

FCC SAR Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : 9846
FCC ID : IHDT56VF3
STANDARD : FCC 47 CFR Part 2 (2.1093)
ANSI/IEEE C95.1-1992
IEEE 1528-2013

This is a data re-used report which is only valid together with the original test report. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and had 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 (KUNSHAN) INC., the test report shall not be reproduced except in full.

Mark Qu

Prepared by: Mark Qu / Manager



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Appendix A. Original Report



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, 9846** are as follows.

| Equipment Class | Frequency Band | | Highest SAR Summary | | | Highest Simultaneous Transmission 1g SAR (W/kg) |
|------------------|----------------|------------------|-------------------------|-----------------------------|---------------------------|---|
| | | | Head (Separation 0mm) | Body-worn (Separation 10mm) | Hotspot (Separation 10mm) | |
| | | | 1g SAR (W/kg) | | | |
| Licensed | GSM | GSM850 | 0.40 | 0.78 | 0.78 | 1.53 |
| | | GSM1900 | 0.63 | 0.80 | 0.80 | |
| | WCDMA | Band V | 0.38 | 0.67 | 0.67 | |
| | | Band II | 0.72 | 1.10 | 1.10 | |
| | LTE | Band 5 | 0.47 | 0.74 | 0.74 | |
| | | Band 7 | 0.75 | 0.83 | 1.01 | |
| DTS | WLAN | 2.4GHz WLAN | 0.61 | <0.10 | <0.10 | 1.36 |
| DSS | | 2.4GHz Bluetooth | | <0.10 | | 1.15 |
| NII | | 5GHz WLAN | 1.11 | 0.18 | 0.20 | 1.53 |
| Date of Testing: | | | 2016/10/12 ~ 2016/10/26 | | | |

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) 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

| Testing Site | |
|--------------------|---|
| Test Site | SPORTON INTERNATIONAL (KUNSHAN) INC. |
| Test Site Location | No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958 |

| Applicant | |
|--------------|---|
| Company Name | Motorola Mobility LLC |
| Address | 222 W, Merchandise Mart Plaza, Chicago IL 60654 USA |

| Manufacturer | |
|--------------|---|
| Company Name | Motorola Mobility LLC |
| Address | 222 W. Merchandise Mart Plaza, Chicago IL 60654 USA |

3. Guidance Applied

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

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



4. Equipment Under Test (EUT) Information

4.1 General Information

| Product Feature & Specification | |
|--|---|
| Equipment Name | Mobile Cellular Phone |
| Brand Name | Motorola |
| Model Name | 9846 |
| FCC ID | IHDT56VF3 |
| IMEI Code | SIM1: 351868080012870 SIM2: 351868080012888 |
| Wireless Technology and Frequency Range | GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 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 ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz |
| Mode | <ul style="list-style-type: none"> · GSM/GPRS/EGPRS · RMC/AMR 12.2Kbps · HSDPA · HSUPA · DC-HSDPA · HSPA+ (16QAM uplink is not supported) · LTE: QPSK, 16QAM · 802.11b/g/n HT20 · 802.11a/n/ HT20/HT40 · Bluetooth v3.0+EDR, Bluetooth v4.0 LE, Bluetooth v4.2 LE |
| HW Version | DVT2(V5.0) |
| SW Version | cedric-userdebug 7.0 NPP25.73 270 intcfg,test-keys |
| 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: <ol style="list-style-type: none"> 1. This device supported VoIP in GPRS, EGRPS, WCDMA and LTE (e.g. 3rd party VoIP) and LTE Supports VoLTE operation. 2. This device 2.4GHz WLAN/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). 3. This device supports GRPS/EGRPS mode up to multi-slot class 12. 4. 802.11n-HT40MHz does not support at WLAN 2.4GHz. 5. This device does not support DTM operation. 6. When hotspot worked, power reduction active at LTE Band 7. 7. The device has 2 SIM slots and supports dual SIM dual Standby. | |

4.2 Specification of Accessory

| Specification of Accessory | | | | |
|----------------------------|------------------|---|------------|------------------|
| AC Adapter | Brand Name | Motorola (Acbel) | Model Name | C-P35 |
| | Power Rating | I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc, 2000mA | | |
| Battery | Brand Name | Motorola (ATL) | Model Name | GK40 |
| | Power Rating | 3.8Vdc,2685/2800mAh (Min/Typ) | Type | Li-ion |
| Earphone | Brand Name | Motorola | Model Name | SJYN1181B |
| | Signal Line Type | 1.2 meter, non-shielded cable, without ferrite core | | |
| USB Cable | Brand Name | Motorola (Liqi) | Model Name | L25W-051000100AL |
| | Signal Line Type | 1.0 meter, non-shielded cable, without ferrite core | | |



4.3 General LTE SAR Test and Reporting Considerations

| Summarized necessary items addressed in KDB 941225 D05 v02r05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|-------|--------|--------|--------|----------|--|--|------------|---|--|--|--|--|--|----------|---------|---------|-------|--------|--------|--------|------|-----|-----|-----|------|------|------|-----|--------|-----|-----|-----|------|------|------|-----|--------|-----|-----|-----|------|------|------|-----|
| FCC ID | IHDT56VF3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Equipment Name | Mobile Cellular Phone | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating Frequency Range of each LTE transmission band | LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Channel Bandwidth | LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| uplink modulations used | QPSK, and 16QAM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LTE Voice / Data requirements | Voice and Data | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LTE MPR permanently built-in by design | <table border="1"> <thead> <tr> <th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3</th> </tr> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (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> </thead> <tbody> <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> </tbody> </table> | Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3 | | | | | | | | Modulation | Channel bandwidth / Transmission bandwidth (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 |
| Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modulation | Channel bandwidth / Transmission bandwidth (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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 hotspot mode, LTE Band 7 power reduction applied to satisfy SAR compliance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LTE Release | R10, Cat 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CA Support | NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Transmission (H, M, L) channel numbers and frequencies in each LTE band | | | | | | | | |
|---|-------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| 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) |
| L | 20407 | 824.7 | 20415 | 825.5 | 20425 | 826.5 | 20450 | 829 |
| M | 20525 | 836.5 | 20525 | 836.5 | 20525 | 836.5 | 20525 | 836.5 |
| H | 20643 | 848.3 | 20635 | 847.5 | 20625 | 846.5 | 20600 | 844 |
| LTE Band 7 | | | | | | | | |
| | Bandwidth 5 MHz | | Bandwidth 10 MHz | | Bandwidth 15 MHz | | Bandwidth 20 MHz | |
| | Ch. # | Freq. (MHz) | Ch. # | Freq. (MHz) | Ch. # | Freq. (MHz) | Ch. # | Freq. (MHz) |
| L | 20775 | 2502.5 | 20800 | 2505 | 20825 | 2507.5 | 20850 | 2510 |
| M | 21100 | 2535 | 21100 | 2535 | 21100 | 2535 | 21100 | 2535 |
| H | 21425 | 2567.5 | 21400 | 2565 | 21375 | 2562.5 | 21350 | 2560 |



4.4 Re-use of Measured Data

4.4.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: 9846, FCC ID: IHDT56VF3) is electrically identical to the reference device (Model: 9369, 9847, FCC ID: IHDT56VF2) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 178919 D01.

4.4.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration "PED" file.

The re-used RF data includes the following bands provided in Appendix A (Sporton SAR Report No. FA693004 for the reference device Model: 9369, 9847, FCC ID: IHDT56VF2):

- GSM850/1900,
- WCDMA Band II/ V,
- LTE Band 5/7
- 2.4G/5GHz WLAN
- Bluetooth

Spot check for WWAN and WLAN are performed for ensure that SAR measurement for both device are the same. So, the original SAR value can represent this application.



4.4.3 Spot Check Verification Data Section

| Band | BW (MHz) | Modulation | RB Size | RB offset | Mode | Test Position | Gap (mm) | Power Reduction | Ch. | Freq. (MHz) | Original model (FCC ID: IHDT56VF2) | | | | Spot check model (FCC ID: IHDT56VF3) | | | | Deviation |
|------------|----------|------------|---------|-----------|-----------------|---------------|----------|-----------------|-------|-------------|------------------------------------|---------------------|------------------------|------------------------|--------------------------------------|---------------------|------------------------|------------------------|-----------|
| | | | | | | | | | | | Average Power (dBm) | Tune-Up Limit (dBm) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) | Average Power (dBm) | Tune-Up Limit (dBm) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) | |
| WLAN2.4GHz | - | - | - | - | 802.11b 1Mbps | Left Cheek | 0mm | | 6 | 2437 | 17.53 | 18 | 0.535 | 0.609 | 17.43 | 18 | 0.428 | 0.498 | -18.23% |
| WLAN5.3GHz | - | - | - | - | 802.11a 6Mbps | Right Tilted | 0mm | | 64 | 5320 | 12.78 | 13.50 | 0.158 | 0.214 | 13.17 | 13.50 | 0.202 | 0.250 | 16.82% |
| WLAN5.5GHz | - | - | - | - | 802.11a 6Mbps | Left Cheek | 0mm | | 116 | 5580 | 15.35 | 15.50 | 0.932 | 1.109 | 15.29 | 15.50 | 0.910 | 1.097 | -1.08% |
| WLAN5.8GHz | - | - | - | - | 802.11a 6Mbps | Left Cheek | 0mm | | 165 | 5825 | 14.94 | 15.50 | 0.322 | 0.421 | 14.78 | 15.50 | 0.266 | 0.361 | -14.25% |
| GSM850 | - | - | - | - | GPRS 2 Tx slots | Back | 10mm | | 128 | 824.2 | 30.41 | 31.00 | 0.681 | 0.780 | 30.46 | 31.00 | 0.679 | 0.769 | -1.41% |
| GSM1900 | - | - | - | - | GPRS 2 Tx slots | Front | 10mm | | 810 | 1909.8 | 28.13 | 29.50 | 0.582 | 0.798 | 28 | 29.50 | 0.560 | 0.791 | -0.88% |
| WCDMA V | - | - | - | - | RMC12.2Kbps | Back | 10mm | | 4132 | 826.4 | 23.02 | 24.00 | 0.535 | 0.670 | 23.77 | 24.00 | 0.604 | 0.637 | -4.93% |
| WCDMA II | - | - | - | - | RMC12.2Kbps | Back | 10mm | | 9262 | 1852.4 | 22.92 | 23.50 | 0.961 | 1.098 | 23.62 | 23.50 | 1.080 | 1.051 | -4.28% |
| LTE Band 5 | 10M | QPSK | 1 | 25 | - | Back | 10mm | | 20525 | 836.5 | 22.67 | 24.00 | 0.548 | 0.744 | 23.53 | 24.00 | 0.573 | 0.638 | -14.25% |
| LTE Band 7 | 20M | QPSK | 1 | 49 | - | Back | 10mm | Hotspot On | 21350 | 2560 | 22.40 | 23.00 | 0.876 | 1.006 | 22.45 | 23.00 | 0.816 | 0.926 | -7.95% |
| WLAN5.3GHz | - | - | - | - | 802.11a 6Mbps | Top Side | 10mm | | 36 | 5180 | 12.96 | 13.50 | 0.152 | 0.198 | 13.11 | 13.50 | 0.178 | 0.224 | 13.13% |
| Bluetooth | - | - | - | - | 1Mbps | Back | 10mm | | 39 | 2441 | 11.89 | 12.50 | 0.044 | 0.055 | 11.93 | 12.50 | 0.047 | 0.058 | 5.45% |

Note: In the table above, all the deviation of SAR test results are compliant with uncertainty budget.

4.4.4 Reference detail Section

| Equipment Class | Reference FCC ID | Folder Test/RF Exposure | Report Title/Section |
|-------------------|------------------|-------------------------|-------------------------|
| PCE | IHDT56VF2 | RF Exposure(FA693004) | All sections applicable |
| DSS | IHDT56VF2 | RF Exposure(FA693004) | All sections applicable |
| DTS (BLE) | IHDT56VF2 | RF Exposure(FA693004) | All sections applicable |
| DTS (WLAN 2.4GHz) | IHDT56VF2 | RF Exposure(FA693004) | All sections applicable |
| NIII (WLAN 5GHz) | IHDT56VF2 | RF Exposure(FA693004) | All sections applicable |

5. Simultaneous Transmission Analysis

| NO. | Simultaneous Transmission Configurations | Portable Handset | | | Note |
|-----|--|------------------|-----------|---------|-----------|
| | | Head | Body-worn | Hotspot | |
| 1. | GSM Voice + WLAN2.4GHz | Yes | Yes | | |
| 2. | GPRS/EDGE + WLAN2.4GHz | Yes | Yes | Yes | Hotspot |
| 3. | WCDMA + WLAN2.4GHz | Yes | Yes | Yes | Hotspot |
| 4. | LTE + WLAN2.4GHz | Yes | Yes | Yes | Hotspot |
| 5. | GSM Voice + Bluetooth | | Yes | | |
| 6. | GPRS/EDGE + Bluetooth | | Yes | | WWAN VoIP |
| 7. | WCDMA+ Bluetooth | | Yes | | WWAN VoIP |
| 8. | LTE + Bluetooth | | Yes | | WWAN VoIP |
| 9. | GSM Voice + WLAN5.3/5.5GHz | Yes | Yes | | |
| 10. | GPRS/EDGE + WLAN5.3/5.5GHz | Yes | Yes | | WWAN VoIP |
| 11. | WCDMA + WLAN5.3/5.5GHz | Yes | Yes | | WWAN VoIP |
| 12. | LTE + WLAN5.3/5.5GHz | Yes | Yes | | WWAN VoIP |
| 13. | GSM Voice + WLAN5.2/5.8GHz | Yes | Yes | Yes | |
| 14. | GPRS/EDGE + WLAN5.2/5.8GHz | Yes | Yes | Yes | WWAN VoIP |
| 15. | WCDMA + WLAN5.2/5.8GHz | Yes | Yes | Yes | WWAN VoIP |
| 16. | LTE + WLAN5.2/5.8GHz | Yes | Yes | Yes | WWAN VoIP |
| 17. | GSM Voice + WLAN5GHz+Bluetooth | | Yes | | |
| 18. | GPRS/EDGE + WLAN5GHz+Bluetooth | | Yes | | WWAN VoIP |
| 19. | WCDMA + WLAN5GHz+Bluetooth | | Yes | | WWAN VoIP |
| 20. | LTE + WLAN5GHz+Bluetooth | | Yes | | WWAN VoIP |



5.1 Head Exposure Conditions

| WWAN Band | | Exposure Position | 1 | 2 | 3 | 1+2 Summed 1g SAR (W/kg) | 1+3 Summed 1g SAR (W/kg) | SPLSR | Case No |
|-----------|---------|-------------------|------------------|------------------|------------------|-----------------------------------|-----------------------------------|-------------|-----------|
| | | | WWAN | 2.4GHz WLAN | 5GHz WLAN | | | | |
| | | | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | | | | |
| GSM | GSM850 | Right Cheek | 0.401 | 0.609 | 0.726 | 1.01 | 1.13 | | |
| | | Right Tilted | 0.286 | 0.609 | 0.585 | 0.90 | 0.87 | | |
| | | Left Cheek | 0.383 | 0.609 | 1.109 | 0.99 | 1.49 | | |
| | | Left Tilted | 0.308 | 0.265 | 0.938 | 0.57 | 1.25 | | |
| | GSM1900 | Right Cheek | 0.334 | 0.609 | 0.726 | 0.94 | 1.06 | | |
| | | Right Tilted | 0.152 | 0.609 | 0.585 | 0.76 | 0.74 | | |
| | | Left Cheek | 0.633 | 0.609 | 1.109 | 1.24 | 1.74 | 0.03 | #1 |
| | | Left Tilted | 0.160 | 0.265 | 0.938 | 0.43 | 1.10 | | |
| WCDMA | Band V | Right Cheek | 0.367 | 0.609 | 0.726 | 0.98 | 1.09 | | |
| | | Right Tilted | 0.257 | 0.609 | 0.585 | 0.87 | 0.84 | | |
| | | Left Cheek | 0.375 | 0.609 | 1.109 | 0.98 | 1.48 | | |
| | | Left Tilted | 0.252 | 0.265 | 0.938 | 0.52 | 1.19 | | |
| | Band II | Right Cheek | 0.478 | 0.609 | 0.726 | 1.09 | 1.20 | | |
| | | Right Tilted | 0.182 | 0.609 | 0.585 | 0.79 | 0.77 | | |
| | | Left Cheek | 0.717 | 0.609 | 1.109 | 1.33 | 1.83 | 0.03 | #3 |
| | | Left Tilted | 0.222 | 0.265 | 0.938 | 0.49 | 1.16 | | |
| LTE | Band 5 | Right Cheek | 0.466 | 0.609 | 0.726 | 1.08 | 1.19 | | |
| | | Right Tilted | 0.330 | 0.609 | 0.585 | 0.94 | 0.92 | | |
| | | Left Cheek | 0.424 | 0.609 | 1.109 | 1.03 | 1.53 | | |
| | | Left Tilted | 0.329 | 0.265 | 0.938 | 0.59 | 1.27 | | |
| | Band 7 | Right Cheek | 0.274 | 0.609 | 0.726 | 0.88 | 1.00 | | |
| | | Right Tilted | 0.196 | 0.609 | 0.585 | 0.81 | 0.78 | | |
| | | Left Cheek | 0.748 | 0.609 | 1.109 | 1.36 | 1.86 | 0.03 | #6 |
| | | Left Tilted | 0.183 | 0.265 | 0.938 | 0.45 | 1.12 | | |



5.2 Hotspot Exposure Conditions

| WWAN Band | | Exposure Position | 1 | 2 | 3 | 1+2 Summed 1g SAR (W/kg) | 1+3 Summed 1g SAR (W/kg) | SPLSR | Case No |
|-----------|---------|-------------------|-----------------------|------------------------------|----------------------------|--------------------------|--------------------------|-------|---------|
| | | | WWAN 1g SAR (W/kg) | 2.4GHz WLAN 1g SAR (W/kg) | 5GHz WLAN 1g SAR (W/kg) | | | | |
| GSM | GSM850 | Front | 0.603 | 0.094 | 0.198 | 0.70 | 0.80 | | |
| | | Back | 0.780 | 0.094 | 0.038 | 0.87 | 0.82 | | |
| | | Left side | 0.426 | | | 0.43 | 0.43 | | |
| | | Right side | 0.501 | 0.094 | 0.198 | 0.60 | 0.70 | | |
| | | Top side | | 0.094 | 0.198 | 0.09 | 0.20 | | |
| | | Bottom side | 0.096 | | | 0.10 | 0.10 | | |
| | GSM1900 | Front | 0.798 | 0.094 | 0.198 | 0.89 | 1.00 | | |
| | | Back | 0.795 | 0.094 | 0.038 | 0.89 | 0.83 | | |
| | | Left side | 0.350 | | | 0.35 | 0.35 | | |
| | | Right side | 0.151 | 0.094 | 0.198 | 0.25 | 0.35 | | |
| | | Top side | | 0.094 | 0.198 | 0.09 | 0.20 | | |
| | | Bottom side | 0.358 | | | 0.36 | 0.36 | | |
| WCDMA | Band V | Front | 0.482 | 0.094 | 0.198 | 0.58 | 0.68 | | |
| | | Back | 0.670 | 0.094 | 0.038 | 0.76 | 0.71 | | |
| | | Left side | 0.487 | | | 0.49 | 0.49 | | |
| | | Right side | 0.554 | 0.094 | 0.198 | 0.65 | 0.75 | | |
| | | Top side | | 0.094 | 0.198 | 0.09 | 0.20 | | |
| | | Bottom side | 0.068 | | | 0.07 | 0.07 | | |
| | Band II | Front | 1.090 | 0.094 | 0.198 | 1.18 | 1.29 | | |
| | | Back | 1.098 | 0.094 | 0.038 | 1.19 | 1.14 | | |
| | | Left side | 0.302 | | | 0.30 | 0.30 | | |
| | | Right side | 0.169 | 0.094 | 0.198 | 0.26 | 0.37 | | |
| | | Top side | | 0.094 | 0.198 | 0.09 | 0.20 | | |
| | | Bottom side | 0.318 | | | 0.32 | 0.32 | | |
| LTE | Band 5 | Front | 0.541 | 0.094 | 0.198 | 0.64 | 0.74 | | |
| | | Back | 0.744 | 0.094 | 0.038 | 0.84 | 0.78 | | |
| | | Left side | 0.509 | | | 0.51 | 0.51 | | |
| | | Right side | 0.626 | 0.094 | 0.198 | 0.72 | 0.82 | | |
| | | Top side | | 0.094 | 0.198 | 0.09 | 0.20 | | |
| | | Bottom side | 0.087 | | | 0.09 | 0.09 | | |
| | Band 7 | Front | 0.557 | 0.094 | 0.198 | 0.65 | 0.76 | | |
| | | Back | 0.571 | 0.094 | 0.038 | 0.67 | 0.61 | | |
| | | Left side | 0.361 | | | 0.36 | 0.36 | | |
| | | Right side | 0.028 | 0.094 | 0.198 | 0.12 | 0.23 | | |
| | | Top side | | 0.094 | 0.198 | 0.09 | 0.20 | | |
| | | Bottom side | 1.006 | | | 1.01 | 1.01 | | |



5.3 Body-Worn Accessory Exposure Conditions

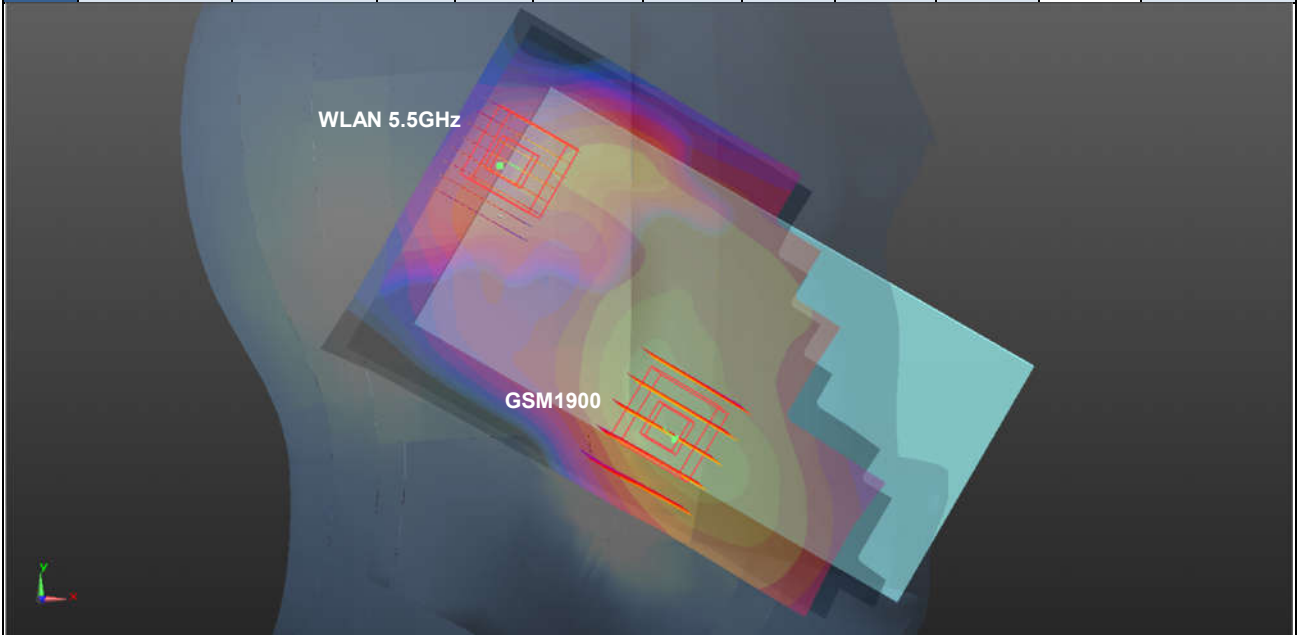
| WWAN Band | | Exposure Position | 1 | 2 | 3 | 4 | 1+2 Summed 1g SAR (W/kg) | 1+3 Summed 1g SAR (W/kg) | 1+4 Summed 1g SAR (W/kg) | 1+3+4 Summed 1g SAR (W/kg) | SPLSR | Case No |
|-----------|---------|-------------------|---------------|---------------|---------------|-------------------------|--------------------------|--------------------------|--------------------------|----------------------------|-------|---------|
| | | | WWAN | 2.4GHz WLAN | 5GHz WLAN | Bluetooth | | | | | | |
| | | | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) | Estimated 1g SAR (W/kg) | | | | | | |
| GSM | GSM850 | Front | 0.603 | 0.094 | 0.184 | 0.029 | 0.70 | 0.79 | 0.63 | 0.82 | | |
| | | Back | 0.780 | 0.094 | 0.184 | 0.055 | 0.87 | 0.96 | 0.84 | 1.02 | | |
| | GSM1900 | Front | 0.798 | 0.094 | 0.184 | 0.029 | 0.89 | 0.98 | 0.83 | 1.01 | | |
| | | Back | 0.795 | 0.094 | 0.184 | 0.055 | 0.89 | 0.98 | 0.85 | 1.03 | | |
| WCDMA | Band V | Front | 0.482 | 0.094 | 0.184 | 0.029 | 0.58 | 0.67 | 0.51 | 0.70 | | |
| | | Back | 0.670 | 0.094 | 0.184 | 0.055 | 0.76 | 0.85 | 0.73 | 0.91 | | |
| | Band II | Front | 1.090 | 0.094 | 0.184 | 0.029 | 1.18 | 1.27 | 1.12 | 1.30 | | |
| | | Back | 1.098 | 0.094 | 0.184 | 0.055 | 1.19 | 1.28 | 1.15 | 1.34 | | |
| LTE | Band 5 | Front | 0.541 | 0.094 | 0.184 | 0.029 | 0.64 | 0.73 | 0.57 | 0.75 | | |
| | | Back | 0.744 | 0.094 | 0.184 | 0.055 | 0.84 | 0.93 | 0.80 | 0.98 | | |
| | Band 7 | Front | 0.830 | 0.094 | 0.184 | 0.029 | 0.92 | 1.01 | 0.86 | 1.04 | | |
| | | Back | 0.745 | 0.094 | 0.184 | 0.055 | 0.84 | 0.93 | 0.80 | 0.98 | | |

5.4 SPLSR Evaluation and Analysis

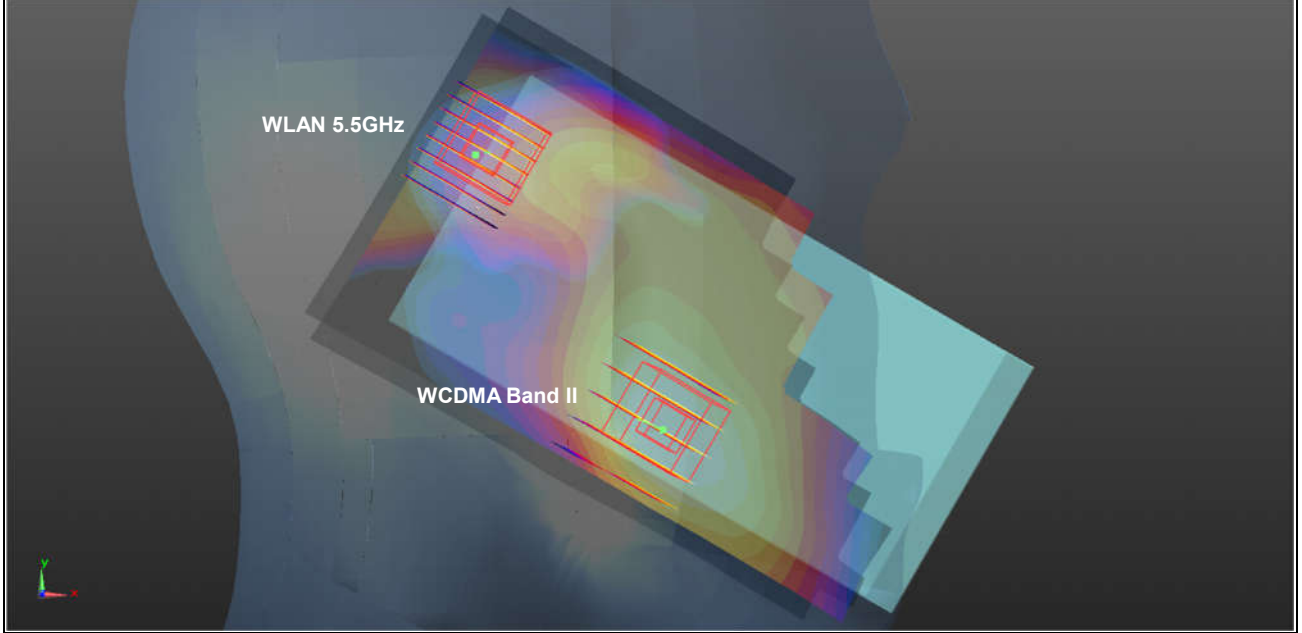
General Note:

SPLSR = $(SAR_1 + SAR_2)^{1.5} / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

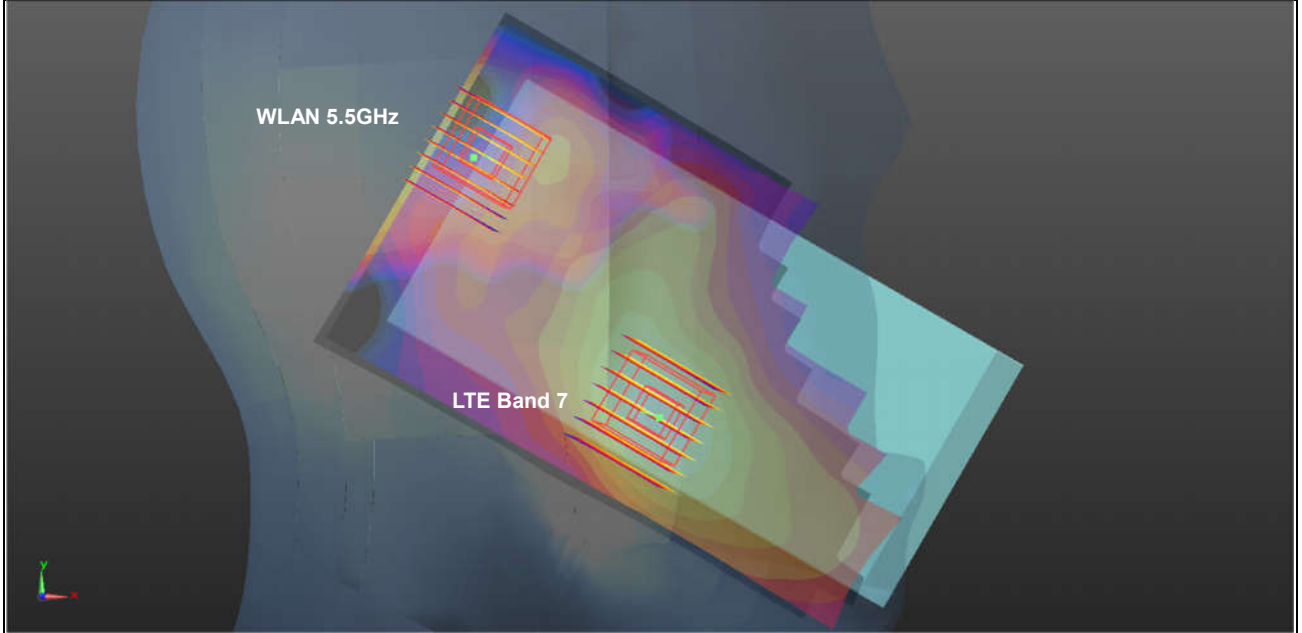
| Case #1 | Band | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) | | | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
| | | | | | X | Y | Z | | | | |
| | GSM1900 | Left Cheek | 0.633 | 0 | 0.0618 | 0.249 | -0.172 | 87.5 | 1.74 | 0.03 | Not required |
| | WLAN5.5GHz | | 1.109 | 0 | 0.0168 | 0.324 | -0.173 | | | | |



| Case #3 | Band | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) | | | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|---------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
| | | | | | X | Y | Z | | | | |
| | WCDMA Band II | Left Cheek | 0.717 | 0 | 0.0632 | 0.252 | -0.171 | 85.7 | 1.83 | 0.03 | Not required |
| | WLAN5.5GHz | | 1.109 | 0 | 0.0168 | 0.324 | -0.173 | | | | |



| Case #6 | Band | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) | | | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|---------|------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
| | | | | | X | Y | Z | | | | |
| | LTE Band 7 | Left Cheek | 0.748 | 0 | 0.0634 | 0.255 | -0.172 | 83.3 | 1.86 | 0.03 | Not required |
| | WLAN5.5GHz | | 1.109 | 0 | 0.0168 | 0.324 | -0.173 | | | | |



Test Engineer : Nick Hu



Appendix A. Original Report

Please refer to Sporton report number FA693004 which is issued separately.