	BPSK	1	1	Front	5mm	Ant2	ECI 3	-	166300	831.5	1	23.84	25.20	1.368			-0.10	0.246	0.337
	FR1 n26	20M	BPSK	50	28	Front	5mm	Ant2	ECI 3	-	166300	831.5	1	23.81	25.20	1.377			0.09	0.142	0.196
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant2	ECI 3	-	166300	831.5	1	23.84	25.20	1.368			0.02	0.362	0.495
	FR1 n26	20M	BPSK	50	28	Back	5mm	Ant2	ECI 3	-	166300	831.5	1	23.81	25.20	1.377			-0.01	0.218	0.300
	FR1 n26	20M	BPSK	1	1	Back	5mm	Ant2	ECI 3	code D2	166300	831.5	1	23.84	25.2	1.368			-0.03	0.316	0.432
	FR1 n26	20M	BPSK	1	1	Front	8mm	Ant2	ECI 4	-	166300	831.5	1	24.41	25.70	1.346			0.02	0.162	0.218
	FR1 n26	20M	BPSK	1	1	Back	14mm	Ant2	ECI 4	-	166300	831.5	1	24.41	25.70	1.346			-0.17	0.111	0.149
	FR1 n26	20M	BPSK	1	1	Front	8mm	Ant2	ECI 4	code D2	166300	831.5	1	24.41	25.7	1.346			0.02	0.154	0.207
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant1	ECI 3	-	349000	1745	1	19.89	20.70	1.205			-0.09	0.531	0.640
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant1	ECI 3	-	349000	1745	1	19.86	20.70	1.213			0.03	0.569	0.690
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant1	ECI 3	-	349000	1745	1	19.89	20.70	1.205			0.02	0.766	0.923
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant1	ECI 3	-	349000	1745	1	19.86	20.70	1.213			0.03	0.739	0.896
	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant1	ECI 3	-	349000	1745	1	19.85	20.70	1.216			-0.15	0.724	0.880
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant1	ECI3	-	349000	1745	1	16.99	18.20	1.321			-0.04	0.408	0.539
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant1	ECI3	-	349000	1745	1	16.96	18.20	1.33			0.03	0.392	0.521
	FR1 n66	45M	BPSK	1	1	Front	15mm	Ant1	ECI 4	-	349000	1745	1	24.79	25.70	1.233			0.12	0.394	0.486
	FR1 n66	45M	BPSK	1	1	Back	15mm	Ant1	ECI 4	-	349000	1745	1	24.79	25.70	1.233			-0.18	0.529	0.652
	FR1 n66	45M	BPSK	1	1	Front	5mm	Ant5	ECI 3	-	349000	1745	1	18.73	19.70	1.25			-0.10	0.487	0.609
	FR1 n66	45M	BPSK	120	60	Front	5mm	Ant5	ECI 3	-	349000	1745	1	18.71	19.70	1.256			0.15	0.489	0.614
	FR1 n66	45M	BPSK	1	1	Back	5mm	Ant5	ECI 3	-	349000	1745	1	18.73	19.70	1.25			-0.01	0.782	0.978
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant5	ECI 3	-	349000	1745	1	18.71	19.70	1.256			0.09	0.811	1.019
	FR1 n66	45M	BPSK	240	0	Back	5mm	Ant5	ECI 3	-	349000	1745	1	18.69	19.70	1.262			-0.08	0.788	0.994
	FR1 n66	45M	BPSK	120	60	Back	5mm	Ant5	ECI 3	code 04	349000	1745	1	18.71	19.7	1.256			0.02	0.246	0.309
	FR1 n66 ENDC	45M	BPSK	1	1	Back	5mm	Ant5	ECI 3	-	349000	1745	1	15.87	16.7	1.211			0.18	0.401	0.486
	FR1 n66 ENDC	45M	BPSK	120	60	Back	5mm	Ant5	ECI 3	-	349000	1745	1	15.79	16.7	1.233			0.14	0.412	0.508
72	FR1 n66	45M	BPSK	1	1	Front	8mm	Ant5	ECI 4	-	349000	1745	1	24.77	25.70	1.239			0.16	0.876	1.085
	FR1 n66	45M	BPSK	120	60	Front	8mm	Ant5	ECI 4	-	349000	1745	1	24.65	25.70	1.274			-0.02	0.837	1.066
	FR1 n66	45M	BPSK	240	0	Front	8mm	Ant5	ECI 4												



FCC SAR Test Report

Report No. : FA562503

	FR1 n66	45M	BPSK	1	1	Front	8mm	Ant5	ECI 4	code 04	349000	1745	1	24.77	25.7	1.239			0.09	0.217	0.269
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant1	ECI 3	-	518598	2592.99	1	20.57	21.20	1.156			-0.11	0.546	0.631
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant5	ECI 3	-	518598	2592.99	1	20.55	21.20	1.161			0.11	0.562	0.652
	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant1	ECI 3	-	518598	2592.99	1	20.57	21.20	1.156			-0.08	0.727	0.840
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant1	ECI 3	-	518598	2592.99	1	20.55	21.20	1.161			-0.09	0.775	0.900
	FR1 n41	100M	BPSK	270	0	Back	5mm	Ant1	ECI 3	-	518598	2592.99	1	20.51	21.20	1.172			-0.01	0.701	0.822
	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant1	ECI3	-	518598	2592.99	1	17.62	18.70	1.282			-0.05	0.387	0.496
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant1	ECI3	-	518598	2592.99	1	17.61	18.70	1.285			0.08	0.396	0.509
	FR1 n41	100M	BPSK	1	1	Front	15mm	Ant1	ECI 4	-	518598	2592.99	1	24.94	25.70	1.191			0.05	0.324	0.386
	FR1 n41	100M	BPSK	1	1	Back	15mm	Ant1	ECI 4	-	518598	2592.99	1	24.94	25.70	1.191			-0.03	0.457	0.544
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant5	ECI 3	-	518598	2592.99	1	18.56	19.20	1.159			-0.18	0.529	0.613
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant5	ECI 3	-	518598	2592.99	1	18.54	19.20	1.164			0.14	0.573	0.667
	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant5	ECI 3	-	518598	2592.99	1	18.56	19.20	1.159			0.04	0.817	0.947
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant5	ECI 3	-	518598	2592.99	1	18.54	19.20	1.164			-0.01	0.857	0.998
	FR1 n41	100M	BPSK	270	0	Back	5mm	Ant5	ECI 3	-	518598	2592.99	1	18.51	19.20	1.172			-0.08	0.792	0.928
	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant5	ECI3	-	518598	2592.99	1	15.86	16.70	1.213			-0.05	0.438	0.531
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant5	ECI3	-	518598	2592.99	1	15.84	16.70	1.219			0.09	0.430	0.524
	FR1 n41	100M	BPSK	1	1	Front	8mm	Ant5	ECI 4	-	518598	2592.99	1	22.50	23.20	1.175			0.05	0.759	0.892
	FR1 n41	100M	BPSK	135	69	Front	8mm	Ant5	ECI 4	-	518598	2592.99	1	22.48	23.20	1.18			-0.05	0.723	0.853
	FR1 n41	100M	BPSK	270	0	Front	8mm	Ant5	ECI 4	-	518598	2592.99	1	22.42	23.20	1.197			0.08	0.734	0.879
	FR1 n41	100M	BPSK	1	1	Back	14mm	Ant5	ECI 4	-	518598	2592.99	1	22.50	23.20	1.175			-0.04	0.401	0.471
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant3	ECI 3	-	518598	2592.99	1	17.60	19.00	1.38			-0.01	0.407	0.562
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant3	ECI 3	-	518598	2592.99	1	17.57	19.00	1.39			-0.12	0.301	0.418
73	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant3	ECI 3	-	518598	2592.99	1	17.60	19.00	1.38			-0.05	0.788	1.087
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant3	ECI 3	-	518598	2592.99	1	17.57	19.00	1.39			-0.16	0.699	0.972
	FR1 n41	100M	BPSK	270	0	Back	5mm	Ant3	ECI 3	-	518598	2592.99	1	17.45	19.00	1.429			0.15	0.516	0.737
	FR1 n41 ENDC	100M	BPSK	1	1	Back	5mm	Ant3	ECI 3	-	518598	2592.99	1	14.57	16	1.390			-0.05	0.407	0.566
	FR1 n41 ENDC	100M	BPSK	135	69	Back	5mm	Ant3	ECI 3	-	518598	2592.99	1	14.42	16	1.439			0.01	0.377	0.543
	FR1 n41	100M	BPSK	1	1	Front	8mm	Ant3	ECI 4	-	518598	2592.99	1	21.70	23.00	1.349			0.04	0.420	0.567
	FR1 n41	100M	BPSK	1	1	Back	14mm	Ant3	ECI 4	-	518598	2592.99	1	21.70	23.00	1.349			-0.08	0.326	0.440
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant6	ECI 3	-	518598	2592.99	1	17.48	18.50	1.265			-0.13	0.191	0.242
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant6	ECI 3	-	518598	2592.99	1	17.46	18.50	1.271			-0.10	0.164	0.208
	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	518598	2592.99	1	17.48	18.50	1.265			0.07	0.412	0.521
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant6	ECI 3	-	518598	2592.99	1	17.46	18.50	1.271			0.01	0.423	0.538
	FR1 n41	100M	BPSK	1	1	Front	8mm	Ant6	ECI 4	-	518598	2592.99	1	23.77	24.50	1.183			0.12	0.403	0.477
	FR1 n41	100M	BPSK	1	1	Back	14mm	Ant6	ECI 4	-	518598	2592.99	1	23.77	24.50	1.183			-0.16	0.241	0.285
	FR1 n41	100M	BPSK	1	1	Front	5mm	Ant10	ECI 3	-	518598	2592.99	1	21.58	23.00	1.387			0.05	0.162	0.225
	FR1 n41	100M	BPSK	135	69	Front	5mm	Ant10	ECI 3	-	518598	2592.99	1	21.44	23.00	1.432			-0.13	0.154	0.221
	FR1 n41	100M	BPSK	1	1	Back	5mm	Ant10	ECI 3	-	518598	2592.99	1	21.58	23.00	1.387			-0.14	0.279	0.387
	FR1 n41	100M	BPSK	135	69	Back	5mm	Ant10	ECI 3	-	518598	2592.99	1	21.44	23.00	1.432			-0.03	0.308	0.441
	FR1 n41	100M	BPSK	1	1	Front	8mm	Ant10	ECI 4	-	518598	2592.99	1	21.58	23.00	1.387			0.07	0.112	0.155
	FR1 n41	100M	BPSK	1	1	Back	14mm	Ant10	ECI 4	-	518598	2592.99	1	21.58	23.00	1.387			-0.19	0.069	0.096
	FR1 n48	40M	BPSK	1	1	Front	5mm	Ant4	ECI 3	-	641666	3624.99	1	16.89	17.70	1.205			-0.03	0.379	0.457
	FR1 n48	40M	BPSK	50	28	Front	5mm	Ant4	ECI 3	-	641666	3624.99	1	16.86	17.70	1.213			0.13	0.393	0.477
	FR1 n48	40M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	641666	3624.99	1	16.89	17.70	1.205			-0.13	0.749	0.903
	FR1 n48	40M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	638000	3570	1	16.83	17.70	1.222			0.18	0.710	0.868
	FR1 n48	40M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	645332	3679.98	1	16.85	17.70	1.216			0.07	0.724	0.880
	FR1 n48	40M	BPSK	50	28	Back	5mm	Ant4	ECI 3	-	641666	3624.99	1	16.86	17.70	1.213			0.09	0.707	0.858
	FR1 n48	40M	BPSK	50	28	Back		Ant4	ECI 3	-	638000	3570	1	16.75	17.70	1.245			-0.02	0.759	0.945
	FR1 n48	40M	BPSK	50	28	Back	5mm	Ant4	ECI 3	-	645332	3679.98	1	16.78	17.70	1.236			0.19	0.732	0.905
	FR1 n48	40M	BPSK	100	0	Back	5mm	Ant4	ECI 3	-	641666	3624.99	1	16.84	17.70	1.219			0.17	0.755	0.920
	FR1 n48	40M	BPSK	1	1	Front	8mm	Ant4	ECI 4	-	641666	3624.99	1	22.79	23.70	1.233			0.04	0.773	0.953
	FR1 n48	40M	BPSK	1	1	Front	8mm	Ant4	ECI 4	-	638000	3570	1	22.75	23.70	1.245			-0.18	0.781	0.972
	FR1 n48	40M	BPSK	1	1	Front	8mm	Ant4	ECI 4	-	645332	3679.98	1	22.73	23.70	1.25			0.01	0.818	1.022
	FR1 n48	40M	BPSK	50	28	Front	8mm	Ant4	ECI 4	-	641666	3624.99	1	22.75	23.70	1.245			0.13	0.796	0.991
	FR1 n48	40M	BPSK	50	28	Front	8mm	Ant4	ECI 4	-	638000	3570	1	22.72	23.70	1.253			0.06	0.811	1.016
74	FR1 n48	40M	BPSK	50	28	Front	8mm	Ant4	ECI 4	-	645332	3679.98	1	22.69	23.70	1.262			-0.09	0.826	1.042
	FR1 n48	40M	BPSK	100	0	Front	8mm	Ant4	ECI 4	-	641666	3624.99	1	22.71	23.70	1.256			-0.05	0.781	0.981
	FR1 n48	40M	BPSK	1	1	Back	14mm	Ant4	ECI 4	-	641666	3624.99	1	22.79	23.70	1.233			0.12	0.661	0.815
	FR1 n48	40M	BPSK	1	1	Back	14mm	Ant4	ECI 4	-	638000	3570	1	22.75	23.70	1.245			-0.04	0.632	0.787
	FR1 n48	40M	BPSK	1	1	Back	14mm	Ant4	ECI 4	-	645332	3679.98	1	22.73	23.70	1.25			-0.11	0.647	0.809
	FR1 n48	40M	BPSK	50	28	Back	14mm	Ant4	ECI 4	-	641666	3624.99	1	22.75	23.70	1.245			0.08	0.663	0.825
	FR1 n48	40M	BPSK	50	28	Back	14mm	Ant4	ECI 4	-	638000	3570	1	22.72	23.70	1.253			-0.10	0.662	0.829
	FR1 n48	40M	BPSK	50	28	Back	14mm	Ant4	ECI 4	-	645332	3679.98	1	22.69	23.70	1.262			0.16	0.658	0.830
	FR1 n48	40M	BPSK	100	0	Back	14mm	Ant4	ECI 4	-	641666	3624.99	1	22.71	23.70	1.256			-0.09	0.664	0.834
	FR1 n48	40M	BPSK	1	1	Front	5mm	Ant6	ECI 3	-	641666	3624.99	1	19.38	20.70	1.355			-0.09	0.267	0.362
	FR1 n48	40M	BPSK	50	28	Front	5mm	Ant6	ECI 3	-	641666	3624.99	1	19.36	20.70	1.361			0.10	0.243	0.331
	FR1 n48	40M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	641666	3624.99	1	19.38	20.70	1.355			-0.06	0.629	0.852
	FR1 n48	40M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	638000	3570	1	19.35	20.70	1.365			-0.04	0.668	0.912
	FR1 n48	40M	BPSK	1	1	Back	5mm														



FCC SAR Test Report

Report No. : FA562503

	FR1 n48	40M	BPSK	50	28	Back	5mm	Ant6	ECI 3	-	645332	3679.98	1	19.23	20.70	1.403			-0.16	0.674	0.946
	FR1 n48	40M	BPSK	100	0	Back	5mm	Ant6	ECI 3	-	641666	3624.99	1	19.30	20.70	1.38			-0.12	0.714	0.985
	FR1 n48	40M	BPSK	1	1	Front	8mm	Ant6	ECI 4	-	641666	3624.99	1	24.28	25.70	1.387			0.02	0.427	0.592
	FR1 n48	40M	BPSK	1	1	Back	14mm	Ant6	ECI 4	-	641666	3624.99	1	24.28	25.70	1.387			-0.15	0.393	0.545
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant2	ECI 3	-	633332	3499.98	1	21.10	22.50	1.38			-0.15	0.279	0.385
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant2	ECI 3	-	633332	3499.98	1	21.08	22.50	1.387			0.08	0.234	0.325
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant2	ECI 3	-	633332	3499.98	1	21.10	22.50	1.38			-0.02	0.397	0.548
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant2	ECI 3	-	633332	3499.98	1	21.08	22.50	1.387			-0.12	0.345	0.479
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant2	ECI 3	-	633332	3499.98	1	24.20	25.50	1.349	50.0	1.0	0.08	0.421	0.568
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant4	ECI 3	-	633332	3499.98	1	15.68	16.50	1.208			0.06	0.349	0.422
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant4	ECI 3	-	633332	3499.98	1	15.65	16.50	1.216			0.13	0.386	0.469
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	633332	3499.98	1	15.68	16.50	1.208			0.05	0.639	0.772
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant4	ECI 3	-	633332	3499.98	1	15.65	16.50	1.216			-0.01	0.751	0.913
	FR1 n77	100M	BPSK	270	0	Back	5mm	Ant4	ECI 3	-	633332	3499.98	1	15.59	16.50	1.233			0.16	0.641	0.790
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	633332	3499.98	1	18.69	19.50	1.205	50.0	1.0	0.16	0.750	0.904
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant4	ECI3	-	633332	3499.98	1	13.23	14.00	1.194			-0.04	0.334	0.399
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant4	ECI3	-	633332	3499.98	1	13.20	14.00	1.202			0.09	0.318	0.382
	FR1 n77	100M	BPSK	1	1	Front	8mm	Ant4	ECI 4	-	633332	3499.98	1	21.89	23.00	1.291			0.05	0.547	0.706
	FR1 n77	100M	BPSK	1	1	Back	14mm	Ant4	ECI 4	-	633332	3499.98	1	21.89	23.00	1.291			-0.08	0.573	0.740
	FR1 n77 HPUE	100M	BPSK	1	1	Back	14mm	Ant4	ECI 4	-	633332	3499.98	1	24.90	26.00	1.288	50.0	1.0	0.07	0.554	0.714
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant6	ECI 3	-	633332	3499.98	1	19.68	21.00	1.355			0.17	0.322	0.436
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant6	ECI 3	-	633332	3499.98	1	19.67	21.00	1.358			0.18	0.278	0.378
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	19.68	21.00	1.355			-0.02	0.659	0.893
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	19.67	21.00	1.358			0.15	0.644	0.875
	FR1 n77	100M	BPSK	270	0	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	19.60	21.00	1.38			0.00	0.654	0.903
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	22.64	24.00	1.368	50.0	1.0	0.12	0.617	0.844
	FR1 n77 ENDC	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	16.71	18	1.346			-0.18	0.311	0.419
	FR1 n77 ENDC	100M	BPSK	135	69	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	16.69	18	1.352			0.1	0.302	0.408
	FR1 n77 ENDC	100M	BPSK	270	0	Back	5mm	Ant6	ECI 3	-	633332	3499.98	1	16.57	18	1.390			0.12	0.297	0.413
	FR1 n77	100M	BPSK	1	1	Front	8mm	Ant6	ECI 4	-	633332	3499.98	1	22.98	24.50	1.419			0.06	0.285	0.404
	FR1 n77 HPUE	100M	BPSK	1	1	Front	8mm	Ant6	ECI 4	-	633332	3499.98	1	25.97	27.50	1.422	50.0	2.0	0.05	0.263	0.748
	FR1 n77	100M	BPSK	1	1	Back	14mm	Ant6	ECI 4	-	633332	3499.98	1	22.98	24.50	1.419			-0.18	0.240	0.341
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant11	ECI 3	-	633332	3499.98	1	15.04	16.50	1.4			0.13	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant11	ECI 3	-	633332	3499.98	1	15.02	16.50	1.406			-0.13	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant11	ECI 3	-	633332	3499.98	1	15.04	16.50	1.4			0.12	0.353	0.494
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant11	ECI 3	-	633332	3499.98	1	15.02	16.50	1.406			0.18	0.334	0.470
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant11	ECI 3	-	633332	3499.98	1	18.02	19.50	1.406	50.0	1.0	0.02	0.378	0.531
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant2	ECI 3	-	656000	3840	1	20.96	22.50	1.426			0.10	0.181	0.258
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant2	ECI 3	-	656000	3840	1	20.90	22.50	1.445			-0.14	0.153	0.221
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant2	ECI 3	-	656000	3840	1	20.96	22.50	1.426			-0.00	0.266	0.379
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant2	ECI 3	-	656000	3840	1	20.90	22.50	1.445			-0.11	0.217	0.314
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant2	ECI 3	-	656000	3840	1	24.01	25.50	1.409	50.0	1.0	-0.14	0.275	0.387
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant4	ECI 3	-	656000	3840	1	15.27	16.50	1.327			0.10	0.412	0.547
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant4	ECI 3	-	656000	3840	1	15.25	16.50	1.334			0.03	0.402	0.536
75	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	656000	3840	1	15.27	16.50	1.327			0.08	0.783	1.039
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant4	ECI 3	-	656000	3840	1	15.25	16.50	1.334			-0.17	0.756	1.009
	FR1 n77	100M	BPSK	270	0	Back	5mm	Ant4	ECI 3	-	656000	3840	1	15.27	16.50	1.327			0.08	0.746	0.990
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant4	ECI 3	-	656000	3840	1	18.31	19.50	1.315	50.0	1.0	-0.07	0.737	0.969
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant4	ECI3	-	656000	3840	1	12.82	14.00	1.312			-0.14	0.374	0.491
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant4	ECI3	-	656000	3840	1	12.79	14.00	1.321			0.02	0.359	0.474
	FR1 n77	100M	BPSK	1	1	Front	8mm	Ant4	ECI 4	-	656000	3840	1	21.77	23.00	1.327			0.08	0.587	0.779
	FR1 n77 HPUE	100M	BPSK	1	1	Front	8mm	Ant4	ECI 4	-	656000	3840	1	24.74	26.00	1.337	50.0	1.0	0.08	0.571	0.763
	FR1 n77	100M	BPSK	1	1	Back	14mm	Ant4	ECI 4	-	656000	3840	1	21.77	23.00	1.327			-0.14	0.556	0.738
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant6	ECI 3	-	656000	3840	1	19.80	21.00	1.318			-0.14	0.193	0.254
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant6	ECI 3	-	656000	3840	1	19.75	21.00	1.334			0.03	0.169	0.225
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	656000	3840	1	19.80	21.00	1.318			-0.10	0.721	0.950
	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant6	ECI 3	-	656000	3840	1	19.75	21.00	1.334			-0.02	0.594	0.792
	FR1 n77	100M	BPSK	270	0	Back	5mm	Ant6	ECI 3	-	656000	3840	1	19.56	21.00	1.393			-0.02	0.563	0.784
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	656000	3840	1	23.02	24.00	1.253	50.0	1.0	-0.01	0.779	0.976
	FR1 n77 ENDC	100M	BPSK	1	1	Back	5mm	Ant6	ECI 3	-	656000	3840	1	16.87	18	1.297			0.08	0.353	0.458
	FR1 n77 ENDC	100M	BPSK	135	69	Back	5mm	Ant6	ECI 3	-	656000	3840	1	16.69	18	1.352			-0.17	0.275	0.372
	FR1 n77	100M	BPSK	1	1	Front	8mm	Ant6	ECI 4	-	656000	3840	1	23.07	24.50	1.39			-0.15	0.253	0.352
	FR1 n77 HPUE	100M	BPSK	1	1	Back	14mm	Ant6	ECI 4	-	656000	3840	1	25.97	27.50	1.422	50.0	1.0	0.07	0.257	0.365
	FR1 n77	100M	BPSK	1	1	Back	14mm	Ant6	ECI 4	-	656000	3840	1	23.07	24.50	1.39			0.16	0.270	0.375
	FR1 n77	100M	BPSK	1	1	Front	5mm	Ant11	ECI 3	-	656000	3840	1	15.08	16.50	1.387			0.01	0.001	0.001
	FR1 n77	100M	BPSK	135	69	Front	5mm	Ant11	ECI 3	-	656000	3840	1	15.07	16.50	1.39			0.00	0.001	0.001
	FR1 n77	100M	BPSK	1	1	Back	5mm	Ant11	ECI 3	-	656000	3840	1	15.08	16.50	1.387			0.08	0.156	0.216



FCC SAR Test Report

Report No. : FA562503

	FR1 n77	100M	BPSK	135	69	Back	5mm	Ant11	ECI 3	-	656000	3840	1	15.07	16.50	1.39			0.12	0.001	0.001
	FR1 n77 HPUE	100M	BPSK	1	1	Back	5mm	Ant11	ECI 3	-	656000	3840	1	18.11	19.50	1.377	50.0	1.0	-0.14	0.145	0.200

【WLAN 2.4GHz_5GHz SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	0.11	0.338	0.491
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant8	Simultaneous-	6	2437	1	12.63	14.00	1.371	99.52	1.005	-0.05	0.367	0.506
76	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant8	Receiver off	6	2437	1	15.40	17.00	1.445	99.52	1.005	-0.07	0.751	1.091
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant8	Receiver off	1	2412	1	14.90	16.50	1.445	99.52	1.005	-0.00	0.691	1.003
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant8	Receiver off	11	2462	1	15.39	17.00	1.449	99.52	1.005	0.07	0.628	0.915
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant8	Receiver off	6	2437	2	15.40	17.00	1.445	99.52	1.005	0.09	0.723	1.050
	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant8	Receiver off	6	2437	4	15.40	17.00	1.445	99.52	1.005	-0.15	0.739	1.073
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	0.06	0.533	0.715
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant9	Simultaneous-	58	5290	1	10.22	11.50	1.343	88.04	1.136	-0.02	0.142	0.217
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	0.05	0.714	0.957
77	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant9	Receiver off	60	5300	1	17.29	18.50	1.321	96.5	1.036	0.06	0.730	0.999
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	0.15	0.627	0.903
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant9	Receiver off	144	5720	1	17.05	18.50	1.396	96.5	1.036	-0.01	0.506	0.732
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant9	Simultaneous-	106	5530	1	10.41	11.50	1.285	88.04	1.136	-0.05	0.151	0.220
78	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	-0.06	0.664	0.956
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant9	Receiver off	144	5720	1	17.05	18.50	1.396	96.5	1.036	-0.06	0.581	0.840
	WLAN5GHz	802.11a 6Mbps	Front	5mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	0.11	0.399	0.575
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant9	Simultaneous-	155	5775	1	11.17	12.50	1.358	88.04	1.136	-0.04	0.141	0.218
79	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant9	Receiver off	165	5825	1	17.07	18.50	1.39	96.5	1.036	0.04	0.562	0.809
	WLAN5GHz	802.11a 6Mbps	Back	5mm	Ant9	Receiver off	157	5785	1	16.51	18.00	1.409	96.5	1.036	0.09	0.542	0.791

【Bluetooth SAR】

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	Bluetooth	1Mbps	Front	5mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.18	0.072	0.116
80	Bluetooth	1Mbps	Back	5mm	Ant8	Receiver off	39	2441	1	9.30	11.00	1.479	76.53	1.088	-0.04	0.161	0.259



15.4 Product specific 10g SAR

[WLAN 5GHz SAR]

Plot No	Band	Mode	Test Position	Gap(mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	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)
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	-0.06	0.622	0.834
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	0.13	0.344	0.461
	WLAN5GHz	802.11a 6Mbps	Left Edge	0mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	0.10	0.012	0.016
81	WLAN5GHz	802.11a 6Mbps	Right Edge	0mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	-0.12	1.210	1.622
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	-0.06	0.143	0.192
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	0mm	Ant9	Receiver off	52	5260	1	17.38	18.50	1.294	96.5	1.036	0.04	0.010	0.013
	WLAN5GHz	802.11a 6Mbps	Right Edge	0mm	Ant9	Receiver off	52	5260	2	17.38	18.50	1.294	96.5	1.036	0.16	1.160	1.555
	WLAN5GHz	802.11a 6Mbps	Right Edge	0mm	Ant9	Receiver off	52	5260	4	17.38	18.50	1.294	96.5	1.036	-0.17	1.120	1.501
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	-0.17	0.591	0.851
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	-0.05	0.341	0.491
	WLAN5GHz	802.11a 6Mbps	Left Edge	0mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	0.19	0.012	0.017
82	WLAN5GHz	802.11a 6Mbps	Right Edge	0mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	-0.06	1.060	1.526
	WLAN5GHz	802.11a 6Mbps	Top Edge	0mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	0.18	0.176	0.253
	WLAN5GHz	802.11a 6Mbps	Bottom Edge	0mm	Ant9	Receiver off	116	5580	1	17.07	18.50	1.39	96.5	1.036	0.13	0.010	0.014



15.5 Repeated SAR Measurement

[Repeat SAR 1g - FCC]

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)	Ratio
1st	LTE Band 13	10M_QPSK_1_0	Back	5mm	Ant2	ECI 3	23230	782	23.09	24.00	1.233			0.09	0.873	1.076	-
2nd	LTE Band 13	10M_QPSK_1_0	Back	5mm	Ant2	ECI 3	23230	782	23.09	24.00	1.233			-0.14	0.854	1.053	1.02
1st	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant2	ECI 3	4182	836.4	23.07	24.00	1.239			-0.16	0.862	1.068	-
2nd	WCDMA V	RMC 12.2Kbps	Back	5mm	Ant2	ECI 3	4182	836.4	23.07	24.00	1.239			0.02	0.837	1.037	1.03
1st	FR1 n66	45M_BPSK_1_1	Front	8mm	Ant5	ECI 4	349000	1745	24.77	25.70	1.239			0.16	0.876	1.085	-
2nd	FR1 n66	45M_BPSK_1_1	Front	8mm	Ant5	ECI 4	349000	1745	24.77	25.70	1.239			0.09	0.866	1.073	1.01
1st	FR1 n2	40M_BPSK_1_1	Front	8mm	Ant5	ECI 4	376000	1880	24.87	25.70	1.211			-0.02	0.894	1.083	-
2nd	FR1 n2	40M_BPSK_1_1	Front	8mm	Ant5	ECI 4	376000	1880	24.87	25.70	1.211			0.07	0.878	1.063	1.02
1st	LTE Band 41	20M_QPSK_1_0	Right Tilted	0mm	Ant5	ECI 1	40620	2593	19.63	20.00	1.089	62.9	1.006	0.06	0.976	1.069	-
2nd	LTE Band 41	20M_QPSK_1_0	Right Tilted	0mm	Ant5	ECI 1	40620	2593	19.63	20.00	1.089	62.9	1.006	-0.03	0.942	1.032	1.04
1st	LTE Band 42	20M_QPSK_50_0	Back	5mm	Ant4	ECI 3	42990	3540	18.52	19.50	1.253	62.9	1.006	-0.04	0.815	1.027	-
2nd	LTE Band 42	20M_QPSK_50_0	Back	5mm	Ant4	ECI 3	42990	3540	18.52	19.50	1.253	62.9	1.006	0.14	0.803	1.012	1.01
1st	FR1 n48	40M_BPSK_50_28	Front	8mm	Ant4	ECI 4	645332	3679.98	22.69	23.70	1.262			-0.09	0.826	1.042	-
2nd	FR1 n48	40M_BPSK_50_28	Front	8mm	Ant4	ECI 4	645332	3679.98	22.69	23.70	1.262			-0.18	0.819	1.034	1.01

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/kg}$, only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured* SAR.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

15.6 NR Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for 5GNR n77/n78. The highest available duty cycle for Power Class 2 operation is 50% 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 5GNR 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.

NR n77 Part270 (HPUE)-Linearity Data for Head Ant2			NR n77 Part270 (HPUE)-Linearity Data for Head Ant4		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	17.00	20.00
Reported 1g SAR (W/kg)	0.517	0.522	Reported 1g SAR (W/kg)	0.884	0.865
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	50.12	50.00
Linearity SAR (W/kg)	0.516		Linearity SAR (W/kg)	0.882	
% deviation from expected linearity		1.21%	% deviation from expected linearity		-1.92%
NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant2			NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant4		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.548	0.568	Reported 1g SAR (W/kg)	0.913	0.904
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.547		Linearity SAR (W/kg)	0.911	
% deviation from expected linearity		3.90%	% deviation from expected linearity		-0.75%
NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant2			NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant4		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.230	0.214	Reported 1g SAR (W/kg)	0.327	0.302
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.229		Linearity SAR (W/kg)	0.326	
% deviation from expected linearity		-6.74%	% deviation from expected linearity		-7.43%
NR n77 Part270 (HPUE)-Linearity Data for Head Ant6			NR n77 Part270 (HPUE)-Linearity Data for Head Ant11		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	22.50	25.50
Reported 1g SAR (W/kg)	0.994	0.957	Reported 1g SAR (W/kg)	0.257	0.245
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	177.83	177.41
Linearity SAR (W/kg)	0.992		Linearity SAR (W/kg)	0.256	
% deviation from expected linearity		-3.49%	% deviation from expected linearity		-4.44%
NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant6			NR n77 Part270 (HPUE)-Linearity Data for Body-worn Ant11		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.903	0.844	Reported 1g SAR (W/kg)	0.494	0.531
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.901		Linearity SAR (W/kg)	0.493	
% deviation from expected linearity		-6.31%	% deviation from expected linearity		7.75%
NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant6			NR n77 Part270 (HPUE)-Linearity Data for Hotspot Ant11		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.300	0.298	Reported 1g SAR (W/kg)	0.164	0.149



Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.299		Linearity SAR (W/kg)	0.164	
% deviation from expected linearity		-0.43%	% deviation from expected linearity		-8.93%

NR n77 Part27Q (HPUE)-Linearity Data for Head Ant2			NR n77 Part27Q (HPUE)-Linearity Data for Head Ant4		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	17.00	20.00
Reported 1g SAR (W/kg)	0.392	0.403	Reported 1g SAR (W/kg)	0.919	0.935
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	50.12	50.00
Linearity SAR (W/kg)	0.391		Linearity SAR (W/kg)	0.917	
% deviation from expected linearity		3.05%	% deviation from expected linearity		1.98%
NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant2			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant4		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.379	0.387	Reported 1g SAR (W/kg)	1.039	0.969
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.378		Linearity SAR (W/kg)	1.037	
% deviation from expected linearity		2.35%	% deviation from expected linearity		-6.52%
NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant2			NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant4		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.188	0.197	Reported 1g SAR (W/kg)	0.446	0.422
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.188		Linearity SAR (W/kg)	0.445	
% deviation from expected linearity		5.04%	% deviation from expected linearity		-5.16%

NR n77 Part27Q (HPUE)-Linearity Data for Head Ant6			NR n77 Part27Q (HPUE)-Linearity Data for Head Ant11		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	25.50	Maximum Tune up Power (dBm)	22.50	25.50
Reported 1g SAR (W/kg)	1.008	0.945	Reported 1g SAR (W/kg)	0.115	0.111
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	177.83	177.41	Frame Averaged (mW)	177.83	177.41
Linearity SAR (W/kg)	1.006		Linearity SAR (W/kg)	0.115	
% deviation from expected linearity		-6.03%	% deviation from expected linearity		-3.25%
NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant6			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant11		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.950	0.976	Reported 1g SAR (W/kg)	0.216	0.200
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.948		Linearity SAR (W/kg)	0.215	
% deviation from expected linearity		2.98%	% deviation from expected linearity		-7.19%
NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant6			NR n77 Part27Q (HPUE)-Linearity Data for Hotspot Ant11		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	21.00	24.00	Maximum Tune up Power (dBm)	16.50	19.50
Reported 1g SAR (W/kg)	0.313	0.295	Reported 1g SAR (W/kg)	0.058	0.054
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59	Frame Averaged (mW)	44.67	44.56
Linearity SAR (W/kg)	0.312		Linearity SAR (W/kg)	0.058	
% deviation from expected linearity		-5.53%	% deviation from expected linearity		-6.68%

**Sensor off**

NR n77 Part27O (HPUE)-Linearity Data for Body-worn Ant4			NR n77 Part27O (HPUE)-Linearity Data for Body-worn Ant6		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00	Maximum Tune up Power (dBm)	24.50	27.50
Reported 1g SAR (W/kg)	0.740	0.714	Reported 1g SAR (W/kg)	0.404	0.374
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05	Frame Averaged (mW)	281.84	281.17
Linearity SAR (W/kg)	0.738		Linearity SAR (W/kg)	0.403	
% deviation from expected linearity		-3.28%	% deviation from expected linearity		-7.21%

NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant4			NR n77 Part27Q (HPUE)-Linearity Data for Body-worn Ant6		
	NR n77 (Power Class 3)	NR n77 (Power Class 2)		NR n77 (Power Class 3)	NR n77 (Power Class 2)
Maximum Tune up Power (dBm)	23.00	26.00	Maximum Tune up Power (dBm)	24.50	27.50
Reported 1g SAR (W/kg)	0.779	0.763	Reported 1g SAR (W/kg)	0.375	0.365
Duty Cycle	100.00%	50.00%	Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05	Frame Averaged (mW)	281.84	281.17
Linearity SAR (W/kg)	0.777		Linearity SAR (W/kg)	0.374	
% deviation from expected linearity		-1.82%	% deviation from expected linearity		-2.44%

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN 2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN 5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
5.	WWAN +5GHz WLAN + Bluetooth	Yes	Yes	Yes	Yes
6.	WWAN + WLAN 2.4GHz+ NFC				Yes
7.	WWAN + WLAN 5GHz+ NFC				Yes
8.	WWAN + Bluetooth+ NFC				Yes
9.	5GHz WLAN + Bluetooth+ NFC				Yes
10.	WWAN +5GHz WLAN + Bluetooth+ NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
- 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 supports WLAN Direct (GC only).
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can't transmit simultaneously.
- According to the EUT characteristic, when WLAN 2.4GHz and Bluetooth share the same antenna path and cannot transmit simultaneously
- NFC can transmit simultaneously with other Radios in extremity exposure condition
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each band.
- For inter-band ULCA SAR co-located with WLAN/Bluetooth, chose the worst SAR among the selected LTE bands within the selected antenna per each test position to do co-located with WLAN/Bluetooth. This is the worst co-located analysis and can represent each LTE bands.
- For EN-DC SAR co-located with WLAN/Bluetooth, chose the worst SAR among the selected LTE Bands within the selected antenna per each test position and the worst SAR of the selected 5GNR Bands within the selected antenna to do co-located with WLAN/Bluetooth. This is the worst co-located analysis and can represent each LTE bands and each 5GNR 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.



16.1 Head Exposure Conditions

WWAN1		Exposure Position	1	3	4	5	1+3 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
			WWAN1	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
All Bands	All ANT	Right Cheek	1.055	0.253	0.217	0.002	1.31	1.27
		Right Tilted	1.09	0.253	0.173	0.002	1.34	1.27
		Left Cheek	0.884	0.709	0.412	0.211	1.59	1.51
		Left Tilted	0.851	0.719	0.412	0.154	1.57	1.42

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 2	Ant1	LTE Band 4 LTE Band 66	Ant3	Right Cheek	0.154	0.551	0.253	0.217	0.002	0.96	0.92
				Right Tilted	0.107	0.174	0.253	0.173	0.002	0.53	0.46
				Left Cheek	0.162	0.151	0.709	0.412	0.211	1.02	0.94
				Left Tilted	0.120	0.071	0.719	0.412	0.154	0.91	0.76
LTE Band 4 LTE Band 66	Ant1	LTE Band 5 LTE Band 26	Ant0	Right Cheek	0.169	0.219	0.253	0.217	0.002	0.64	0.61
				Right Tilted	0.074	0.125	0.253	0.173	0.002	0.45	0.37
				Left Cheek	0.167	0.211	0.709	0.412	0.211	1.09	1.00
				Left Tilted	0.099	0.109	0.719	0.412	0.154	0.93	0.77
LTE Band 2	Ant3	LTE Band 7	Ant6	Right Cheek	0.550	0.483	0.253	0.217	0.002	1.29	1.25
				Right Tilted	0.185	0.535	0.253	0.173	0.002	0.97	0.90
				Left Cheek	0.149	0.304	0.709	0.412	0.211	1.16	1.08
				Left Tilted	0.081	0.338	0.719	0.412	0.154	1.14	0.99
LTE Band 4 LTE Band 66	Ant3	LTE Band 7	Ant6	Right Cheek	0.551	0.483	0.253	0.217	0.002	1.29	1.25
				Right Tilted	0.174	0.535	0.253	0.173	0.002	0.96	0.88
				Left Cheek	0.151	0.304	0.709	0.412	0.211	1.16	1.08
				Left Tilted	0.071	0.338	0.719	0.412	0.154	1.13	0.98
LTE Band 5 LTE Band 26	Ant0	FR1 n77 (27Q) FR1 n77 (27Q) FR1 n78 (27Q) FR1 n78 (27Q)	Ant4	Right Cheek	0.219	0.935	0.253	0.217	0.002	1.41	1.37
				Right Tilted	0.125	0.586	0.253	0.173	0.002	0.96	0.89
				Left Cheek	0.211	0.231	0.709	0.412	0.211	1.15	1.07
				Left Tilted	0.109	0.160	0.719	0.412	0.154	0.99	0.84
LTE Band 5 LTE Band 26	Ant0	FR1 n7 FR1 n38 FR1 n41 FR1 n66	Ant1	Right Cheek	0.219	0.175	0.253	0.217	0.002	0.65	0.61
				Right Tilted	0.125	0.098	0.253	0.173	0.002	0.48	0.40
				Left Cheek	0.211	0.289	0.709	0.412	0.211	1.21	1.12
				Left Tilted	0.109	0.085	0.719	0.412	0.154	0.91	0.76
LTE Band 7	Ant1	FR1 n5 FR1 n26	Ant0	Right Cheek	0.116	0.298	0.253	0.217	0.002	0.67	0.63
				Right Tilted	0.088	0.175	0.253	0.173	0.002	0.52	0.44
				Left Cheek	0.213	0.228	0.709	0.412	0.211	1.15	1.06
				Left Tilted	0.081	0.134	0.719	0.412	0.154	0.93	0.78
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27Q) FR1 n78 (27Q) FR1 n78 (27Q)	Ant4	Right Cheek	0.655	0.607	0.253	0.217	0.002	1.52	1.48
				Right Tilted	0.265	0.586	0.253	0.173	0.002	1.10	1.03
				Left Cheek	0.190	0.231	0.709	0.412	0.211	1.13	1.04
				Left Tilted	0.137	0.160	0.719	0.412	0.154	1.02	0.86
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant1	Right Cheek	0.605	0.175	0.253	0.217	0.002	1.03	1.00
				Right Tilted	0.227	0.098	0.253	0.173	0.002	0.58	0.50
				Left Cheek	0.179	0.151	0.709	0.412	0.211	1.04	0.95
				Left Tilted	0.109	0.103	0.719	0.412	0.154	0.93	0.78
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant6	Right Cheek	0.551	0.647	0.253	0.217	0.002	1.45	1.42
				Right Tilted	0.185	0.718	0.253	0.173	0.002	1.16	1.08
				Left Cheek	0.151	0.387	0.709	0.412	0.211	1.25	1.16
				Left Tilted	0.081	0.432	0.719	0.412	0.154	1.23	1.08



FCC SAR Test Report

Report No. : FA562503

LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant5	Right Cheek	0.551	0.472	0.253	0.217	0.002	1.28	1.24
				Right Tilted	0.185	0.472	0.253	0.173	0.002	0.91	0.83
				Left Cheek	0.151	0.472	0.709	0.412	0.211	1.33	1.25
				Left Tilted	0.081	0.472	0.719	0.412	0.154	1.27	1.12
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n38 FR1 n41	Ant10	Right Cheek	0.551	0.427	0.253	0.217	0.002	1.23	1.20
				Right Tilted	0.185	0.061	0.253	0.173	0.002	0.50	0.42
				Left Cheek	0.151	0.351	0.709	0.412	0.211	1.21	1.13
				Left Tilted	0.081	0.137	0.719	0.412	0.154	0.94	0.78

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 26	Ant0	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Right Cheek	0.219	0.522	0.253	0.217	0.002	0.99	0.96
				Right Tilted	0.125	0.522	0.253	0.173	0.002	0.90	0.82
				Left Cheek	0.211	0.522	0.709	0.412	0.211	1.44	1.36
				Left Tilted	0.109	0.522	0.719	0.412	0.154	1.35	1.20
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Right Cheek	0.655	0.522	0.253	0.217	0.002	1.43	1.40
				Right Tilted	0.265	0.522	0.253	0.173	0.002	1.04	0.96
				Left Cheek	0.190	0.522	0.709	0.412	0.211	1.42	1.34
				Left Tilted	0.137	0.522	0.719	0.412	0.154	1.38	1.23
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant5	Right Cheek	0.605	0.532	0.253	0.217	0.002	1.39	1.36
				Right Tilted	0.227	0.532	0.253	0.173	0.002	1.01	0.93
				Left Cheek	0.179	0.532	0.709	0.412	0.211	1.42	1.33
				Left Tilted	0.109	0.532	0.719	0.412	0.154	1.36	1.21
LTE Band 5 LTE Band 26	Ant0 Ant2	FR1 n7 FR1 n66	Ant5	Right Cheek	0.444	0.472	0.253	0.217	0.002	1.17	1.14
				Right Tilted	0.125	0.472	0.253	0.173	0.002	0.85	0.77
				Left Cheek	0.411	0.472	0.709	0.412	0.211	1.59	1.51
				Left Tilted	0.112	0.472	0.719	0.412	0.154	1.30	1.15
LTE Band 7	Ant5	FR1 n5 FR1 n26	Ant0 Ant2	Right Cheek	0.832	0.298	0.253	0.217	0.002	1.38	1.35
				Right Tilted	0.791	0.175	0.253	0.173	0.002	1.22	1.14
				Left Cheek	0.339	0.330	0.709	0.412	0.211	1.38	1.29
				Left Tilted	0.390	0.134	0.719	0.412	0.154	1.24	1.09
LTE Band 5 LTE Band 26	Ant2	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant4 Ant11	Right Cheek	0.444	0.607	0.253	0.217	0.002	1.30	1.27
				Right Tilted	0.076	0.607	0.253	0.173	0.002	0.94	0.86
				Left Cheek	0.411	0.292	0.709	0.412	0.211	1.41	1.33
				Left Tilted	0.112	0.607	0.719	0.412	0.154	1.44	1.29
LTE Band 5 LTE Band 26	Ant2	FR1 n38 FR1 n41	Ant1 Ant5 Ant3 Ant10	Right Cheek	0.444	0.472	0.253	0.217	0.002	1.17	1.14
				Right Tilted	0.076	0.472	0.253	0.173	0.002	0.80	0.72
				Left Cheek	0.411	0.472	0.709	0.412	0.211	1.59	1.51
				Left Tilted	0.112	0.472	0.719	0.412	0.154	1.30	1.15



16.2 Hotspot Exposure Conditions

WWAN1		Exposure Position	1	3	4	5	1+3 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
			WWAN1	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
All Bands	All ANT	Front	0.421	0.244	0.256	0.002	0.67	0.68
		Back	0.577	0.495	0.287	0.092	1.07	0.96
		Left Edge	0.860	0.001	0.085	0.002	0.86	0.95
		Right Edge	0.406	0.407	0.544	0.063	0.81	1.01
		Top Edge	0.473	0.328	0.158	0.002	0.80	0.63
		Bottom Edge	0.558	0.001	0.094	0.002	0.56	0.65

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 2	Ant1	LTE Band 4 LTE Band 66	Ant3	Front	0.278	0.005	0.244	0.256	0.002	0.53	0.54
				Back	0.334	0.246	0.495	0.287	0.092	1.08	0.96
				Left Edge	0.097	0.306	0.001	0.085	0.002	0.40	0.49
				Right Edge	0.001	0.005	0.407	0.544	0.063	0.41	0.61
				Top Edge	0.001	0.005	0.328	0.158	0.002	0.33	0.17
				Bottom Edge	0.541	0.005	0.001	0.094	0.002	0.55	0.64
LTE Band 4 LTE Band 66	Ant1	LTE Band 5 LTE Band 26	Ant0	Front	0.250	0.233	0.244	0.256	0.002	0.73	0.74
				Back	0.323	0.308	0.495	0.287	0.092	1.13	1.01
				Left Edge	0.081	0.108	0.001	0.085	0.002	0.19	0.28
				Right Edge	0.060	0.347	0.407	0.544	0.063	0.81	1.01
				Top Edge	0.001	0.001	0.328	0.158	0.002	0.33	0.16
				Bottom Edge	0.473	0.227	0.001	0.094	0.002	0.70	0.80
LTE Band 2	Ant3	LTE Band 7	Ant6	Front	0.132	0.075	0.244	0.256	0.002	0.45	0.47
				Back	0.201	0.144	0.495	0.287	0.092	0.84	0.72
				Left Edge	0.256	0.020	0.001	0.085	0.002	0.28	0.36
				Right Edge	0.001	0.001	0.407	0.544	0.063	0.41	0.61
				Top Edge	0.001	0.111	0.328	0.158	0.002	0.44	0.27
				Bottom Edge	0.001	0.001	0.001	0.094	0.002	0.00	0.10
LTE Band 4 LTE Band 66	Ant3	LTE Band 7	Ant6	Front	0.005	0.075	0.244	0.256	0.002	0.32	0.34
				Back	0.246	0.144	0.495	0.287	0.092	0.89	0.77
				Left Edge	0.306	0.020	0.001	0.085	0.002	0.33	0.41
				Right Edge	0.005	0.001	0.407	0.544	0.063	0.41	0.61
				Top Edge	0.005	0.111	0.328	0.158	0.002	0.44	0.28
				Bottom Edge	0.005	0.001	0.001	0.094	0.002	0.01	0.10
LTE Band 5 LTE Band 26	Ant0	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant4	Front	0.233	0.147	0.244	0.256	0.002	0.62	0.64
				Back	0.308	0.231	0.495	0.287	0.092	1.03	0.92
				Left Edge	0.108	0.446	0.001	0.085	0.002	0.56	0.64
				Right Edge	0.347	0.001	0.407	0.544	0.063	0.76	0.96
				Top Edge	0.001	0.106	0.328	0.158	0.002	0.44	0.27
				Bottom Edge	0.227	0.048	0.001	0.094	0.002	0.28	0.37
LTE Band 5 LTE Band 26	Ant0	FR1 n7 FR1 n38 FR1 n41 FR1 n66	Ant1	Front	0.233	0.230	0.244	0.256	0.002	0.71	0.72
				Back	0.308	0.303	0.495	0.287	0.092	1.11	0.99
				Left Edge	0.108	0.079	0.001	0.085	0.002	0.19	0.27
				Right Edge	0.347	0.049	0.407	0.544	0.063	0.80	1.00
				Top Edge	0.001	0.001	0.328	0.158	0.002	0.33	0.16
				Bottom Edge	0.227	0.400	0.001	0.094	0.002	0.63	0.72
LTE Band 7	Ant1	FR1 n5 FR1 n26	Ant0	Front	0.254	0.236	0.244	0.256	0.002	0.73	0.75
				Back	0.334	0.296	0.495	0.287	0.092	1.13	1.01



FCC SAR Test Report

Report No. : FA562503

				Left Edge	0.077	0.159	0.001	0.085	0.002	0.24	0.32
				Right Edge	0.001	0.399	0.407	0.544	0.063	0.81	1.01
				Top Edge	0.001	0.001	0.328	0.158	0.002	0.33	0.16
				Bottom Edge	0.343	0.127	0.001	0.094	0.002	0.47	0.57
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant4	Front	0.132	0.147	0.244	0.256	0.002	0.52	0.54
				Back	0.246	0.231	0.495	0.287	0.092	0.97	0.86
				Left Edge	0.306	0.446	0.001	0.085	0.002	0.75	0.84
				Right Edge	0.005	0.001	0.407	0.544	0.063	0.41	0.61
				Top Edge	0.074	0.106	0.328	0.158	0.002	0.51	0.34
				Bottom Edge	0.005	0.048	0.001	0.094	0.002	0.05	0.15
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant1	Front	0.132	0.269	0.244	0.256	0.002	0.65	0.66
				Back	0.246	0.317	0.495	0.287	0.092	1.06	0.94
				Left Edge	0.306	0.099	0.001	0.085	0.002	0.41	0.49
				Right Edge	0.005	0.050	0.407	0.544	0.063	0.46	0.66
				Top Edge	0.074	0.001	0.328	0.158	0.002	0.40	0.24
				Bottom Edge	0.005	0.558	0.001	0.094	0.002	0.56	0.66
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant6	Front	0.132	0.140	0.244	0.256	0.002	0.52	0.53
				Back	0.246	0.270	0.495	0.287	0.092	1.01	0.90
				Left Edge	0.306	0.001	0.001	0.085	0.002	0.31	0.39
				Right Edge	0.005	0.001	0.407	0.544	0.063	0.41	0.61
				Top Edge	0.005	0.250	0.328	0.158	0.002	0.58	0.42
				Bottom Edge	0.005	0.001	0.001	0.094	0.002	0.01	0.10
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant5	Front	0.132	0.301	0.244	0.256	0.002	0.68	0.69
				Back	0.246	0.452	0.495	0.287	0.092	1.19	1.08
				Left Edge	0.306	0.166	0.001	0.085	0.002	0.47	0.56
				Right Edge	0.005	0.001	0.407	0.544	0.063	0.41	0.61
				Top Edge	0.005	0.473	0.328	0.158	0.002	0.81	0.64
				Bottom Edge	0.005	0.001	0.001	0.094	0.002	0.01	0.10
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n38 FR1 n41	Ant10	Front	0.132	0.089	0.244	0.256	0.002	0.47	0.48
				Back	0.246	0.117	0.495	0.287	0.092	0.86	0.74
				Left Edge	0.306	0.001	0.001	0.085	0.002	0.31	0.39
				Right Edge	0.005	0.110	0.407	0.544	0.063	0.52	0.72
				Top Edge	0.005	0.001	0.328	0.158	0.002	0.33	0.17
				Bottom Edge	0.005	0.001	0.001	0.094	0.002	0.01	0.10

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 26	Ant0	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Front	0.233	0.153	0.244	0.256	0.002	0.63	0.64
				Back	0.308	0.260	0.495	0.287	0.092	1.06	0.95
				Left Edge	0.108	0.230	0.001	0.085	0.002	0.34	0.43
				Right Edge	0.347	0.085	0.407	0.544	0.063	0.84	1.04
				Top Edge	0.001	0.313	0.328	0.158	0.002	0.64	0.47
				Bottom Edge	0.227	0.001	0.001	0.094	0.002	0.23	0.32
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Front	0.132	0.153	0.244	0.256	0.002	0.53	0.54
				Back	0.246	0.260	0.495	0.287	0.092	1.00	0.89
				Left Edge	0.306	0.230	0.001	0.085	0.002	0.54	0.62
				Right Edge	0.005	0.085	0.407	0.544	0.063	0.50	0.70
				Top Edge	0.074	0.313	0.328	0.158	0.002	0.72	0.55
				Bottom Edge	0.005	0.001	0.001	0.094	0.002	0.01	0.10
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant5	Front	0.132	0.254	0.244	0.256	0.002	0.63	0.64
				Back	0.246	0.421	0.495	0.287	0.092	1.16	1.05
				Left Edge	0.306	0.134	0.001	0.085	0.002	0.44	0.53
				Right Edge	0.005	0.055	0.407	0.544	0.063	0.47	0.67



FCC SAR Test Report

Report No. : FA562503

				Top Edge	0.074	0.409	0.328	0.158	0.002	0.81	0.64
				Bottom Edge	0.005	0.001	0.001	0.094	0.002	0.01	0.10
LTE Band 5 LTE Band 26	Ant0 Ant2	FR1 n7 FR1 n66	Ant5	Front	0.404	0.254	0.244	0.256	0.002	0.90	0.92
				Back	0.577	0.421	0.495	0.287	0.092	1.49	1.38
				Left Edge	0.730	0.126	0.001	0.085	0.002	0.86	0.94
				Right Edge	0.347	0.001	0.407	0.544	0.063	0.76	0.96
				Top Edge	0.004	0.409	0.328	0.158	0.002	0.74	0.57
				Bottom Edge	0.227	0.001	0.001	0.094	0.002	0.23	0.32
LTE Band 7	Ant5	FR1 n5 FR1 n26	Ant0 Ant2	Front	0.170	0.236	0.244	0.256	0.002	0.65	0.66
				Back	0.228	0.296	0.495	0.287	0.092	1.02	0.90
				Left Edge	0.107	0.406	0.001	0.085	0.002	0.51	0.60
				Right Edge	0.001	0.399	0.407	0.544	0.063	0.81	1.01
				Top Edge	0.247	0.001	0.328	0.158	0.002	0.58	0.41
LTE Band 5 LTE Band 26	Ant2	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant4 Ant11	Bottom Edge	0.001	0.127	0.001	0.094	0.002	0.13	0.22
				Front	0.404	0.153	0.244	0.256	0.002	0.80	0.82
				Back	0.577	0.260	0.495	0.287	0.092	1.33	1.22
				Left Edge	0.730	0.446	0.001	0.085	0.002	1.18	1.26
				Right Edge	0.004	0.085	0.407	0.544	0.063	0.50	0.70
LTE Band 5 LTE Band 26	Ant2	FR1 n38 FR1 n41	Ant1 Ant5 Ant3 Ant10	Top Edge	0.004	0.313	0.328	0.158	0.002	0.65	0.48
				Bottom Edge	0.004	0.048	0.001	0.094	0.002	0.05	0.15
				Front	0.404	0.327	0.244	0.256	0.002	0.98	0.99
				Back	0.577	0.453	0.495	0.287	0.092	1.53	1.41
				Left Edge	0.730	0.613	0.001	0.085	0.002	1.34	1.43
				Right Edge	0.004	0.110	0.407	0.544	0.063	0.52	0.72
				Top Edge	0.004	0.473	0.328	0.158	0.002	0.81	0.64
				Bottom Edge	0.004	0.268	0.001	0.094	0.002	0.27	0.37



16.3 Body-Worn Accessory Exposure Conditions

WWAN1		Exposure Position	1	3	4	5	1+3 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
			WWAN1	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
All Bands	All ANT	Front	1.085	0.491	0.220	0.116	1.58	1.42
		Back	1.087	0.506	0.220	0.259	1.59	1.57

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 2	Ant1	LTE Band 4 LTE Band 66	Ant3	Front	0.416	0.223	0.491	0.220	0.116	1.13	0.98
				Back	0.551	0.512	0.506	0.220	0.259	1.57	1.54
LTE Band 4 LTE Band 66	Ant1	LTE Band 5 LTE Band 26	Ant0	Front	0.747	0.348	0.491	0.220	0.116	1.59	1.43
				Back	0.529	0.497	0.506	0.220	0.259	1.53	1.51
LTE Band 2	Ant3	LTE Band 7	Ant6	Front	0.300	0.211	0.491	0.220	0.116	1.00	0.85
				Back	0.506	0.549	0.506	0.220	0.259	1.56	1.53
LTE Band 4 LTE Band 66	Ant3	LTE Band 7	Ant6	Front	0.223	0.211	0.491	0.220	0.116	0.93	0.77
				Back	0.512	0.549	0.506	0.220	0.259	1.57	1.54
LTE Band 5 LTE Band 26	Ant0	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant4	Front	0.348	0.491	0.491	0.220	0.116	1.33	1.18
				Back	0.497	0.491	0.506	0.220	0.259	1.49	1.47
LTE Band 5 LTE Band 26	Ant0	FR1 n7 FR1 n38 FR1 n41 FR1 n66	Ant1	Front	0.348	0.539	0.491	0.220	0.116	1.38	1.22
				Back	0.497	0.539	0.506	0.220	0.259	1.54	1.52
LTE Band 7	Ant1	FR1 n5 FR1 n26	Ant0	Front	0.528	0.545	0.491	0.220	0.116	1.56	1.41
				Back	0.528	0.545	0.506	0.220	0.259	1.58	1.55
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant4	Front	0.328	0.491	0.491	0.220	0.116	1.31	1.16
				Back	0.512	0.491	0.506	0.220	0.259	1.51	1.48
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant1	Front	0.328	0.539	0.491	0.220	0.116	1.36	1.20
				Back	0.512	0.539	0.506	0.220	0.259	1.56	1.53
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant6	Front	0.300	0.242	0.491	0.220	0.116	1.03	0.88
				Back	0.512	0.538	0.506	0.220	0.259	1.56	1.53
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant5	Front	0.300	0.533	0.491	0.220	0.116	1.32	1.17
				Back	0.512	0.533	0.506	0.220	0.259	1.55	1.52
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n38 FR1 n41	Ant10	Front	0.300	0.225	0.491	0.220	0.116	1.02	0.86
				Back	0.512	0.441	0.506	0.220	0.259	1.46	1.43



WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 26	Ant2	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Front	0.517	0.568	0.491	0.220	0.116	1.58	1.42
				Back	0.517	0.568	0.506	0.220	0.259	1.59	1.56
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Front	0.512	0.568	0.491	0.220	0.116	1.57	1.42
				Back	0.512	0.568	0.506	0.220	0.259	1.59	1.56
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant5	Front	0.328	0.509	0.491	0.220	0.116	1.33	1.17
				Back	0.512	0.509	0.506	0.220	0.259	1.53	1.50
LTE Band 5 LTE Band 26	Ant0 Ant2	FR1 n7 FR1 n66	Ant5	Front	0.517	0.533	0.491	0.220	0.116	1.54	1.39
				Back	0.517	0.533	0.506	0.220	0.259	1.56	1.53
LTE Band 7	Ant5	FR1 n5 FR1 n26	Ant0 Ant2	Front	0.387	0.545	0.491	0.220	0.116	1.42	1.27
				Back	0.387	0.545	0.506	0.220	0.259	1.44	1.41
LTE Band 5 LTE Band 26	Ant2	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant4 Ant11	Front	0.517	0.568	0.491	0.220	0.116	1.58	1.42
				Back	0.517	0.568	0.506	0.220	0.259	1.59	1.56
LTE Band 5 LTE Band 26	Ant2	FR1 n38 FR1 n41	Ant1 Ant5 Ant3 Ant10	Front	0.517	0.566	0.491	0.220	0.116	1.57	1.42
				Back	0.517	0.566	0.506	0.220	0.259	1.59	1.56



<Sensor Off>

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 2	Ant1	LTE Band 4 LTE Band 66	Ant3	Front	0.270	0.223	0.491	0.220	0.116	0.98	0.83
				Back	0.412	0.512	0.506	0.220	0.259	1.43	1.40
LTE Band 2	Ant3	LTE Band 7	Ant6	Front	0.300	0.211	0.491	0.220	0.116	1.00	0.85
				Back	0.506	0.549	0.506	0.220	0.259	1.56	1.53
LTE Band 4 LTE Band 66	Ant3	LTE Band 7	Ant6	Front	0.223	0.211	0.491	0.220	0.116	0.93	0.77
				Back	0.512	0.549	0.506	0.220	0.259	1.57	1.54
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant4	Front	0.328	0.491	0.491	0.220	0.116	1.31	1.16
				Back	0.512	0.491	0.506	0.220	0.259	1.51	1.48
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant1	Front	0.328	0.539	0.491	0.220	0.116	1.36	1.20
				Back	0.512	0.539	0.506	0.220	0.259	1.56	1.53
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant6	Front	0.300	0.242	0.491	0.220	0.116	1.03	0.88
				Back	0.512	0.538	0.506	0.220	0.259	1.56	1.53
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n7 FR1 n38 FR1 n41	Ant5	Front	0.300	0.533	0.491	0.220	0.116	1.32	1.17
				Back	0.512	0.533	0.506	0.220	0.259	1.55	1.52
LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n38 FR1 n41	Ant10	Front	0.300	0.155	0.491	0.220	0.116	0.95	0.79
				Back	0.512	0.096	0.506	0.220	0.259	1.11	1.09

WWAN1		WWAN2		Exposure Position	1	2	3	4	5	1+2+3 Summed 1g SAR (W/kg)	1+2+4+5 Summed 1g SAR (W/kg)
					WWAN1	WWAN2	2.4GHz WLAN Ant8	5GHz WLAN Ant9	Bluetooth Ant8		
					1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 7 LTE Band 38 LTE Band 41 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant11	Front	0.512	0.568	0.491	0.220	0.116	1.57	1.42
				Back	0.512	0.568	0.506	0.220	0.259	1.59	1.56
LTE Band 7 LTE Band 2 LTE Band 4 LTE Band 66	Ant3	FR1 n2 FR1 n66	Ant5	Front	0.512	0.509	0.491	0.220	0.116	1.51	1.36
				Back	0.512	0.509	0.506	0.220	0.259	1.53	1.50
LTE Band 5 LTE Band 26	Ant0 Ant2	FR1 n7 FR1 n66	Ant5	Front	0.517	0.533	0.491	0.220	0.116	1.54	1.39
				Back	0.517	0.533	0.506	0.220	0.259	1.56	1.53
LTE Band 7	Ant5	FR1 n5 FR1 n26	Ant0 Ant2	Front	0.387	0.545	0.491	0.220	0.116	1.42	1.27
				Back	0.387	0.545	0.506	0.220	0.259	1.44	1.41
LTE Band 5 LTE Band 26	Ant2	FR1 n77 (27Q) FR1 n77 (27O) FR1 n78 (27Q) FR1 n78 (27O)	Ant2 Ant6 Ant4 Ant11	Front	0.517	0.568	0.491	0.220	0.116	1.58	1.42
				Back	0.517	0.568	0.506	0.220	0.259	1.59	1.56
LTE Band 5 LTE Band 26	Ant2	FR1 n38 FR1 n41	Ant1 Ant5 Ant3 Ant10	Front	0.517	0.566	0.491	0.220	0.116	1.57	1.42
				Back	0.517	0.566	0.506	0.220	0.259	1.59	1.56

16.4 Product specific 10g SAR Exposure Conditions

Remark:

- For WLAN2.4G/Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

WWAN1		Exposure Position	4	6	4+6 Summed 10g SAR (W/kg)
			5GHz WLAN Ant9	NFC	
			10g SAR (W/kg)	10g SAR (W/kg)	
All Bands	All ANT	Front	0.851	0.001	0.85
		Back	0.491	0.010	0.50
		Left Edge	0.017	0.001	0.02
		Right Edge	1.622	0.001	1.62
		Top Edge	0.253	0.001	0.25
		Bottom Edge	0.014	0.001	0.02

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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"
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- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [14] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015

Appendixes

Please refer to separated files for the following appendixes

Appendix A. Plots of System Performance Check

Appendix B. Plots of High SAR Measurement

Appendix C. DASY Calibration Certificate

Appendix D. Test Setup Photos

Appendix E. Conducted RF Output Power Table

Appendix F. Power measurement connection diagram and CA Conducted RF Output Power Table

Appendix G. Power reduction mechanism verification

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