

# FCC SAR Test Report

APPLICANT : Motorola Mobility LLC  
EQUIPMENT : Mobile Cellular Phone  
BRAND NAME : Motorola  
MODEL NAME : 10509  
FCC ID : IHDT56WC7  
STANDARD : FCC 47 CFR Part 2 (2.1093)  
ANSI/IEEE C95.1-1992  
IEEE 1528-2013

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.



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## Revision History

| REPORT NO.  | VERSION | DESCRIPTION             | ISSUED DATE   |
|-------------|---------|-------------------------|---------------|
| FA711913-02 | Rev. 01 | Initial issue of report | Apr. 01, 2017 |
|             |         |                         |               |
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## 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Motorola Mobility LLC, Mobile Cellular Phone, 10509** are as follows.

| Equipment Class  | Frequency Band |             | Highest SAR Summary      |                              |                                | Highest Simultaneous Transmission<br>1g SAR (W/kg) |
|------------------|----------------|-------------|--------------------------|------------------------------|--------------------------------|----------------------------------------------------|
|                  |                |             | Head<br>(Separation 0mm) | Hotspot<br>(Separation 10mm) | Body-worn<br>(Separation 10mm) |                                                    |
|                  |                |             | 1g SAR (W/kg)            |                              |                                |                                                    |
| Licensed         | GSM            | GSM850      | 0.52                     | 1.20                         | 1.20                           | 1.56                                               |
|                  |                | GSM1900     | 0.27                     | 0.41                         | 0.41                           |                                                    |
|                  | WCDMA          | Band V      | 0.35                     | 0.68                         | 0.68                           |                                                    |
|                  |                | Band II     | 0.55                     | 0.78                         | 0.78                           |                                                    |
|                  | LTE            | Band 5      | 0.38                     | 0.75                         | 0.75                           |                                                    |
|                  |                | Band 7      | 0.36                     | 0.69                         | 0.69                           |                                                    |
| DTS              | WLAN           | 2.4GHz WLAN | 1.10                     | 0.27                         | 0.27                           | 1.56                                               |
| Date of Testing: |                |             | 2017/2/22 ~ 2017/3/7     |                              |                                |                                                    |

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 Development Zone, Jiangsu, China<br>TEL: +86-0512-5790-0158<br>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**

| <b>Product Feature &amp; Specification</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Equipment Name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mobile Cellular Phone                                                                                                                                                                                                                                                                                     |
| <b>Brand Name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Motorola                                                                                                                                                                                                                                                                                                  |
| <b>Model Name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10509                                                                                                                                                                                                                                                                                                     |
| <b>FCC ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | IHDT56WC7                                                                                                                                                                                                                                                                                                 |
| <b>Wireless Technology and Frequency Range</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | GSM850: 824.2 MHz ~ 848.8 MHz<br>GSM1900: 1850.2 MHz ~ 1909.8 MHz<br>WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz<br>WCDMA Band V: 826.4 MHz ~ 846.6 MHz<br>LTE Band 5: 824.7 MHz ~ 848.3 MHz<br>LTE Band 7: 2502.5 MHz ~ 2567.5 MHz<br>WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz<br>Bluetooth: 2402 MHz ~ 2480 MHz |
| <b>Mode</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>· GSM/GPRS/EGPRS</li> <li>· RMC/AMR 12.2Kbps</li> <li>· HSDPA</li> <li>· HSUPA</li> <li>· DC-HSDPA</li> <li>· HSPA+</li> <li>· LTE</li> <li>· 802.11b/g/n HT20</li> <li>· Bluetooth v3.0 + EDR, Bluetooth v4.0 LE, Bluetooth v4.1 LE, Bluetooth v4.2 LE</li> </ul> |
| <b>HW Version</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | WKGMA1A4-3                                                                                                                                                                                                                                                                                                |
| <b>SW Version</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | woods- userdebug 7.0 NMA25.27 314 intcfg,test-keys                                                                                                                                                                                                                                                        |
| <b>GSM / (E)GPRS Transfer mode</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.                                                                                                                                        |
| <b>EUT Stage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Identical Prototype                                                                                                                                                                                                                                                                                       |
| <b>Remark:</b> <ol style="list-style-type: none"> <li>1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.</li> <li>2. 802.11n-HT40 is not supported in 2.4GHz WLAN.</li> <li>3. This device 2.4GHz WLAN support hotspot operation.</li> <li>4. This device does not support DTM operation and support GRPS/EGPRS mode up to multi-slot class 12.</li> <li>5. The dual SIM card mobile has 2 SIM slots and supports dual SIM dual standby. The WWAN radio transmission will be enabled by either one SIM at a time (single active). After pre-scan two SIM cards power, we found test result of the SIM1 was the worse, so we chose dual SIM1 card to perform all tests.</li> <li>6. This product has two kinds of battery options, the capacity are the same only different manufacturer, therefore RF exposure evaluation only selected battery1 performed SAR testing.</li> </ol> |                                                                                                                                                                                                                                                                                                           |

## 4.2 General LTE SAR Test and Reporting Considerations

| Summarized necessary items addressed in KDB 941225 D05 v02r05           |                                                                                                                                                                                                        |                                                 |                  |             |                  |             |                  |             |      |     |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------|-------------|------------------|-------------|------------------|-------------|------|-----|
| FCC ID                                                                  | IHDT56WC7                                                                                                                                                                                              |                                                 |                  |             |                  |             |                  |             |      |     |
| Equipment Name                                                          | Mobile Cellular Phone                                                                                                                                                                                  |                                                 |                  |             |                  |             |                  |             |      |     |
| Operating Frequency Range of each LTE transmission band                 | LTE Band 5: 824.7 MHz ~ 848.3 MHz<br>LTE Band 7: 2502.5 MHz ~ 2567.5 MHz                                                                                                                               |                                                 |                  |             |                  |             |                  |             |      |     |
| Channel Bandwidth                                                       | LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz<br>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 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. |                                                 |                  |             |                  |             |                  |             |      |     |
| LTE Release Version                                                     | R9, Cat 4                                                                                                                                                                                              |                                                 |                  |             |                  |             |                  |             |      |     |
| CA Support                                                              | Not Supported                                                                                                                                                                                          |                                                 |                  |             |                  |             |                  |             |      |     |
| 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        |      |     |



## **5. Re-use of Measured Data**

### **5.1 Introduction Section**

This application re-uses data collected on a similar device. The subject device of this application (Model: 10509, FCC ID: IHDT56WC7) is electrically identical to the reference device (Model: 10714, FCC ID: IHDT56WC6) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 178919 D01.

### **5.2 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 RF Report No. FA711913 for the reference device Model: 10714, FCC ID: IHDT56WC6):

- GSM850/1900,
- WCDMA Band V/II,
- LTE Band 5/7
- 2.4G 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.



### 5.3 Spot Check Verification Data Section

| Band          | BW (MHz) | Modulation | RB Size | RB offset | Mode            | Test Position | Gap (mm) | Ch.   | Freq. (MHz) | Original model (FCC ID: IHDT56WC6) |                     |                        |                        | Spot check model (FCC ID: IHDT56WC7) |                     |                        |                        | 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   | Right Tilted  | 0        | 6     | 2437        | 18.36                              | 18.50               | 1.060                  | 1.095                  | 18.36                                | 18.50               | 1.210                  | 1.250                  | 14.16%    |
| GSM 850       | -        | -          | -       | -         | GPRS 4 Tx slots | Back          | 10       | 128   | 824.2       | 28.85                              | 29.5                | 1.030                  | 1.196                  | 28.85                                | 29.5                | 0.976                  | 1.134                  | -5.18%    |
| GSM1900       | -        | -          | -       | -         | GPRS 4 Tx slots | Back          | 10       | 810   | 1909.8      | 26                                 | 26.5                | 0.361                  | 0.405                  | 26                                   | 26.5                | 0.411                  | 0.461                  | 13.83%    |
| WCDMA Band V  | -        | -          | -       | -         | RMC 12.2Kbps    | Back          | 10       | 4182  | 836.4       | 22.99                              | 23.5                | 0.608                  | 0.684                  | 22.99                                | 23.5                | 0.686                  | 0.771                  | 12.72%    |
| WCDMA Band II | -        | -          | -       | -         | RMC 12.2Kbps    | Back          | 10       | 9538  | 1907.6      | 23.16                              | 23.5                | 0.720                  | 0.779                  | 23.16                                | 23.5                | 0.621                  | 0.672                  | -13.74%   |
| LTE Band 5    | 10M      | QPSK       | 1RB     | Offset    | -               | Back          | 10       | 20525 | 836.5       | 23.25                              | 24.5                | 0.562                  | 0.749                  | 23.25                                | 24.5                | 0.552                  | 0.736                  | -1.74%    |
| LTE Band 7    | 20M      | QPSK       | 1RB     | Offset    | -               | Front         | 10       | 21350 | 2560        | 23.42                              | 24                  | 0.605                  | 0.691                  | 23.42                                | 24                  | 0.550                  | 0.629                  | -8.97%    |

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

### 5.4 Reference detail Section

| Equipment Class | Reference FCC ID | Folder Test/RF Exposure | Report Title/Section    |
|-----------------|------------------|-------------------------|-------------------------|
| PCE (2G/3G/4G)  | IHDT56WC6        | RF Exposure(FA711913)   | All sections applicable |
| DTS (BLE)       | IHDT56WC6        | RF Exposure(FA711913)   | All sections applicable |
| DSS (BER)       | IHDT56WC6        | RF Exposure(FA711913)   | All sections applicable |
| DTS (WLAN)      | IHDT56WC6        | RF Exposure(FA711913)   | All sections applicable |

## 6. Simultaneous Transmission Analysis

| NO. | Simultaneous Transmission Configurations | Mobile Cellular Phone |           |         | 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 |

**6.1 Head Exposure Conditions Head Exposure Conditions**

| WWAN Band |         | Exposure Position | 1                | 2                | 1+2<br>Summed<br>1g SAR (W/kg) |
|-----------|---------|-------------------|------------------|------------------|--------------------------------|
|           |         |                   | WWAN             | 2.4GHz WLAN      |                                |
|           |         |                   | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg) |                                |
| GSM       | GSM850  | Right Cheek       | 0.502            | 1.016            | 1.52                           |
|           |         | Right Tilted      | 0.409            | 1.095            | 1.50                           |
|           |         | Left Cheek        | 0.521            | 0.536            | 1.06                           |
|           |         | Left Tilted       | 0.344            | 0.557            | 0.90                           |
|           | GSM1900 | Right Cheek       | 0.267            | 1.016            | 1.28                           |
|           |         | Right Tilted      | 0.136            | 1.095            | 1.23                           |
|           |         | Left Cheek        | 0.165            | 0.536            | 0.70                           |
|           |         | Left Tilted       | 0.128            | 0.557            | 0.69                           |
| WCDMA     | Band V  | Right Cheek       | 0.323            | 1.016            | 1.34                           |
|           |         | Right Tilted      | 0.196            | 1.095            | 1.29                           |
|           |         | Left Cheek        | 0.349            | 0.536            | 0.89                           |
|           |         | Left Tilted       | 0.172            | 0.557            | 0.73                           |
|           | Band II | Right Cheek       | 0.545            | 1.016            | 1.56                           |
|           |         | Right Tilted      | 0.229            | 1.095            | 1.32                           |
|           |         | Left Cheek        | 0.279            | 0.536            | 0.82                           |
|           |         | Left Tilted       | 0.223            | 0.557            | 0.78                           |
| LTE       | Band 5  | Right Cheek       | 0.343            | 1.016            | 1.36                           |
|           |         | Right Tilted      | 0.287            | 1.095            | 1.38                           |
|           |         | Left Cheek        | 0.375            | 0.536            | 0.91                           |
|           |         | Left Tilted       | 0.193            | 0.557            | 0.75                           |
|           | Band 7  | Right Cheek       | 0.334            | 1.016            | 1.35                           |
|           |         | Right Tilted      | 0.286            | 1.095            | 1.38                           |
|           |         | Left Cheek        | 0.362            | 0.536            | 0.90                           |
|           |         | Left Tilted       | 0.272            | 0.557            | 0.83                           |

## 6.2 Hotspot Exposure Conditions

| WWAN Band |         | Exposure Position | 1                | 2                | 1+2<br>Summed<br>1g SAR (W/kg) |
|-----------|---------|-------------------|------------------|------------------|--------------------------------|
|           |         |                   | WWAN             | 2.4GHz WLAN      |                                |
|           |         |                   | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg) |                                |
| GSM       | GSM850  | Front             | 0.808            | 0.272            | 1.08                           |
|           |         | Back              | 1.196            | 0.272            | 1.47                           |
|           |         | Left side         | 1.144            | 0.272            | 1.42                           |
|           |         | Right side        | 0.846            |                  | 0.85                           |
|           |         | Top side          |                  | 0.272            | 0.27                           |
|           |         | Bottom side       | 0.102            |                  | 0.10                           |
|           | GSM1900 | Front             | 0.292            | 0.272            | 0.56                           |
|           |         | Back              | 0.405            | 0.272            | 0.68                           |
|           |         | Left side         | 0.107            | 0.272            | 0.38                           |
|           |         | Right side        | 0.293            |                  | 0.29                           |
|           |         | Top side          |                  | 0.272            | 0.27                           |
|           |         | Bottom side       | 0.368            |                  | 0.37                           |
| WCDMA     | Band V  | Front             | 0.459            | 0.272            | 0.73                           |
|           |         | Back              | 0.684            | 0.272            | 0.96                           |
|           |         | Left side         | 0.541            | 0.272            | 0.81                           |
|           |         | Right side        | 0.440            |                  | 0.44                           |
|           |         | Top side          |                  | 0.272            | 0.27                           |
|           |         | Bottom side       | 0.075            |                  | 0.08                           |
|           | Band II | Front             | 0.509            | 0.272            | 0.78                           |
|           |         | Back              | 0.779            | 0.272            | 1.05                           |
|           |         | Left side         | 0.201            | 0.272            | 0.47                           |
|           |         | Right side        | 0.643            |                  | 0.64                           |
|           |         | Top side          |                  | 0.272            | 0.27                           |
|           |         | Bottom side       | 0.699            |                  | 0.70                           |

| WWAN Band |        | Exposure Position | 1                | 2                | 1+2<br>Summed<br>1g SAR (W/kg) |
|-----------|--------|-------------------|------------------|------------------|--------------------------------|
|           |        |                   | WWAN             | 2.4GHz WLAN      |                                |
|           |        |                   | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg) |                                |
| LTE       | Band 5 | Front             | 0.520            | 0.272            | 0.79                           |
|           |        | Back              | 0.749            | 0.272            | 1.02                           |
|           |        | Left side         | 0.619            | 0.272            | 0.89                           |
|           |        | Right side        | 0.529            |                  | 0.53                           |
|           |        | Top side          |                  | 0.272            | 0.27                           |
|           |        | Bottom side       | 0.085            |                  | 0.09                           |
|           | Band 7 | Front             | 0.691            | 0.272            | 0.96                           |
|           |        | Back              | 0.593            | 0.272            | 0.87                           |
|           |        | Left side         | 0.358            | 0.272            | 0.63                           |
|           |        | Right side        | 0.224            |                  | 0.22                           |
|           |        | Top side          |                  | 0.272            | 0.27                           |
|           |        | Bottom side       | 0.645            |                  | 0.65                           |

### 6.3 Body-Worn Accessory Exposure Conditions

| WWAN Band |         | Exposure Position | 1                | 2                | 3                             | 1+2<br>Summed<br>1g SAR<br>(W/kg) | 1+3<br>Summed<br>1g SAR<br>(W/kg) |
|-----------|---------|-------------------|------------------|------------------|-------------------------------|-----------------------------------|-----------------------------------|
|           |         |                   | WWAN             | 2.4GHz<br>WLAN   | Bluetooth                     |                                   |                                   |
|           |         |                   | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg) | Estimated<br>1g SAR<br>(W/kg) |                                   |                                   |
| GSM       | GSM850  | Front             | 0.808            | 0.272            | 0.105                         | 1.08                              | 0.91                              |
|           |         | Back              | 1.196            | 0.272            | 0.105                         | 1.47                              | 1.30                              |
|           | GSM1900 | Front             | 0.292            | 0.272            | 0.105                         | 0.56                              | 0.40                              |
|           |         | Back              | 0.405            | 0.272            | 0.105                         | 0.68                              | 0.51                              |
| WCDMA     | Band V  | Front             | 0.459            | 0.272            | 0.105                         | 0.73                              | 0.56                              |
|           |         | Back              | 0.684            | 0.272            | 0.105                         | 0.96                              | 0.79                              |
|           | Band II | Front             | 0.509            | 0.272            | 0.105                         | 0.78                              | 0.61                              |
|           |         | Back              | 0.779            | 0.272            | 0.105                         | 1.05                              | 0.88                              |
| LTE       | Band 5  | Front             | 0.520            | 0.272            | 0.105                         | 0.79                              | 0.63                              |
|           |         | Back              | 0.749            | 0.272            | 0.105                         | 1.02                              | 0.85                              |
|           | Band 7  | Front             | 0.691            | 0.272            | 0.105                         | 0.96                              | 0.80                              |
|           |         | Back              | 0.593            | 0.272            | 0.105                         | 0.87                              | 0.70                              |

**Test Engineer :** Nick Hu



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## ***Appendix A. Reference Report***

Please refer to Sporton report number FA711913 which is issued separately.