

# FCC SAR Test Report

APPLICANT : Relay, Inc.  
EQUIPMENT : Relay  
BRAND NAME : RelayM  
MODEL NAME : RY2267  
FCC ID : 2AMBHRY2267  
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.



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Approved by: Si Zhang

***Sporton International Inc. (Kunshan)***

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People's Republic of China***



## 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 General LTE SAR Test and Reporting Considerations .....   | 9  |
| 4.3 General 5G NR SAR Test and Reporting Considerations ..... | 13 |
| 5. Proximity Sensor Triggering Test .....                     | 17 |
| 6. RF Exposure Limits .....                                   | 18 |
| 6.1 Uncontrolled Environment .....                            | 18 |
| 6.2 Controlled Environment .....                              | 18 |
| 7. Specific Absorption Rate (SAR) .....                       | 19 |
| 7.1 Introduction .....                                        | 19 |
| 7.2 SAR Definition .....                                      | 19 |
| 8. System Description and Setup .....                         | 20 |
| 8.1 E-Field Probe .....                                       | 21 |
| 8.2 Data Acquisition Electronics (DAE) .....                  | 21 |
| 8.3 Phantom .....                                             | 22 |
| 8.4 Device Holder .....                                       | 23 |
| 9. Measurement Procedures .....                               | 24 |
| 9.1 Spatial Peak SAR Evaluation .....                         | 24 |
| 9.2 Power Reference Measurement .....                         | 25 |
| 9.3 Area Scan .....                                           | 25 |
| 9.4 Zoom Scan .....                                           | 26 |
| 9.5 Volume Scan Procedures .....                              | 26 |
| 9.6 Power Drift Monitoring .....                              | 26 |
| 10. Test Equipment List .....                                 | 27 |
| 11. System Verification .....                                 | 28 |
| 11.1 Tissue Simulating Liquids .....                          | 28 |
| 11.2 Tissue Verification .....                                | 29 |
| 11.3 System Performance Check Results .....                   | 30 |
| 12. RF Exposure Positions .....                               | 32 |
| 12.1 SAR Testing for Relay .....                              | 32 |
| 12.2 Body SAR Testing for Device .....                        | 32 |
| 12.3 Extremity SAR Testing for Device .....                   | 32 |
| 12.4 Wireless Router .....                                    | 32 |
| 13. Conducted RF Output Power (Unit: dBm) .....               | 33 |
| 14. Antenna Location .....                                    | 42 |
| 15. SAR Test Results .....                                    | 43 |
| 15.1 In Front of Face SAR .....                               | 46 |
| 15.2 Hotspot SAR .....                                        | 50 |
| 15.3 Body Worn Accessory SAR .....                            | 67 |
| 15.4 Extremity SAR .....                                      | 74 |
| 15.5 Repeated SAR Measurement .....                           | 75 |
| 16. Simultaneous Transmission Analysis .....                  | 76 |
| 16.1 In Front of Face Exposure Conditions .....               | 77 |
| 16.2 Hotspot Exposure Conditions .....                        | 78 |
| 16.3 Body-Worn Exposure Conditions .....                      | 81 |
| 16.4 Extremity SAR Exposure Conditions .....                  | 82 |
| 17. Uncertainty Assessment .....                              | 83 |
| 18. References .....                                          | 84 |
| Appendix .....                                                | 85 |
| Appendix A. Plots of System Performance Check .....           | 85 |
| Appendix B. Plots of High SAR Measurement .....               | 85 |
| Appendix C. DASY Calibration Certificate .....                | 85 |
| Appendix D. Test Setup Photos .....                           | 85 |
| Appendix E. Conducted RF Output Power Table .....             | 85 |
| Appendix F. Power reduction mechanism verification .....      | 85 |



## Revision History

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FA250505   | Rev. 01 | Initial issue of report | Feb. 24, 2025 |
|            |         |                         |               |
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## 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **Relay, Inc., Relay, RY2267**, are as follows.

| Highest 1g SAR Summary                                                                                                                                                                                                                                                                                                                                                                                |                |                  |                                      |                             |                                                     |                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------|--------------------------------------|-----------------------------|-----------------------------------------------------|----------------------------------------------------|
| Equipment Class                                                                                                                                                                                                                                                                                                                                                                                       | Frequency Band |                  | In Front of Face<br>(Separation 5mm) | Hotspot<br>(Separation 5mm) | Body<br>(Separation 5mm)                            | Highest Simultaneous Transmission<br>1g SAR (W/kg) |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                |                  | 1g SAR (W/kg)                        |                             |                                                     |                                                    |
| Licensed                                                                                                                                                                                                                                                                                                                                                                                              | LTE            | LTE Band 7       | 0.53                                 | 1.04                        | 0.53                                                | 1.59                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 12      | 0.79                                 | 1.12                        | 0.83                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 13      | 0.90                                 | 1.14                        | 1.14                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 14      | 0.93                                 | 1.08                        | 1.08                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 25/2    | 1.04                                 | 1.04                        | 1.04                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 26/5    | 0.93                                 | 1.09                        | 1.09                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 30      | 0.45                                 | 0.57                        | 0.45                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 66/4    | 0.75                                 | 1.16                        | 0.75                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 71      | 0.91                                 | 1.07                        | 0.91                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 41/38   | 1.06                                 | 1.06                        | 1.06                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | LTE Band 48      | 0.11                                 | 0.61                        | 0.55                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       | FR1            | FR1 n2           | 0.49                                 | 0.68                        | 0.49                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n25          | 1.08                                 | 1.08                        | 1.08                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n7           | 0.56                                 | 0.98                        | 0.56                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n12          | 0.77                                 | 0.82                        | 0.82                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n13          | 0.62                                 | 0.71                        | 0.71                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n14          | 0.96                                 | 1.17                        | 1.17                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n26/5        | 0.78                                 | 1.07                        | 1.07                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n30          | 0.41                                 | 0.68                        | 0.41                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n66          | 0.78                                 | 1.07                        | 0.78                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n70          | 0.79                                 | 1.17                        | 0.80                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n71          | 0.61                                 | 0.68                        | 0.61                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n41/38       | 0.76                                 | 1.16                        | 0.76                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n48          | <0.10                                | 0.62                        | 0.46                                                |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                | FR1 n77/78       | 0.37                                 | 1.11                        | 0.86                                                |                                                    |
| DTS                                                                                                                                                                                                                                                                                                                                                                                                   | WLAN           | 2.4GHz WLAN      | 0.39                                 | 0.39                        | 1.58                                                |                                                    |
| NII                                                                                                                                                                                                                                                                                                                                                                                                   |                | 5GHz WLAN        | 0.11                                 | 0.66                        | 0.23                                                | 1.59                                               |
| DSS                                                                                                                                                                                                                                                                                                                                                                                                   | Bluetooth      | 2.4GHz Bluetooth | <0.10                                | <0.10                       | <0.10                                               | 1.59                                               |
| DTS                                                                                                                                                                                                                                                                                                                                                                                                   | LoRa           | LoRa             | 1.03                                 |                             | 1.03                                                | -                                                  |
| Highest 10g SAR Summary                                                                                                                                                                                                                                                                                                                                                                               |                |                  |                                      |                             |                                                     |                                                    |
| Equipment Class                                                                                                                                                                                                                                                                                                                                                                                       | Frequency Band |                  | Extremity (W/kg)                     |                             | Highest Simultaneous Transmission<br>10g SAR (W/kg) |                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                       |                |                  | (Separation 0mm)                     |                             |                                                     |                                                    |
| NII                                                                                                                                                                                                                                                                                                                                                                                                   | WLAN           | 5GHz WLAN        | 1.46                                 |                             | 1.46                                                |                                                    |
| Date of Testing:                                                                                                                                                                                                                                                                                                                                                                                      |                |                  |                                      | 2024/12/27 ~ 2025/2/15      |                                                     |                                                    |
| Remark:                                                                                                                                                                                                                                                                                                                                                                                               |                |                  |                                      |                             |                                                     |                                                    |
| 1. This device supports LTE B2 / B4 / B5 / B38 and B25 / B66 / B26 / B41. Since the supported frequency span for LTE B2 / B4 / B5 / B38 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B41, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B25 / B66 / B26 / B41.            |                |                  |                                      |                             |                                                     |                                                    |
| 2. This device supports 5GNR n2 / n5 / n38 /n78 and 5GNR n25 / n26 / n41 / n77. Since the supported frequency span for 5GNR n2 / n5 / n38 /n78 falls completely within the supports frequency span for 5GNR n25 / n26 / n41 / n77, both 5GNR bands have the same target power, and both 5GNR bands share the same transmission path; therefore, SAR was only assessed for 5GNR n25 / n26 / n41 / n77. |                |                  |                                      |                             |                                                     |                                                    |

**Declaration of Conformity:**

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

**Comments and Explanations:**

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

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

## **2. Administration Data**

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

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

| Applicant    |                                                      |
|--------------|------------------------------------------------------|
| Company Name | Relay, Inc.                                          |
| Address      | 2230 Bandmate Way, Suite 500, Raleigh, NC 27607, USA |

| Manufacturer |                                                      |
|--------------|------------------------------------------------------|
| Company Name | Relay, Inc.                                          |
| Address      | 2230 Bandmate Way, Suite 500, Raleigh, NC 27607, 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 248227 D01 802.11 Wi-Fi SAR v02r02
- 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
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02



#### 4. Equipment Under Test (EUT) Information

##### 4.1 General Information

| Product Feature & Specification         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment Name                          | Relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Brand Name                              | RelayM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Model Name                              | RY2267                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| FCC ID                                  | 2AMBHRY2267                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| S/N Code                                | 388BE9CC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Wireless Technology and Frequency Range | LTE Band 2: 1850 MHz ~ 1910 MHz<br>LTE Band 4: 1710 MHz ~ 1755 MHz<br>LTE Band 5: 824 MHz ~ 849 MHz<br>LTE Band 7: 2500 MHz ~ 2570 MHz<br>LTE Band 12: 699 MHz ~ 716 MHz<br>LTE Band 13: 777 MHz ~ 787 MHz<br>LTE Band 14: 788 MHz ~ 798 MHz<br>LTE Band 25: 1850 MHz ~ 1915 MHz<br>LTE Band 26: 814 MHz ~ 849 MHz<br>LTE Band 30: 2305 MHz ~ 2315 MHz<br>LTE Band 38: 2570 MHz ~ 2620 MHz<br>LTE Band 41: 2496 MHz ~ 2690 MHz<br>LTE Band 48: 3550 MHz ~ 3700 MHz<br>LTE Band 66: 1710 MHz ~ 1780 MHz<br>LTE Band 71: 663 MHz ~ 698 MHz<br>5G NR n2: 1850 MHz ~ 1910 MHz<br>5G NR n5: 824 MHz ~ 849 MHz<br>5G NR n7: 2500 MHz ~ 2570 MHz<br>5G NR n12: 699 MHz ~ 716 MHz<br>5G NR n13: 777 MHz ~ 787 MHz<br>5G NR n14: 788 MHz ~ 798 MHz<br>5G NR n25: 1850 MHz ~ 1915 MHz<br>5G NR n26: 814 MHz ~ 849 MHz<br>5G NR n30: 2305 MHz ~ 2315 MHz<br>5G NR n38: 2570 MHz ~ 2620 MHz<br>5G NR n41: 2496 MHz ~ 2690 MHz<br>5G NR n48: 3550 MHz ~ 3700 MHz<br>5G NR n66: 1710 MHz ~ 1780 MHz<br>5G NR n70: 1695 MHz ~ 1710 MHz<br>5G NR n71: 663 MHz ~ 698 MHz<br>5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz<br>5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz<br>WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz<br>WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz<br>WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz<br>WLAN 5.5GHz Band: 5500 MHz ~ 5700 MHz<br>WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz<br>WLAN 6GHz U-NII-5: 5925 MHz ~ 6425 MHz<br>WLAN 6GHz U-NII-6: 6425 MHz ~ 6525 MHz<br>WLAN 6GHz U-NII-7: 6525 MHz ~ 6875 MHz<br>WLAN 6GHz U-NII-8: 6875 MHz ~ 7125 MHz<br>Bluetooth: 2402 MHz ~ 2480 MHz<br>NFC : 13.56 MHz<br>LoRa DTS: 904 MHz ~ 926 MHz<br>UWB: 7987.2MHz |
| Mode                                    | LTE: QPSK, 16QAM, 64QAM, (256QAM for B41 only)<br>5G NR: CP-OFDM / DFT-s-OFDM, PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM<br>WLAN 2.4GHz 802.11b/g/n HT20/HT40<br>WLAN 2.4GHz 802.11ax HE20/HE40<br>WLAN 5GHz 802.11a/n HT20/HT40<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160<br>WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |



|            |                                                                                                                         |
|------------|-------------------------------------------------------------------------------------------------------------------------|
|            | WLAN 6GHz 802.11a<br>WLAN 6GHz 802.11ax HE20/HE40/HE80/HE160<br>Bluetooth BR/EDR/LE<br>NFC:ASK<br>Lora<br>UWB: BPM-BPSK |
| HW Version | v01                                                                                                                     |
| EUT Stage  | Identical Prototype                                                                                                     |

**Remark:**

1. This device WLAN 2.4GHz supports hotspot operation and Bluetooth support tethering applications.
2. 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). LoRa and WLAN 6GHz have no hotspot function.
3. The 2.4GHz/5GHz WLAN can transmit in SISO and MIMO antenna mode.
4. The device implements proximity sensors trigger reduced power for the power management for SAR compliance at different exposure conditions (body-worn, hotspot, extremity). The device will invoke corresponding work scenarios power level, which are provided in the operational description.
5. For LTE Band 41 support up to 256QAM, all other LTE bands support up to 64QAM.
6. LTE Band 41 and 5G NR n41/77/n78 supports HPUE only, HPUE power and SAR testing performed separately.
7. For 5G NR n41/n77/n78 HPUE, 5G NR n41/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 test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
8. 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.
9. For LoRa, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
10. The UWB output power is -18.5dBm and it is less than 1mW and exempt from power density testing.
11. This device has NFC function and the NFC SAR report will be separately submitted.
12. SAR and Power density test report for WLAN 6GHz U-NII-5/6/7/8 will be separately submitted. About co-located SAR with WWAN/Bluetooth always chose higher SAR of WLAN5GHz U-NII-1/2A/2C/3 and WLAN 6GHz U-NII-5/6/7/8.
13. This device has PTT (Push-To-Talk) function, so in-front-of the face SAR has been evaluated with 5mm distance using head liquid under the flat phantom.
14. This device supports 5G NR FR1 bands as following table, including NSA mode and SA mode.

**<5G NR>**

| Mode | Band | Duplex | SCS(KHz) | Bandwidths(BW)                                  |
|------|------|--------|----------|-------------------------------------------------|
| NSA  | n2   | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n5   | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n25  | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40                       |
|      | n30  | FDD    | 15       | 5, 10                                           |
|      | n66  | FDD    | 15       | 5, 10, 15, 20, 30, 40                           |
|      | n71  | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n41  | TDD    | 30       | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100         |
|      | n77  | TDD    | 30       | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |
| SA   | n78  | TDD    | 30       | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |
|      | n2   | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n5   | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n7   | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40                       |
|      | n12  | FDD    | 15       | 5, 10, 15                                       |
|      | n13  | FDD    | 15       | 5, 10                                           |
|      | n14  | FDD    | 15       | 5, 10                                           |
|      | n25  | FDD    | 15       | 5, 10, 15, 20, 25, 30, 40                       |
|      | n26  | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n30  | FDD    | 15       | 5, 10                                           |
|      | n66  | FDD    | 15       | 5, 10, 15, 20, 30, 40                           |
|      | n70  | FDD    | 15       | 5, 10, 15                                       |
|      | n71  | FDD    | 15       | 5, 10, 15, 20                                   |
|      | n38  | TDD    | 30       | 10, 15, 20, 30, 40                              |
|      | n41  | TDD    | 30       | 10, 15, 20, 30, 40, 50, 60, 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 General LTE SAR Test and Reporting Considerations

| Summarized necessary items addressed in KDB 941225 D05 v02r05 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                               |         |       |        |        |        |          |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------|-------|--------|--------|--------|----------|
| FCC ID                                                        | 2AMBHRY2267                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                               |         |       |        |        |        |          |
| Equipment Name                                                | Relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                               |         |       |        |        |        |          |
| Operating Frequency Range of each LTE transmission band       | LTE Band 2: 1850 MHz ~ 1910 MHz<br>LTE Band 4: 1710 MHz ~ 1755 MHz<br>LTE Band 5: 824 MHz ~ 849 MHz<br>LTE Band 7: 2500 MHz ~ 2570 MHz<br>LTE Band 12: 699 MHz ~ 716 MHz<br>LTE Band 13: 777 MHz ~ 787 MHz<br>LTE Band 14: 788 MHz ~ 798 MHz<br>LTE Band 25: 1850 MHz ~ 1915 MHz<br>LTE Band 26: 814 MHz ~ 849 MHz<br>LTE Band 30: 2305 MHz ~ 2315 MHz<br>LTE Band 38: 2570 MHz ~ 2620 MHz<br>LTE Band 41: 2496 MHz ~ 2690 MHz<br>LTE Band 48: 3550 MHz ~ 3700 MHz<br>LTE Band 66: 1710 MHz ~ 1780 MHz<br>LTE Band 71: 663 MHz ~ 698 MHz                                                                                                                     |                                                               |         |       |        |        |        |          |
| Channel Bandwidth                                             | LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz<br>LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz<br>LTE Band 13: 5MHz, 10MHz<br>LTE Band 14: 5MHz, 10MHz<br>LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz<br>LTE Band 30: 5MHz, 10MHz<br>LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz<br>LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz |                                                               |         |       |        |        |        |          |
| Uplink Modulations used                                       | LTE: QPSK, 16QAM, 64QAM, (256QAM for B41 only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                               |         |       |        |        |        |          |
| LTE Voice / Data requirements                                 | Data only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                               |         |       |        |        |        |          |
| LTE Release Version                                           | R12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                               |         |       |        |        |        |          |
| CA Support                                                    | Not Supported                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                               |         |       |        |        |        |          |
| LTE MPR permanently built-in by design                        | Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                               |         |       |        |        |        |          |
|                                                               | Modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> ) |         |       |        |        |        | MPR (dB) |
|                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.4 MHz                                                       | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz |          |
|                                                               | QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | > 5                                                           | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 1      |
|                                                               | 16 QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≤ 5                                                           | ≤ 4     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 1      |
|                                                               | 16 QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | > 5                                                           | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 2      |
|                                                               | 64 QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ≤ 5                                                           | ≤ 4     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 2      |
|                                                               | 64 QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | > 5                                                           | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 3      |
|                                                               | 256 QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ≥ 1                                                           |         |       |        |        |        | ≤ 5      |
| LTE A-MPR                                                     | In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                               |         |       |        |        |        |          |
| Spectrum plots for RB configuration                           | A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                               |         |       |        |        |        |          |
| Power reduction applied to satisfy SAR compliance             | Yes, when operating in Proximity sensors/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.                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                               |         |       |        |        |        |          |

| Transmission (H, M, L) channel numbers and frequencies in each LTE band |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|-------------------------------------------------------------------------|-------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|--|--|
| LTE Band 2                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |  |  |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |  |  |
| L                                                                       | 18607             | 1850.7      | 18615            | 1851.5      | 18625            | 1852.5      | 18650            | 1855        | 18675            | 1857.5      | 18700            | 1860        |  |  |
| M                                                                       | 18900             | 1880        | 18900            | 1880        | 18900            | 1880        | 18900            | 1880        | 18900            | 1880        | 18900            | 1880        |  |  |
| H                                                                       | 19193             | 1909.3      | 19185            | 1908.5      | 19175            | 1907.5      | 19150            | 1905        | 19125            | 1902.5      | 19100            | 1900        |  |  |
| LTE Band 4                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |  |  |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |  |  |
| L                                                                       | 19957             | 1710.7      | 19965            | 1711.5      | 19975            | 1712.5      | 20000            | 1715        | 20025            | 1717.5      | 20050            | 1720        |  |  |
| M                                                                       | 20175             | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      | 20175            | 1732.5      |  |  |
| H                                                                       | 20393             | 1754.3      | 20385            | 1753.5      | 20375            | 1752.5      | 20350            | 1750        | 20325            | 1747.5      | 20300            | 1745        |  |  |
| LTE Band 5                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             |                  |             |                  |             |  |  |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |  |  |
| L                                                                       | 20407             | 824.7       | 20415            | 825.5       | 20425            | 826.5       | 20450            | 829         |                  |             |                  |             |  |  |
| M                                                                       | 20525             | 836.5       | 20525            | 836.5       | 20525            | 836.5       | 20525            | 836.5       |                  |             |                  |             |  |  |
| H                                                                       | 20643             | 848.3       | 20635            | 847.5       | 20625            | 846.5       | 20600            | 844         |                  |             |                  |             |  |  |
| LTE Band 7                                                              |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |                  |             |                  |             |  |  |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |  |  |
| L                                                                       | 20775             | 2502.5      | 20800            | 2505        | 20825            | 2507.5      | 20850            | 2510        |                  |             |                  |             |  |  |
| M                                                                       | 21100             | 2535        | 21100            | 2535        | 21100            | 2535        | 21100            | 2535        |                  |             |                  |             |  |  |
| H                                                                       | 21425             | 2567.5      | 21400            | 2565        | 21375            | 2562.5      | 21350            | 2560        |                  |             |                  |             |  |  |
| LTE Band 12                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |             | Bandwidth 10 MHz |             |                  |             |                  |             |  |  |
|                                                                         | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |  |  |
| L                                                                       | 23017             | 699.7       | 23025            | 700.5       | 23035            | 701.5       | 23060            | 704         |                  |             |                  |             |  |  |
| M                                                                       | 23095             | 707.5       | 23095            | 707.5       | 23095            | 707.5       | 23095            | 707.5       |                  |             |                  |             |  |  |
| H                                                                       | 23173             | 715.3       | 23165            | 714.5       | 23155            | 713.5       | 23130            | 711         |                  |             |                  |             |  |  |
| LTE Band 13                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 5 MHz   |             |                  |             | Bandwidth 10 MHz |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Channel #         |             | Freq.(MHz)       |             | Channel #        |             | Freq.(MHz)       |             |                  |             |                  |             |  |  |
| L                                                                       | 23205             |             | 779.5            |             | 23230            |             | 782              |             |                  |             |                  |             |  |  |
| M                                                                       | 23230             |             | 782              |             |                  |             |                  |             |                  |             |                  |             |  |  |
| H                                                                       | 23255             |             | 784.5            |             |                  |             |                  |             |                  |             |                  |             |  |  |
| LTE Band 14                                                             |                   |             |                  |             |                  |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Bandwidth 5 MHz   |             |                  |             | Bandwidth 10 MHz |             |                  |             |                  |             |                  |             |  |  |
|                                                                         | Channel #         |             | Channel #        |             | Channel #        |             | Freq.(MHz)       |             |                  |             |                  |             |  |  |
| L                                                                       | 23305             |             | 790.5            |             | 23330            |             | 793              |             |                  |             |                  |             |  |  |
| M                                                                       | 23330             |             | 793              |             |                  |             |                  |             |                  |             |                  |             |  |  |
| H                                                                       | 23355             |             | 795.5            |             |                  |             |                  |             |                  |             |                  |             |  |  |



| LTE Band 25 |                   |             |                  |             |                  |                  |                  |             |                  |             |                  |             |
|-------------|-------------------|-------------|------------------|-------------|------------------|------------------|------------------|-------------|------------------|-------------|------------------|-------------|
|             | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |                  | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz)      | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L           | 26047             | 1850.7      | 26055            | 1851.5      | 26065            | 1852.5           | 26090            | 1855        | 26115            | 1857.5      | 26140            | 1860        |
| M           | 26340             | 1880        | 26340            | 1880        | 26340            | 1880             | 26340            | 1880        | 26340            | 1880        | 26340            | 1880        |
| H           | 26683             | 1914.3      | 26675            | 1913.5      | 26665            | 1912.5           | 26640            | 1910        | 26615            | 1907.5      | 26590            | 1905        |
| LTE Band 26 |                   |             |                  |             |                  |                  |                  |             |                  |             |                  |             |
|             | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |                  | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz)      | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L           | 26697             | 814.7       | 26705            | 815.5       | 26715            | 816.5            | 26740            | 819         | 26765            | 821.5       | 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 30 |                   |             |                  |             |                  |                  |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             |                  |             |                  | Bandwidth 10 MHz |                  |             |                  |             |                  |             |
|             | Channel #         |             | Freq.(MHz)       |             |                  | Channel #        |                  | Freq.(MHz)  |                  |             |                  |             |
| L           | 27685             |             | 2307.5           |             |                  | 27710            |                  | 2310        |                  |             |                  |             |
| M           | 27710             |             | 2310             |             |                  |                  |                  |             |                  |             |                  |             |
| H           | 27735             |             | 2312.5           |             |                  |                  |                  |             |                  |             |                  |             |
| LTE Band 38 |                   |             |                  |             |                  |                  |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |                  | Bandwidth 20 MHz |             |                  |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz)      | Ch. #            | Freq. (MHz) | 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) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L           | 39675             | 2498.5      | 39700            | 2501        | 39725            | 2503.5           | 39750            | 2506        | 39750            | 2506        | 39750            | 2506        |
| LM          | 40148             | 2545.8      | 40160            | 2547        | 40173            | 2548.3           | 40185            | 2549.5      | 40185            | 2549.5      | 40185            | 2549.5      |
| M           | 40620             | 2593        | 40620            | 2593        | 40620            | 2593             | 40620            | 2593        | 40620            | 2593        | 40620            | 2593        |
| HM          | 41093             | 2640.3      | 41080            | 2639        | 41068            | 2637.8           | 41055            | 2636.5      | 41055            | 2636.5      | 41055            | 2636.5      |
| H           | 41565             | 2687.5      | 41540            | 2685        | 41515            | 2682.5           | 41490            | 2680        | 41490            | 2680        | 41490            | 2680        |
| LTE Band 66 |                   |             |                  |             |                  |                  |                  |             |                  |             |                  |             |
|             | Bandwidth 1.4 MHz |             | Bandwidth 3 MHz  |             | Bandwidth 5 MHz  |                  | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz)      | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L           | 131979            | 1710.7      | 131987           | 1711.5      | 131997           | 1712.5           | 132022           | 1715        | 132047           | 1717.5      | 132072           | 1720        |
| M           | 132322            | 1745        | 132322           | 1745        | 132322           | 1745             | 132322           | 1745        | 132322           | 1745        | 132322           | 1745        |
| H           | 132665            | 1779.3      | 132657           | 1778.5      | 132647           | 1777.5           | 132622           | 1775        | 132597           | 1772.5      | 132572           | 1770        |
| LTE Band 71 |                   |             |                  |             |                  |                  |                  |             |                  |             |                  |             |
|             | Bandwidth 5 MHz   |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |                  | Bandwidth 20 MHz |             |                  |             |                  |             |
|             | Ch. #             | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz)      | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| L           | 133147            | 665.5       | 133172           | 668         | 133197           | 670.5            | 133222           | 673         | 133222           | 673         | 133222           | 673         |
| M           | 133247            | 675.5       | 133272           | 678         | 133297           | 680.5            | 133322           | 683         | 133322           | 683         | 133322           | 683         |
| H           | 133447            | 695.5       | 133422           | 693         | 133397           | 690.5            | 133372           | 688         | 133372           | 688         | 133372           | 688         |



| LTE Band 48 |                 |             |                  |             |                  |             |                  |             |
|-------------|-----------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
|             | Bandwidth 5 MHz |             | Bandwidth 10 MHz |             | Bandwidth 15 MHz |             | Bandwidth 20 MHz |             |
|             | Ch. #           | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) | Ch. #            | Freq. (MHz) |
| 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 2  | Yes     | Yes   | Yes   | Yes    | Yes    | Yes    |
| LTE Band 25 | Yes     | 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 5  | Yes     | Yes   | Yes   | Yes    |        |        |
| LTE Band 26 | Yes     | Yes   | Yes   | Yes    | Yes    |        |
| LTE Band 38 |         |       | Yes   | Yes    | Yes    | Yes    |
| LTE Band 41 |         |       | Yes   | Yes    | Yes    | Yes    |

**2) LTE Bands tune up:**

| Band             | Antenna | Sensor On     | Sensor Off    | Default       |
|------------------|---------|---------------|---------------|---------------|
|                  |         | Tune-up Limit | Tune-up Limit | Tune-up Limit |
| LTE Band 2 NSA   | Ant 1   | 16            | 25            | 25            |
| LTE Band 2       | Ant 1   | 18            | 25            | 25            |
| LTE Band 25      | Ant 1   | 18            | 25            | 25            |
| LTE Band 4       | Ant 1   | 20            | 25            | 25            |
| LTE Band 66      | Ant 1   | 20            | 25            | 25            |
| LTE Band 5 NSA   | Ant 1   | 22            | 25            | 25            |
| LTE Band 5       | Ant 1   | 24            | 25            | 25            |
| LTE Band 26      | Ant 1   | 24            | 25            | 25            |
| LTE Band 38      | Ant 1   | 17.5          | 25            | 25            |
| LTE Band 41 HPUE | Ant 1   | 17.5          | 28            | 28            |
| LTE Band 2 NSA   | Ant 2   | 18            | 24            | 24            |
| LTE Band 25 NSA  | Ant 2   | 18            | 24            | 24            |



|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Frequency Range of each 5G NR transmission band | 5G NR n2: 1850 MHz ~ 1910 MHz<br>5G NR n5: 824 MHz ~ 849 MHz<br>5G NR n7: 2500 MHz ~ 2570 MHz<br>5G NR n12: 699 MHz ~ 716 MHz<br>5G NR n13: 777 MHz ~ 787 MHz<br>5G NR n14: 788 MHz ~ 798 MHz<br>5G NR n25: 1850 MHz ~ 1915 MHz<br>5G NR n26: 814 MHz ~ 849 MHz<br>5G NR n30: 2305 MHz ~ 2315 MHz<br>5G NR n38: 2570 MHz ~ 2620 MHz<br>5G NR n41: 2496 MHz ~ 2690 MHz<br>5G NR n48: 3550 MHz ~ 3700 MHz<br>5G NR n66: 1710 MHz ~ 1780 MHz<br>5G NR n70: 1695 MHz ~ 1710 MHz<br>5G NR n71: 663 MHz ~ 698 MHz<br>5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz<br>5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz |
| Channel Bandwidth                                         | The detail please refers to section 4.1 5G NR FR1 bands table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| SCS                                                       | FDD: SCS15KHz, TDD: SCS30KHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| uplink modulations used                                   | DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM<br>CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| A-MPR (Additional MPR) disabled for SAR Testing?          | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| LTE Anchor Bands for n2                                   | LTE B5/12/13/14/66/30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| LTE Anchor Bands for n5                                   | LTE B2/66/30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| LTE Anchor Bands for n25                                  | LTE B66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| LTE Anchor Bands for n30                                  | LTE B2/12/14/66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| LTE Anchor Bands for n66                                  | LTE B2/5/12/13/30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| LTE Anchor Bands for n71                                  | LTE B2/66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| LTE Anchor Bands for n41                                  | LTE B66/25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| LTE Anchor Bands for n77                                  | LTE B2/5/12/13/66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| LTE Anchor Bands for n78                                  | LTE B2/5/12/66/7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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

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

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

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



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

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

| NR Band 25 |                   |                |                    |                |                    |             |                    |                |                    |                |                    |                |                    |                |
|------------|-------------------|----------------|--------------------|----------------|--------------------|-------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|
|            | Bandwidth<br>5MHz |                | Bandwidth<br>10MHz |                | Bandwidth<br>15MHz |             | Bandwidth<br>20MHz |                | Bandwidth<br>25MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                |
|            | Ch. #             | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq. (MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) |
| L          | 370500            | 1852.5         | 371000             | 1855           | 371500             | 1857.5      | 372000             | 1860           | 372500             | 1862.5         | 373000             | 1865           | 374000             | 1870           |
| M          | 376500            | 1882.5         | 376500             | 1882.5         | 376500             | 1882.5      | 376500             | 1882.5         | 376500             | 1882.5         | 376500             | 1882.5         | 376500             | 1882.5         |
| H          | 382500            | 1912.5         | 382000             | 1910           | 381500             | 1907.5      | 381000             | 1905           | 380500             | 1902.5         | 380000             | 1900           | 379000             | 1895           |

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

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

| NR Band 66     |             |                 |             |                 |             |                 |             |                 |             |                 |             |       |             |
|----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-------|-------------|
| Bandwidth 5MHz |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             | Bandwidth 30MHz |             | Bandwidth 40MHz |             |       |             |
| Ch. #          | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. # | Freq. (MHz) |
| L              | 342500      | 1712.5          | 343000      | 1715            | 343500      | 1717.5          | 344000      | 1720            | 345000      | 1725            | 346000      | 1730  |             |
| M              | 349000      | 1745            | 349000      | 1745            | 349000      | 1745            | 349000      | 1745            | 349000      | 1745            | 349000      | 1745  |             |
| H              | 355500      | 1777.5          | 355000      | 1775            | 354500      | 1772.5          | 354000      | 1770            | 353000      | 1765            | 352000      | 1760  |             |

| NR Band 70 |                |             |                 |             |                 |             |
|------------|----------------|-------------|-----------------|-------------|-----------------|-------------|
|            | Bandwidth 5MHz |             | Bandwidth 10MHz |             | Bandwidth 15MHz |             |
|            | Ch. #          | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |
| L          | 339500         | 1697.5      | 340000          | 1700        | 340500          | 1702.5      |
| M          | 340500         | 1702.5      | 340500          | 1702.5      |                 |             |
| H          | 341500         | 1707.5      | 341000          | 1705        |                 |             |

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

|   | NR Band 38 SCS30KHz |             |                 |             |                 |             |                 |             |                 |             |
|---|---------------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
|   | Bandwidth10MHz      |             | Bandwidth 15MHz |             | Bandwidth 20MHz |             | Bandwidth 30MHz |             | Bandwidth 40MHz |             |
|   | Ch. #               | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) | Ch. #           | Freq. (MHz) |
| L | 515004              | 2575.02     | 515502          | 2577.51     | 516000          | 2580        | 517002          | 2585.01     | 518004          | 2590.02     |
| M | 519000              | 2595        | 519000          | 2595        | 519000          | 2595        | 519000          | 2595        | 519000          | 2595        |
| H | 522996              | 2614.98     | 522498          | 2612.49     | 522000          | 2610        | 520998          | 2604.99     | 519996          | 2599.98     |

| NR Band 41         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |         |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|---------|
| Bandwidth<br>10MHz |                | Bandwidth<br>15MHz |                | Bandwidth<br>20MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |         |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |         |
| L                  | 500202         | 2501.01            | 500700         | 2503.5             | 501204         | 2506.02            | 502200         | 2511               | 503202         | 2516.01            | 504204         | 2521.02            | 505200         | 2526               | 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 |
| H                  | 537000         | 2685               | 536496         | 2682.48            | 535998         | 2679.99            | 534996         | 2674.98            | 534000         | 2670               | 532998         | 2664.99            | 531996         | 2659.98            | 529998         | 2649.99            | 528996         | 2644.98             | 528000         | 2640    |



| NR Band48 |                 |             |                 |             |                 |             |                 |             |
|-----------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
|           | Bandwidth 10MHz |             | Bandwidth 15MHz |             | 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 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) |  |  |
| 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        |  |  |
| 656000          | 3840        | 656000          | 3840        | 656000          | 3840        | 656000          | 3840.00     | 656000          | 3840        | 656000          | 3840        | 656000          | 3840        | 656000          | 3840        | 656000          | 3840        | 656000          | 3840        | 656000           | 3840        |  |  |
| 664832          | 3972.48     | 664666          | 3969.99     | 664500          | 3967.5      | 664332          | 3964.98     | 664000          | 3960        | 663666          | 3954.99     | 663332          | 3949.98     | 663000          | 3945        | 662666          | 3939.99     | 662332          | 3934.98     | 662000           | 3930        |  |  |

| NR Band 78         |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                    |                |                     |                |
|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|---------------------|----------------|
| Bandwidth<br>15MHz |                | Bandwidth<br>20MHz |                | Bandwidth<br>25MHz |                | Bandwidth<br>30MHz |                | Bandwidth<br>40MHz |                | Bandwidth<br>50MHz |                | Bandwidth<br>60MHz |                | Bandwidth<br>70MHz |                | Bandwidth<br>80MHz |                | Bandwidth<br>90MHz |                | Bandwidth<br>100MHz |                |
| Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #              | Freq.<br>(MHz) | Ch. #               | Freq.<br>(MHz) |
| 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           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750.00        | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000             | 3750           | 650000              | 3750           |
| 652834             | 3792.51        | 652668             | 3790.02        | 652500             | 3787.5         | 652334             | 3785.01        | 652000             | 3780           | 651668             | 3775.02        | 651334             | 3770.01        | 651000             | 3765           | 650668             | 3760.02        | 650334             | 3755.01        |                     |                |

For <3450 MHz ~ 3550 MHz >

| NR Band 77         |        |                    |        |                    |        |                    |        |                    |        |                    |        |                    |        |                    |        |                    |        |                    |        |                     |        |                |
|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|---------------------|--------|----------------|
| Bandwidth<br>15MHz |        | Bandwidth<br>20MHz |        | Bandwidth<br>25MHz |        | Bandwidth<br>30MHz |        | Bandwidth<br>40MHz |        | Bandwidth<br>50MHz |        | Bandwidth<br>60MHz |        | Bandwidth<br>70MHz |        | Bandwidth<br>80MHz |        | Bandwidth<br>90MHz |        | Bandwidth<br>100MHz |        |                |
|                    | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)     | Ch. #  | Freq.<br>(MHz)      | Ch. #  | Freq.<br>(MHz) |
| L                  | 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                  | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01            | 633334 | 3500.01             | 633334 | 3500.01        |
| H                  | 636168 | 3542.52            | 636000 | 3540               | 635834 | 3537.51            | 635668 | 3535.02            | 635334 | 3530.01            | 635000 | 3525               | 634668 | 3520.02            | 634334 | 3515.01            | 634000 | 3510               | 633668 | 3505.02             |        |                |

| NR Band 78 |                 |             |                 |             |                 |             |                 |             |                 |             |                 |             |                 |             |                 |             |                 |             |                 |             |                  |             |  |
|------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|------------------|-------------|--|
| Ch. #      | 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) |  |
| 630501     | 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        |                  |             |  |
| 633334     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334          | 3500.01     | 633334           | 3500.01     |  |
| 636168     | 636168          | 3542.52     | 636000          | 3540        | 635834          | 3537.51     | 635668          | 3535.02     | 635334          | 3530.01     | 635000          | 3525        | 634668          | 3520.02     | 634334          | 3515.01     | 634000          | 3510        | 633668          | 3505.02     |                  |             |  |

**<For NR Overlap Bands Description>**

## 1) NR Bands BW

| Band | Duplex | SCS(KHz) | Bandwidths(BW)                       |
|------|--------|----------|--------------------------------------|
| n2   | FDD    | 15       | 5/10/15/20                           |
| n5   | FDD    | 15       | 5/10/15/20                           |
| n25  | FDD    | 15       | 5/10/15/20/25/30/40                  |
| n26  | FDD    | 15       | 5/10/15/20                           |
| n38  | TDD    | 30       | 10/15/20/30/40                       |
| n41  | TDD    | 30       | 10/15/20/30/40/50/60/80/90/100       |
| 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 |

## 2) NR Bands Tune up:

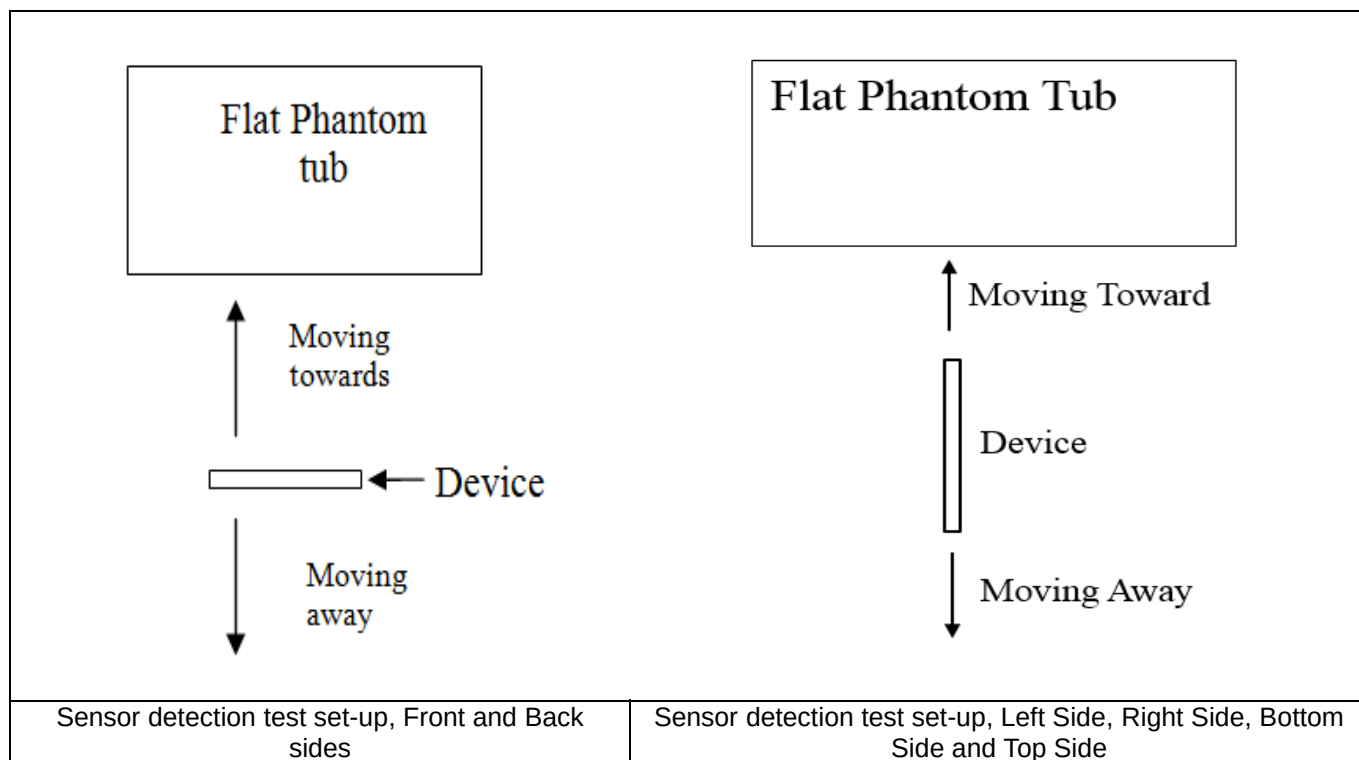
| Band             | Antenna | Sensor On     | Sensor Off    | Default       |
|------------------|---------|---------------|---------------|---------------|
|                  |         | Tune-up Limit | Tune-up Limit | Tune-up Limit |
| FR1 n2 NSA       | Ant 1   | 17            | 25            | 25            |
| FR1 n25 NSA      | Ant 1   | 17            | 25            | 25            |
| 5G NR n2         | Ant 1   | 19            | 25            | 25            |
| 5G NR n25        | Ant 1   | 19            | 25            | 25            |
| FR1 n5 NSA       | Ant 1   | 20.5          | 24            | 24            |
| 5G NR n5         | Ant 1   | 23            | 24            | 24            |
| 5G NR n26        | Ant 1   | 23            | 24            | 24            |
| FR1 n38          | Ant 1   | 23.5          | 26            | 26            |
| FR1 n41 PC2      | Ant 1   | 23.5          | 28            | 28            |
| FR1 n41 PC2 NSA  | Ant 1   | 21.5          | 28            | 28            |
| FR1 N77 HPUE     | Ant 1   | 18            | 27            | 27            |
| FR1 N78 HPUE     | Ant 1   | 18            | 27            | 27            |
| FR1 N77 HPUE     | Ant 2   | 19            | 27.5          | 27.5          |
| FR1 N78 HPUE     | Ant 2   | 19            | 27.5          | 27.5          |
| FR1 N77 HPUE     | Ant 8   | 14.5          | 27            | 27            |
| FR1 N78 HPUE     | Ant 8   | 14.5          | 27            | 27            |
| FR1 N77 HPUE NSA | Ant 8   | 12.5          | 27            | 27            |
| FR1 N78 HPUE NSA | Ant 8   | 12.5          | 27            | 27            |
| FR1 N77 HPUE     | Ant 9   | 19            | 27            | 27            |
| FR1 N78 HPUE     | Ant 9   | 19            | 27            | 27            |
| FR1 N77 HPUE NSA | Ant 9   | 19            | 27            | 27            |
| FR1 N78 HPUE NSA | Ant 9   | 19            | 27            | 27            |



## 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 (3890MHz) 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 device 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 bottom or left or top side 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 bottom or left or top side of the device use a detection threshold distance. When front/back/right/left/top/bottom sides 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 on>

| Proximity Sensor Triggering Distance (mm) |                |             |                |             |                |             |                |             |                |             |                |             |
|-------------------------------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| Position                                  | Front          |             | Back           |             | Left Side      |             | Right Side     |             | Top Side       |             | Bottom Side    |             |
|                                           | Moving towards | Moving away | Moving towards | Moving away | Moving towards | Moving away | Moving towards | Moving away | Moving towards | Moving away | Moving towards | Moving away |
| Minimum                                   | 32             | 37          | 31             | 36          | 33             | 37          | 21             | 26          | 31             | 36          | 32             | 35          |

## 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 ( $\rho$ ). The equation description is as below:

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

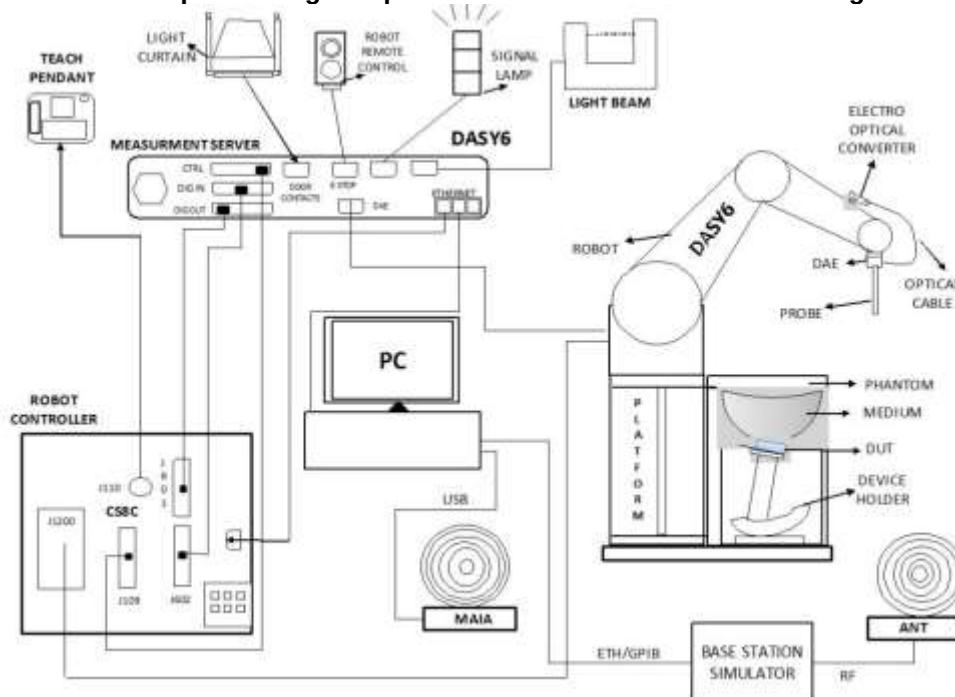
SAR is expressed in units of Watts per kilogram (W/kg)

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

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  is the mass density of the tissue and E is the RMS electrical field strength.

## 8. System Description and Setup

The DASY 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 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

## 8.1 E-Field Probe

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

### <EX3DV4 Probe>

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

## 8.2 Data Acquisition Electronics (DAE)

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

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



**Photo of DAE**

### 8.3 Phantom

#### <SAM Twin Phantom>

|                   |                                                         |                                                                                    |
|-------------------|---------------------------------------------------------|------------------------------------------------------------------------------------|
| Shell Thickness   | 2 ± 0.2 mm;<br>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<br>Minor axis: 400 mm |                                                                                     |

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

## 8.4 Device Holder

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

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

## 9. Measurement Procedures

The measurement procedures are as follows:

### <Conducted power measurement>

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

### <SAR measurement>

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

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

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

### 9.1 Spatial Peak SAR Evaluation

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

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

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

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



## 9.2 Power Reference Measurement

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

## 9.3 Area Scan

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

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

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

## 9.4 Zoom Scan

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

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

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

## 9.5 Volume Scan Procedures

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

## 9.6 Power Drift Monitoring

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

**10. Test Equipment List**

| Manufacturer    | Name of Equipment             | Type/Model  | Serial Number | Calibration |            |
|-----------------|-------------------------------|-------------|---------------|-------------|------------|
|                 |                               |             |               | Last Cal.   | Due Date   |
| SPEAG           | 750MHz System Validation Kit  | D750V3      | 1087          | 2022/2/24   | 2025/2/22  |
| SPEAG           | 835MHz System Validation Kit  | D835V2      | 4d298         | 2024/1/26   | 2025/1/25  |
| SPEAG           | 900MHz System Validation Kit  | D900V2      | 1d186         | 2022/2/3    | 2025/2/1   |
| SPEAG           | 1750MHz System Validation Kit | D1750V2     | 1090          | 2022/2/24   | 2025/2/22  |
| SPEAG           | 1900MHz System Validation Kit | D1900V2     | 5d118         | 2022/3/30   | 2025/3/28  |
| SPEAG           | 2300MHz System Validation Kit | D2300V2     | 1055          | 2023/8/21   | 2026/8/20  |
| SPEAG           | 2450MHz System Validation Kit | D2450V2     | 1095          | 2024/2/8    | 2025/2/7   |
| SPEAG           | 2600MHz System Validation Kit | D2600V2     | 1112          | 2023/12/18  | 2026/12/17 |
| SPEAG           | 3500MHz System Validation Kit | D3500V2     | 1037          | 2023/11/20  | 2026/11/19 |
| SPEAG           | 3700MHz System Validation Kit | D3700V2     | 1008          | 2023/11/20  | 2026/11/19 |
| SPEAG           | 3900MHz System Validation Kit | D3900V2     | 1048          | 2023/3/9    | 2026/3/8   |
| SPEAG           | 5000MHz System Validation Kit | D5GHzV2     | 1113          | 2022/9/23   | 2025/9/21  |
| SPEAG           | Data Acquisition Electronics  | DAE4        | 1649          | 2024/7/3    | 2025/7/2   |
| SPEAG           | Dosimetric E-Field Probe      | EX3DV4      | 7706          | 2024/1/24   | 2025/1/23  |
| SPEAG           | Dosimetric E-Field Probe      | EX3DV4      | 7774          | 2024/6/27   | 2025/6/26  |
| SPEAG           | SAM Twin Phantom              | SAM Twin    | TP-2024       | NCR         | NCR        |
| CHIGO           | Thermo-Hygrometer             | HTC-1       | 55009         | 2024/5/15   | 2025/5/14  |
| SPEAG           | Phone Positioner              | N/A         | N/A           | NCR         | NCR        |
| Anritsu         | Radio Communication Analyzer  | MT8821C     | 6262306175    | 2024/7/4    | 2025/7/3   |
| Agilent         | ENA Series Network Analyzer   | E5071C      | MY46112129    | 2024/7/4    | 2025/7/3   |
| SPEAG           | Dielectric Probe Kit          | DAK-3.5     | 1144          | 2024/8/20   | 2025/8/19  |
| Anritsu         | Vector Signal Generator       | MG3710A     | 6201682672    | 2024/1/2    | 2025/1/1   |
| Anritsu         | Vector Signal Generator       | MG3710A     | 6201682672    | 2025/1/3    | 2026/1/2   |
| Rohde & Schwarz | Power Meter                   | NRVD        | 102081        | 2024/7/4    | 2025/7/3   |
| Rohde & Schwarz | Power Sensor                  | NRV-Z5      | 100538        | 2024/7/4    | 2025/7/3   |
| Rohde & Schwarz | Power Sensor                  | NRV-Z5      | 100539        | 2024/7/4    | 2025/7/3   |
| R&S             | BLUETOOTH TESTER              | CBT         | 101246        | 2024/7/4    | 2025/7/3   |
| Rohde & Schwarz | Spectrum Analyzer             | FSV7        | 101631        | 2024/10/11  | 2025/10/10 |
| TES             | DIGITAC THERMOMETER           | TYPE-K      | 220305411     | 2024/1/4    | 2025/1/3   |
| TES             | DIGITAC THERMOMETER           | TYPE-K      | 220305411     | 2025/1/2    | 2026/1/1   |
| ARRA            | Power Divider                 | A3200-2     | N/A           | Note 1      |            |
| MCL             | Attenuation1                  | BW-S10W5+   | N/A           | Note 1      |            |
| MCL             | Attenuation2                  | BW-S10W5+   | N/A           | Note 1      |            |
| MCL             | Attenuation3                  | BW-S10W5+   | N/A           | Note 1      |            |
| BONN            | POWER AMPLIFIER               | BLMA 0830-3 | 087193A       | Note 1      |            |
| BONN            | POWER AMPLIFIER               | BLMA 2060-2 | 087193B       | Note 1      |            |
| Agilent         | Dual Directional Coupler      | 778D        | 20500         | Note 1      |            |
| Agilent         | Dual Directional Coupler      | 11691D      | MY48151020    | Note 1      |            |

**Note:**

1. 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 source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.

## **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. 10.1. 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. 10.2.



**Fig 10.1**Photo of Liquid Height for Head SAR



**Fig 10.2** Photo of Liquid Height for Body SAR

## 11.2 Tissue Verification

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

| Frequency (MHz)  | Water (%) | Sugar (%) | Cellulose (%) | Salt (%) | Preventol (%) | DGBE (%) | Conductivity ( $\sigma$ ) | Permittivity ( $\epsilon_r$ ) |
|------------------|-----------|-----------|---------------|----------|---------------|----------|---------------------------|-------------------------------|
| For Head         |           |           |               |          |               |          |                           |                               |
| 750              | 41.1      | 57.0      | 0.2           | 1.4      | 0.2           | 0        | 0.89                      | 41.9                          |
| 835              | 40.3      | 57.9      | 0.2           | 1.4      | 0.2           | 0        | 0.90                      | 41.5                          |
| 900              | 40.3      | 57.9      | 0.2           | 1.4      | 0.2           | 0        | 0.97                      | 41.5                          |
| 1800, 1900, 2000 | 55.2      | 0         | 0             | 0.3      | 0             | 44.5     | 1.40                      | 40.0                          |
| 2450             | 55.0      | 0         | 0             | 0        | 0             | 45.0     | 1.80                      | 39.2                          |
| 2600             | 54.8      | 0         | 0             | 0.1      | 0             | 45.1     | 1.96                      | 39.0                          |

### Simulating Liquid for 5GHz, Manufactured by SPEAG

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

### <Tissue Dielectric Parameter Check Results>

| Frequency (MHz) | Tissue Type | Liquid Temp. (°C) | Conductivity ( $\sigma$ ) | Permittivity ( $\epsilon_r$ ) | Conductivity Target ( $\sigma$ ) | Permittivity Target ( $\epsilon_r$ ) | Delta ( $\sigma$ ) (%) | Delta ( $\epsilon_r$ ) (%) | Limit (%) | Date       |
|-----------------|-------------|-------------------|---------------------------|-------------------------------|----------------------------------|--------------------------------------|------------------------|----------------------------|-----------|------------|
| 750             | Head        | 22.7              | 0.926                     | 42.4                          | 0.89                             | 41.90                                | 4.04                   | 1.19                       | ±5        | 2024/12/27 |
| 835             | Head        | 22.7              | 0.935                     | 42.1                          | 0.90                             | 41.50                                | 3.89                   | 1.45                       | ±5        | 2024/12/27 |
| 1750            | Head        | 22.7              | 1.38                      | 40.3                          | 1.37                             | 40.10                                | 0.73                   | 0.50                       | ±5        | 2024/12/28 |
| 1900            | Head        | 22.8              | 1.45                      | 40.0                          | 1.40                             | 40.00                                | 3.57                   | 0.00                       | ±5        | 2024/12/28 |
| 2300            | Head        | 22.8              | 1.71                      | 39.5                          | 1.67                             | 39.50                                | 2.40                   | 0.00                       | ±5        | 2024/12/29 |
| 2600            | Head        | 22.8              | 1.94                      | 39.1                          | 1.96                             | 39.00                                | -1.02                  | 0.26                       | ±5        | 2024/12/29 |
| 3500            | Head        | 22.6              | 2.81                      | 39.0                          | 2.91                             | 37.90                                | -3.44                  | 2.90                       | ±5        | 2025/2/11  |
| 3700            | Head        | 22.6              | 2.99                      | 38.7                          | 3.12                             | 37.70                                | -4.17                  | 2.65                       | ±5        | 2025/2/13  |
| 3900            | Head        | 22.6              | 3.25                      | 37.8                          | 3.32                             | 37.50                                | -2.11                  | 0.80                       | ±5        | 2025/2/15  |
| 5250            | Head        | 22.8              | 4.73                      | 36.0                          | 4.71                             | 35.90                                | 0.42                   | 0.28                       | ±5        | 2024/12/31 |
| 5600            | Head        | 22.8              | 5.15                      | 35.3                          | 5.07                             | 35.50                                | 1.58                   | -0.56                      | ±5        | 2025/1/1   |
| 5750            | Head        | 22.8              | 5.32                      | 35.0                          | 5.22                             | 35.40                                | 1.92                   | -1.13                      | ±5        | 2025/1/1   |
| 2450            | Head        | 22.8              | 1.86                      | 38.5                          | 1.80                             | 39.20                                | 3.33                   | -1.79                      | ±5        | 2025/1/1   |
| 900             | Head        | 22.8              | 0.971                     | 41.9                          | 0.97                             | 41.50                                | 0.10                   | 0.96                       | ±5        | 2024/12/27 |



### 11.3 System Performance Check Results

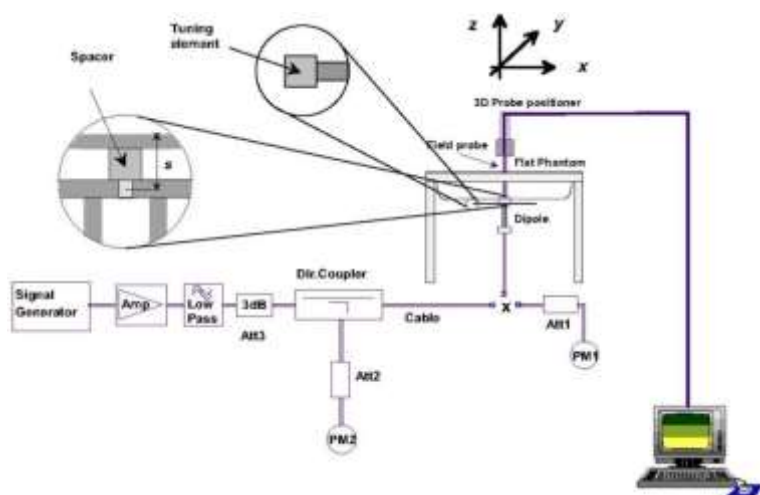
Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the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

#### <1g SAR>

| Date       | Frequency (MHz) | Tissue Type | Input Power (mW) | Dipole S/N | Probe S/N | DAE S/N | Measured 1g SAR (W/kg) | Targeted 1g SAR (W/kg) | Normalized 1g SAR (W/kg) | Deviation (%) |
|------------|-----------------|-------------|------------------|------------|-----------|---------|------------------------|------------------------|--------------------------|---------------|
| 2024/12/27 | 750             | Head        | 50               | 1087       | 7706      | 1649    | 0.399                  | 8.58                   | 7.98                     | -6.99         |
| 2024/12/27 | 835             | Head        | 50               | 4d298      | 7706      | 1649    | 0.457                  | 9.89                   | 9.14                     | -7.58         |
| 2024/12/28 | 1750            | Head        | 50               | 1090       | 7706      | 1649    | 1.95                   | 37.00                  | 39                       | 5.41          |
| 2024/12/28 | 1900            | Head        | 50               | 5d118      | 7706      | 1649    | 1.83                   | 39.30                  | 36.6                     | -6.87         |
| 2024/12/29 | 2300            | Head        | 50               | 1055       | 7706      | 1649    | 2.41                   | 48.40                  | 48.2                     | -0.41         |
| 2024/12/29 | 2600            | Head        | 50               | 1112       | 7706      | 1649    | 2.62                   | 55.10                  | 52.4                     | -4.90         |
| 2025/2/11  | 3500            | Head        | 50               | 1037       | 7774      | 1649    | 3.12                   | 65.40                  | 62.4                     | -4.59         |
| 2025/2/13  | 3700            | Head        | 50               | 1008       | 7774      | 1649    | 3.11                   | 67.20                  | 62.2                     | -7.44         |
| 2025/2/15  | 3900            | Head        | 50               | 1048       | 7774      | 1649    | 3.18                   | 69.10                  | 63.6                     | -7.96         |
| 2024/12/31 | 5250            | Head        | 50               | 1113       | 7706      | 1649    | 3.88                   | 81.50                  | 77.6                     | -4.79         |
| 2025/1/1   | 5600            | Head        | 50               | 1113       | 7706      | 1649    | 4.04                   | 82.60                  | 80.8                     | -2.18         |
| 2025/1/1   | 5750            | Head        | 50               | 1113       | 7706      | 1649    | 4.10                   | 80.80                  | 82                       | 1.49          |
| 2025/1/1   | 2450            | Head        | 50               | 1095       | 7706      | 1649    | 2.61                   | 52.60                  | 52.2                     | -0.76         |
| 2024/12/27 | 900             | Head        | 50               | 1d186      | 7706      | 1649    | 0.538                  | 10.90                  | 10.76                    | -1.28         |

#### <10g SAR>

| Date       | Frequency (MHz) | Tissue Type | Input Power (mW) | Dipole S/N | Probe S/N | DAE S/N | Measured 10g SAR (W/kg) | Targeted 10g SAR (W/kg) | Normalized 10g SAR (W/kg) | Deviation (%) |
|------------|-----------------|-------------|------------------|------------|-----------|---------|-------------------------|-------------------------|---------------------------|---------------|
| 2024/12/27 | 750             | Head        | 50               | 1087       | 7706      | 1649    | 0.273                   | 5.65                    | 5.46                      | -3.36         |
| 2024/12/27 | 835             | Head        | 50               | 4d298      | 7706      | 1649    | 0.303                   | 6.45                    | 6.06                      | -6.05         |
| 2024/12/28 | 1750            | Head        | 50               | 1090       | 7706      | 1649    | 1.01                    | 19.50                   | 20.2                      | 3.59          |
| 2024/12/28 | 1900            | Head        | 50               | 5d118      | 7706      | 1649    | 0.96                    | 20.40                   | 19.2                      | -5.88         |
| 2024/12/29 | 2300            | Head        | 50               | 1055       | 7706      | 1649    | 1.15                    | 23.70                   | 23                        | -2.95         |
| 2024/12/29 | 2600            | Head        | 50               | 1112       | 7706      | 1649    | 1.22                    | 24.80                   | 24.4                      | -1.61         |
| 2025/2/11  | 3500            | Head        | 50               | 1037       | 7774      | 1649    | 1.25                    | 24.70                   | 25                        | 1.21          |
| 2025/2/13  | 3700            | Head        | 50               | 1008       | 7774      | 1649    | 1.21                    | 24.40                   | 24.2                      | -0.82         |
| 2025/2/15  | 3900            | Head        | 50               | 1048       | 7774      | 1649    | 1.19                    | 24.10                   | 23.8                      | -1.24         |
| 2024/12/31 | 5250            | Head        | 50               | 1113       | 7706      | 1649    | 1.25                    | 23.30                   | 25                        | 7.30          |
| 2025/1/1   | 5600            | Head        | 50               | 1113       | 7706      | 1649    | 1.15                    | 23.70                   | 23                        | -2.95         |
| 2025/1/1   | 5750            | Head        | 50               | 1113       | 7706      | 1649    | 1.21                    | 23.00                   | 24.2                      | 5.22          |
| 2025/1/1   | 2450            | Head        | 50               | 1095       | 7706      | 1649    | 1.26                    | 24.70                   | 25.2                      | 2.02          |
| 2024/12/27 | 900             | Head        | 50               | 1d186      | 7706      | 1649    | 0.351                   | 7.02                    | 7.02                      | 0.00          |



**Fig 10.3.1 System Performance Check Setup**



**Fig 10.3.2 Setup Photo**



## **12. RF Exposure Positions**

### **12.1 SAR Testing for Relay**

- (a) To position the device parallel to the phantom surface with in front of face surfaces of the device.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 5 mm.

### **12.2 Body SAR Testing for Device**

- (a) To position the device parallel to the phantom surface with front and back of the device.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 5 mm.

### **12.3 Extremity SAR Testing for Device**

- (b) To position the device parallel to the phantom surface with all surfaces of the device.
- (c) To adjust the device parallel to the flat phantom.
- (d) To adjust the distance between the device surface and the flat phantom to 0 mm.

### **12.4 Wireless Router**

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

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

Please refer to Appendix D for the test setup photos.



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

The detailed conducted power table can refer to Appendix E.

#### <LTE Conducted Power>

##### General Note:

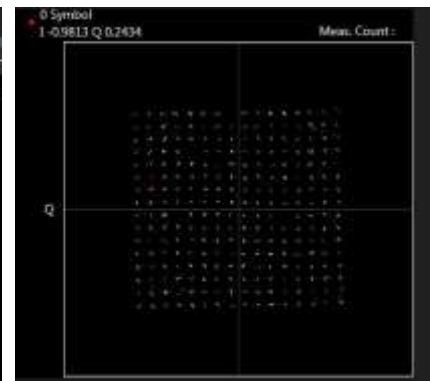
1. Anritsu MT8821C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested 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  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $> \text{not } \frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is  $> \text{not } \frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4 / B5 / B12 / B26 / B38 / B71 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 band 2 / 4 / 5 / 38 SAR test was covered by Band 25 / 66 / 26 / 41; 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.



16QAM



64QAM



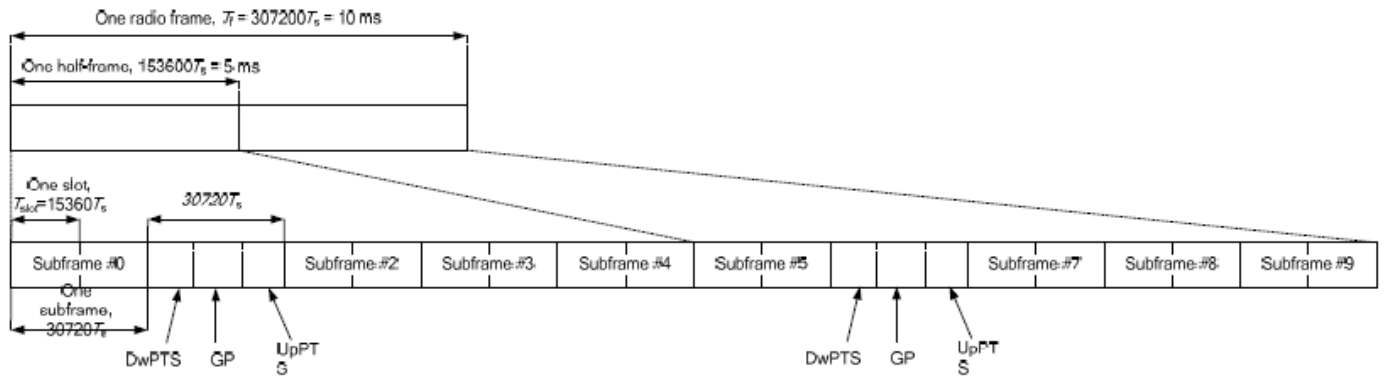
256QAM

### <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 <sub>s</sub> ): 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 <sub>s</sub> ): 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:

For LTE TDD Power class 2

- Uplink-downlink configuration: 1. In a half-frame consisted of 5 subframes, uplink operation is in 2 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:  $(2+0.167)/5 = 43.3\%$
- for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(2+0.143)/5 = 42.9\%$
- For TDD LTE SAR measurement, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix  $43.3\%/42.9\% = 1.009$  is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.

For LTE TDD Power class 3

- 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.

The device can adjust uplink/downlink configuration automatically according to the transmitting power class level, as followings:

| LTE TDD Band | Power Class level | support uplink/downlink configuration |
|--------------|-------------------|---------------------------------------|
| LTE Band 41  | > 23              | 1,2,3,4,5                             |
|              | =23               | 0,1,2,3,4,5,6                         |
|              | < 23              | 0,1,2,3,4,5,6                         |

**5G NR Output Power (Unit: dBm)**

**General Note:**

1. 5G NR n2/n5/n25/n30/n66/n71/n41/n77/n78 is NSA mode.
2. 5G NR n2/n5/n7/n12/n13/n14/n25/n26/n30/n66/n70/n71/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  $\frac{1}{2}$  dB higher than the same configuration in DFT-QPSK and the reported SAR for the DFT-QPSK configuration is  $\leq 1.45$  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  $\frac{1}{2}$  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  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested
  - f. 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.
  - g. Smaller bandwidth output power for each RB allocation configuration for this device will not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device
4. This device supports HPUE mode for 5G NR n41/77/n78 only.
5. For 5G NR n41/77/n78 HPUE, 5G NR n41/77/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 test, using FTM (Factory Test Mode) with default 100% duty cycle transmission to perform SAR testing.
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. 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.
9. 5G NR NSA mode, the power level is the same as 5G NR SA mode, so 5G NR NSA mode and SA mode power table only show one time.
10. 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.

**<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      | $\leq 1$            |                      | 0                    |
|            | 16 QAM    | $\leq 2$            |                      | $\leq 1$             |
|            | 64 QAM    | $\leq 2.5$          |                      |                      |
| CP-OFDM    | 256 QAM   | $\leq 4.5$          |                      |                      |
|            | QPSK      | $\leq 3$            |                      | $\leq 1.5$           |
|            | 16 QAM    | $\leq 3$            |                      | $\leq 2$             |
|            | 64 QAM    | $\leq 3.5$          |                      |                      |
|            | 256 QAM   | $\leq 6.5$          |                      |                      |

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 | $\leq 3.5$          | $\leq 0.5$           | 0                    |
|            | QPSK      | $\leq 3.5$          | $\leq 1$             | 0                    |
|            | 16 QAM    | $\leq 3.5$          | $\leq 2$             | $\leq 1$             |
|            | 64 QAM    | $\leq 3.5$          | $\leq 2.5$           |                      |
|            | 256 QAM   | $\leq 4.5$          |                      |                      |
| CP-OFDM    | QPSK      | $\leq 3.5$          | $\leq 3$             | $\leq 1.5$           |
|            | 16 QAM    | $\leq 3.5$          | $\leq 3$             | $\leq 2$             |
|            | 64 QAM    | $\leq 3.5$          |                      |                      |
|            | 256 QAM   | $\leq 6.5$          |                      |                      |

**<EN-DC combination>:**

| ENDC        | Main Antenna Tx |       |
|-------------|-----------------|-------|
|             | LTE TX          | NR TX |
| DC_2A_n5A   | ANT2            | ANT1  |
| DC_2A_n30A  | ANT1            | ANT9  |
| DC_2A_n71A  | ANT2            | ANT1  |
| DC_2A_n66A  | ANT1            | ANT2  |
| DC_2A_n78A  | ANT1            | ANT9  |
| DC_2A_n77A  | ANT1            | ANT9  |
| DC_5A_n2A   | ANT1            | ANT2  |
| DC_5A_n66A  | ANT1            | ANT2  |
| DC_5A_n78A  | ANT1            | ANT9  |
| DC_5A_n77A  | ANT1            | ANT9  |
| DC_12A_n2A  | ANT1            | ANT2  |
| DC_12A_n30A | ANT1            | ANT9  |
| DC_12A_n78A | ANT1            | ANT9  |
| DC_12A_n66A | ANT1            | ANT2  |
| DC_12A_n77A | ANT1            | ANT9  |
| DC_13A_n66A | ANT1            | ANT2  |
| DC_13A_n77A | ANT1            | ANT9  |
| DC_13A_n2A  | ANT1            | ANT2  |
| DC_14A_n2A  | ANT1            | ANT2  |
| DC_14A_n30A | ANT1            | ANT9  |
| DC_66A_n2A  | ANT2            | ANT1  |
| DC_66A_n5A  | ANT2            | ANT1  |
| DC_66A_n25A | ANT2            | ANT1  |
| DC_66A_n30A | ANT2            | ANT9  |
| DC_66A_n41A | ANT2            | ANT1  |
| DC_66A_n71A | ANT2            | ANT1  |
| DC_66A_n78A | ANT2            | ANT8  |
| DC_66A_n77A | ANT2            | ANT8  |
| DC_30A_n2A  | ANT9            | ANT1  |
| DC_30A_n5A  | ANT9            | ANT1  |
| DC_30A_n66A | ANT9            | ANT1  |
| DC_7A_n78A  | ANT1            | ANT9  |
| DC_25A_n41A | ANT2            | ANT8  |



**<WLAN Conducted Power>**

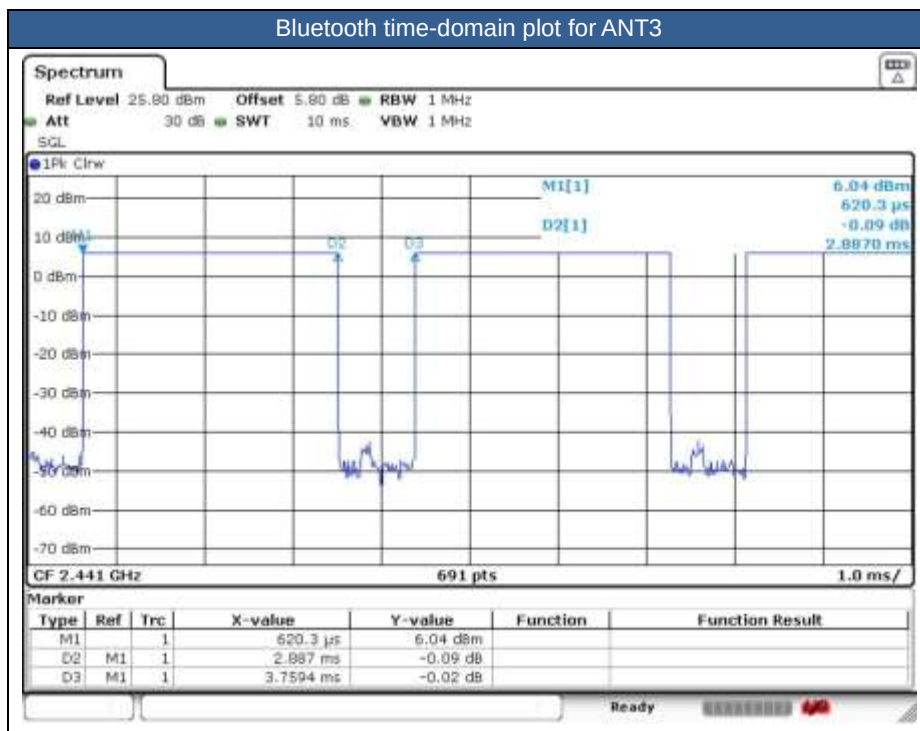
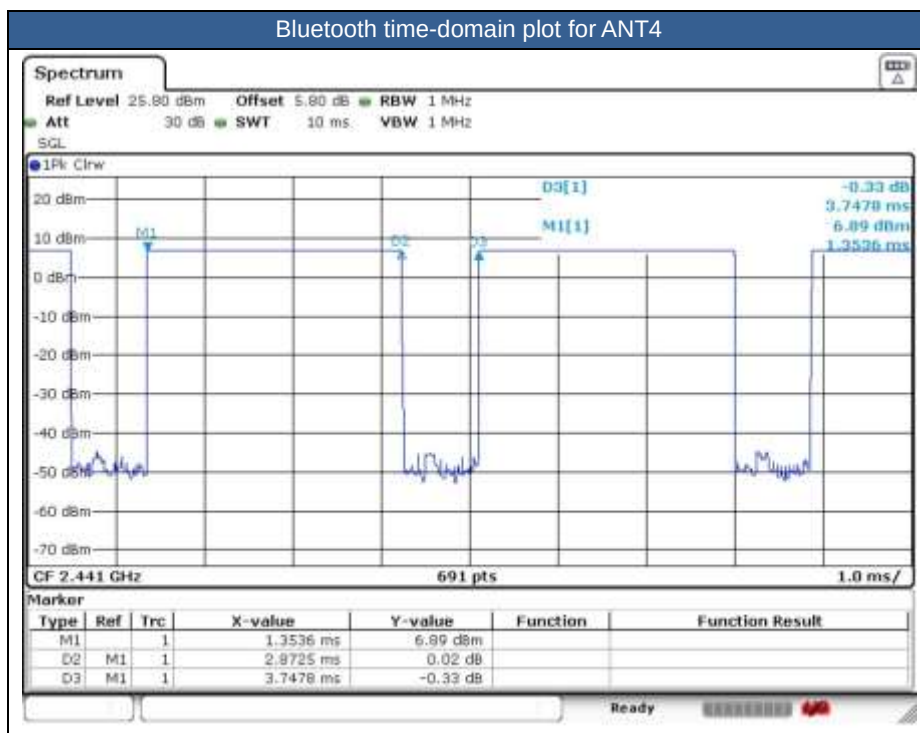
**General Note:**

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  $\leq 0.4$  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  $\leq 0.8$  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  $\leq 1.2$  W/kg or all required channels are tested.
6. 802.11ax supports full tone size and partial tone size, after verification for the partial tone size mode power level will not higher than full tone size power level, so chose full tone power to be measured in this report.
7. The 2.4GHz/5GHz WLAN can transmit in SISO and MIMO antenna mode.
8. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
9. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.

## <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 76.64% for ANT4, 76.79% for ANT3 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.







<LoRa>





## **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 WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor.
  - f. For LoRa: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor\* Transmission duty cycle factor.
  - g. The transmission duty cycle for LoRa is 100% for full power, 50% for sensor on declared by Manufacturer.
  - h. 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 Reported TDD LTE SAR (W/kg) = measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.
  - i. For TDD LTE SAR measurement of power class 2, the duty cycle 1:2.33 (42.9 %) was used perform testing and considering the theoretical duty cycle of 43.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - $\leq 0.8$  W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
  - $\leq 0.4$  W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
4. Referring to KDB 941225 D06 v02r01, when the overall device length and width are  $< 9\text{cm} \times 5\text{cm}$ , the test distance is 5 mm. SAR must be measured for all sides and surfaces.
5. For this device SAR for WLAN transmitter scaled to maximum output power mode for Extremity SAR is higher than 1.2W/kg of WLAN 5.2GHz therefore Extremity SAR is necessary.
6. WLAN 5.3/5.5GHz tested the Extremity SAR since it has no hotspot mode.
7. When Extremity SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
8. For distance SAR and non-distance SAR always chose higher SAR to do co-located analysis.
9. This device has PTT (Push-To-Talk) function, so in-front-of the face SAR has been evaluated with 5mm distance using head liquid under the flat phantom.

**LTE Note:**

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, for QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $> \text{not } \frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM/256QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is  $> \text{not } \frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4 / B5 / B12 / B26 / B38 / B71 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 band 2 / 4 / 5 / 38 SAR test was covered by Band 25 / 66 / 26 / 41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. the maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion
  - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

**5G NR Note:**

1. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
  - a. SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
  - b. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure
  - c. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
  - d. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not  $\frac{1}{2}$  dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK /16QAM/64QAM/256QAM SAR testing are not required.
  - e. Smaller bandwidth output power for each RB allocation configuration for this device will not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device
  - f. For 5G FR1 n5 /n7/n12/ n25/n26 /n66 /n71/n38/n41/n48 /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 Note:**

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is  $> 0.4$  W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is  $\leq 0.8$  W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.
6. 802.11ax supports full tone size and partial tone size, after verification for the partial tone size mode power level will not higher than full tone size power level, so chose full tone power to be measured in this report.
7. The 2.4GHz/5GHz WLAN can transmit in SISO and MIMO antenna mode.
8. SISO and MIMO all supported by WLAN2.4GHz/WLAN5GHz, for SISO mode power is less than per chain power of MIMO mode. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power, so only chose MIMO mode to perform SAR testing.
9. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of two antennas respectively to calculate sum of the power for MIMO mode.



## 15.1 In Front of Face SAR

| Plot No. | Band            | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-----------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-----------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 750MHz   |                 |          |            |         |           |               |               |          |         |                 |        |             |                     |                     |                        |              |                           |                  |                        |                        |
| 01       | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.08             | 0.692                  | 0.793                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.01             | 0.659                  | 0.753                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23095  | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | 0.08             | 0.420                  | 0.472                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23095  | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | 0.01             | 0.382                  | 0.434                  |
| 02       | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 23230  | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.11             | 0.764                  | 0.904                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 23230  | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | -0.05            | 0.666                  | 0.793                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 23230  | 782         | 23.34               | 24.00               | 1.164                  | -            | -                         | 0.05             | 0.651                  | 0.758                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23230  | 782         | 21.36               | 22.00               | 1.159                  | -            | -                         | -0.05            | 0.429                  | 0.497                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23230  | 782         | 21.35               | 22.00               | 1.161                  | -            | -                         | 0.18             | 0.374                  | 0.434                  |
| 03       | LTE Band 14 SA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 24.21               | 24.50               | 1.069                  | -            | -                         | 0.05             | 0.865                  | 0.925                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 23.68               | 24.00               | 1.076                  | -            | -                         | 0.06             | 0.667                  | 0.718                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 23.58               | 24.00               | 1.102                  | -            | -                         | 0.01             | 0.648                  | 0.714                  |
|          | LTE Band 14 NSA | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 21.25               | 21.50               | 1.059                  | -            | -                         | 0.06             | 0.455                  | 0.482                  |
|          | LTE Band 14 NSA | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 21.19               | 21.50               | 1.074                  | -            | -                         | -0.09            | 0.412                  | 0.442                  |
| 04       | LTE Band 71     | 20M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 133322 | 683         | 23.94               | 25.00               | 1.276                  | -            | -                         | 0.08             | 0.715                  | 0.913                  |
|          | LTE Band 71     | 20M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 133322 | 683         | 22.88               | 24.00               | 1.294                  | -            | -                         | 0.01             | 0.558                  | 0.722                  |
|          | LTE Band 71     | 20M      | QPSK       | 100     | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 133322 | 683         | 22.91               | 24.00               | 1.285                  | -            | -                         | 0.05             | 0.523                  | 0.672                  |
| 05       | FR1 n12         | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 23.18               | 24.00               | 1.208                  | -            | -                         | -0.18            | 0.636                  | 0.768                  |
|          | FR1 n12         | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 23.17               | 24.00               | 1.211                  | -            | -                         | -0.09            | 0.617                  | 0.747                  |
|          | FR1 n13         | 10M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.25               | 23.00               | 1.189                  | -            | -                         | -0.02            | 0.422                  | 0.502                  |
| 06       | FR1 n13         | 10M      | QPSK       | 25      | 14        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.23               | 23.00               | 1.194                  | -            | -                         | 0.13             | 0.522                  | 0.623                  |
| 07       | FR1 n14         | 10M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 158600 | 793         | 22.96               | 24.00               | 1.271                  | -            | -                         | 0.11             | 0.756                  | 0.961                  |
|          | FR1 n14         | 10M      | QPSK       | 25      | 14        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 158600 | 793         | 22.94               | 24.00               | 1.276                  | -            | -                         | -0.05            | 0.711                  | 0.908                  |
|          | FR1 n14         | 10M      | QPSK       | 50      | 0         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 158600 | 793         | 22.92               | 24.00               | 1.282                  | -            | -                         | 0.05             | 0.688                  | 0.882                  |
| 08       | FR1 n71         | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 136100 | 680.5       | 24.44               | 25.00               | 1.138                  | -            | -                         | 0.03             | 0.539                  | 0.613                  |
|          | FR1 n71         | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 136100 | 680.5       | 24.36               | 25.00               | 1.159                  | -            | -                         | 0.01             | 0.477                  | 0.553                  |
| 835MHz   |                 |          |            |         |           |               |               |          |         |                 |        |             |                     |                     |                        |              |                           |                  |                        |                        |
| 09       | LTE Band 26 SA  | 15M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 26865  | 831.5       | 23.23               | 24.00               | 1.194                  | -            | -                         | 0.05             | 0.778                  | 0.929                  |
|          | LTE Band 26 SA  | 15M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 26765  | 821.5       | 22.80               | 24.00               | 1.318                  | -            | -                         | 0.05             | 0.681                  | 0.898                  |
|          | LTE Band 26 SA  | 15M      | QPSK       | 36      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 26865  | 831.5       | 23.19               | 24.00               | 1.205                  | -            | -                         | 0.06             | 0.695                  | 0.837                  |
|          | LTE Band 26 SA  | 15M      | QPSK       | 36      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 26765  | 821.5       | 22.91               | 24.00               | 1.285                  | -            | -                         | 0.06             | 0.648                  | 0.833                  |
|          | LTE Band 26 SA  | 15M      | QPSK       | 75      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 26865  | 831.5       | 23.10               | 24.00               | 1.230                  | -            | -                         | 0.02             | 0.645                  | 0.794                  |
|          | LTE Band 5 NSA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 20525  | 836.5       | 21.09               | 22.00               | 1.233                  | -            | -                         | -0.13            | 0.487                  | 0.601                  |
|          | LTE Band 5 NSA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 20525  | 836.5       | 21.04               | 22.00               | 1.247                  | -            | -                         | 0.06             | 0.372                  | 0.464                  |
| 10       | FR1 n26         | 20M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 167800 | 839         | 22.65               | 23.00               | 1.084                  | -            | -                         | 0.19             | 0.716                  | 0.776                  |
|          | FR1 n26         | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 167800 | 839         | 22.60               | 23.00               | 1.096                  | -            | -                         | 0.07             | 0.682                  | 0.748                  |
| 1750MHz  |                 |          |            |         |           |               |               |          |         |                 |        |             |                     |                     |                        |              |                           |                  |                        |                        |
| 11       | LTE Band 66     | 20M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 132322 | 1745        | 19.22               | 20.00               | 1.197                  | -            | -                         | -0.08            | 0.626                  | 0.749                  |
|          | LTE Band 66     | 20M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 132322 | 1745        | 19.18               | 20.00               | 1.208                  | -            | -                         | -0.13            | 0.524                  | 0.633                  |
|          | LTE Band 66 NSA | 20M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 2   | Sensor On       | 132322 | 1745        | 18.79               | 19.00               | 1.050                  | -            | -                         | -0.09            | 0.318                  | 0.334                  |
|          | LTE Band 66 NSA | 20M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 2   | Sensor On       | 132322 | 1745        | 18.76               | 19.00               | 1.057                  | -            | -                         | 0.11             | 0.294                  | 0.311                  |
| 12       | FR1 n66 SA      | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 349000 | 1745        | 19.38               | 20.50               | 1.294                  | -            | -                         | 0.16             | 0.605                  | 0.783                  |
|          | FR1 n66 SA      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 349000 | 1745        | 19.36               | 20.50               | 1.300                  | -            | -                         | -0.03            | 0.555                  | 0.722                  |
|          | FR1 n66 NSA     | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 349000 | 1745        | 17.51               | 18.50               | 1.256                  | -            | -                         | 0.08             | 0.395                  | 0.496                  |
|          | FR1 n66 NSA     | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 349000 | 1745        | 17.49               | 18.50               | 1.262                  | -            | -                         | 0.01             | 0.493                  | 0.622                  |
|          | FR1 n66 NSA     | 40M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 2   | Sensor On       | 349000 | 1745        | 18.97               | 20.00               | 1.268                  | -            | -                         | -0.05            | 0.347                  | 0.440                  |
|          | FR1 n66 NSA     | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 5mm      | Ant 2   | Sensor On       | 349000 | 1745        | 18.95               | 20.00               | 1.274                  | -            | -                         | 0.18             | 0.355                  | 0.452                  |



# FCC SAR Test Report

Report No. : FA250505

|         |                  |      |      |     |    |               |       |     |       |           |        |         |       |       |       |      |       |       |       |       |
|---------|------------------|------|------|-----|----|---------------|-------|-----|-------|-----------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
| 13      | FR1 n70          | 15M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm | Ant 2 | Sensor On | 340500 | 1702.5  | 18.40 | 19.50 | 1.288 | -    | -     | 0.08  | 0.613 | 0.790 |
|         | FR1 n70          | 15M  | QPSK | 36  | 22 | DFT-SCS-15KHz | Front | 5mm | Ant 2 | Sensor On | 340500 | 1702.5  | 18.36 | 19.50 | 1.300 | -    | -     | 0.01  | 0.594 | 0.772 |
| 1900MHz |                  |      |      |     |    |               |       |     |       |           |        |         |       |       |       |      |       |       |       |       |
|         | LTE Band 25 SA   | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 26340  | 1880    | 17.53 | 18.00 | 1.114 | -    | -     | 0.11  | 0.863 | 0.962 |
|         | LTE Band 25 SA   | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 26140  | 1860    | 17.22 | 18.00 | 1.197 | -    | -     | -0.05 | 0.852 | 1.020 |
| 14      | LTE Band 25 SA   | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 26590  | 1905    | 17.23 | 18.00 | 1.194 | -    | -     | 0.18  | 0.870 | 1.039 |
|         | LTE Band 25 SA   | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 26340  | 1880    | 17.41 | 18.00 | 1.146 | -    | -     | 0.14  | 0.603 | 0.691 |
|         | LTE Band 25 SA   | 20M  | QPSK | 100 | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 26340  | 1880    | 17.40 | 18.00 | 1.148 | -    | -     | -0.17 | 0.605 | 0.695 |
|         | LTE Band 2 NSA   | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 18900  | 1880    | 15.39 | 16.00 | 1.151 | -    | -     | -0.13 | 0.485 | 0.558 |
|         | LTE Band 2 NSA   | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 18900  | 1880    | 15.35 | 16.00 | 1.161 | -    | -     | 0.06  | 0.398 | 0.462 |
|         | LTE Band 25 NSA  | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 2 | Sensor On | 26340  | 1880    | 17.81 | 18.00 | 1.045 | -    | -     | -0.09 | 0.412 | 0.430 |
|         | LTE Band 25 NSA  | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 2 | Sensor On | 26140  | 1860    | 17.47 | 18.00 | 1.130 | -    | -     | -0.08 | 0.429 | 0.485 |
|         | LTE Band 25 NSA  | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 2 | Sensor On | 26590  | 1905    | 17.76 | 18.00 | 1.057 | -    | -     | 0.13  | 0.399 | 0.422 |
|         | LTE Band 25 NSA  | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 2 | Sensor On | 26340  | 1880    | 17.78 | 18.00 | 1.052 | -    | -     | 0.12  | 0.381 | 0.401 |
|         | LTE Band 25 NSA  | 20M  | QPSK | 100 | 0  | -             | Front | 5mm | Ant 2 | Sensor On | 26340  | 1880    | 17.75 | 18.00 | 1.059 | -    | -     | 0.03  | 0.404 | 0.428 |
|         | FR1 n25 SA       | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 376500 | 1882.5  | 18.08 | 19.00 | 1.236 | -    | -     | -0.18 | 0.752 | 0.929 |
| 15      | FR1 n25 SA       | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 376500 | 1882.5  | 18.07 | 19.00 | 1.239 | -    | -     | 0.03  | 0.871 | 1.079 |
|         | FR1 n25 SA       | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 376500 | 1882.5  | 18.05 | 19.00 | 1.245 | -    | -     | -0.15 | 0.797 | 0.992 |
|         | FR1 n25 NSA      | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 376500 | 1882.5  | 16.46 | 17.00 | 1.132 | -    | -     | -0.13 | 0.464 | 0.525 |
|         | FR1 n25 NSA      | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 376500 | 1882.5  | 16.41 | 17.00 | 1.146 | -    | -     | 0.07  | 0.537 | 0.615 |
| 16      | FR1 n2 NSA       | 20M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm | Ant 2 | Sensor On | 376000 | 1880    | 18.24 | 19.00 | 1.191 | -    | -     | -0.08 | 0.414 | 0.493 |
|         | FR1 n2 NSA       | 20M  | QPSK | 50  | 28 | DFT-SCS-15KHz | Front | 5mm | Ant 2 | Sensor On | 376000 | 1880    | 18.21 | 19.00 | 1.199 | -    | -     | -0.13 | 0.408 | 0.489 |
| 2300MHz |                  |      |      |     |    |               |       |     |       |           |        |         |       |       |       |      |       |       |       |       |
| 17      | LTE Band 30      | 10M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 9 | Sensor On | 27710  | 2310    | 16.73 | 17.50 | 1.194 | -    | -     | -0.04 | 0.375 | 0.448 |
|         | LTE Band 30      | 10M  | QPSK | 25  | 0  | -             | Front | 5mm | Ant 9 | Sensor On | 27710  | 2310    | 16.69 | 17.50 | 1.205 | -    | -     | 0.13  | 0.257 | 0.310 |
| 18      | FR1 n30          | 10M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm | Ant 9 | Sensor On | 462000 | 2310    | 16.08 | 17.00 | 1.236 | -    | -     | -0.08 | 0.332 | 0.410 |
|         | FR1 n30          | 10M  | QPSK | 25  | 14 | DFT-SCS-15KHz | Front | 5mm | Ant 9 | Sensor On | 462000 | 2310    | 16.05 | 17.00 | 1.245 | -    | -     | -0.08 | 0.213 | 0.265 |
| 2600MHz |                  |      |      |     |    |               |       |     |       |           |        |         |       |       |       |      |       |       |       |       |
| 19      | LTE Band 7 SA    | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 21100  | 2535    | 13.65 | 14.50 | 1.216 | -    | -     | -0.18 | 0.436 | 0.530 |
|         | LTE Band 7 SA    | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 21100  | 2535    | 13.61 | 14.50 | 1.227 | -    | -     | 0.1   | 0.372 | 0.457 |
|         | LTE Band 7 NSA   | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 21100  | 2535    | 11.71 | 12.50 | 1.199 | -    | -     | -0.05 | 0.284 | 0.341 |
|         | LTE Band 7 NSA   | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 21100  | 2535    | 11.68 | 12.50 | 1.208 | -    | -     | -0.15 | 0.243 | 0.293 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 40620  | 2593    | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | -0.09 | 0.702 | 0.894 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 39750  | 2506    | 16.10 | 17.50 | 1.380 | 42.9 | 1.009 | -0.05 | 0.676 | 0.942 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 40185  | 2549.5  | 16.18 | 17.50 | 1.355 | 42.9 | 1.009 | -0.08 | 0.682 | 0.933 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 41055  | 2636.5  | 16.29 | 17.50 | 1.321 | 42.9 | 1.009 | 0.16  | 0.636 | 0.848 |
| 20      | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 41490  | 2680    | 16.17 | 17.50 | 1.358 | 42.9 | 1.009 | 0.05  | 0.774 | 1.061 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 40620  | 2593    | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | 0.05  | 0.577 | 0.741 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 39790  | 2510    | 16.14 | 17.50 | 1.368 | 42.9 | 1.009 | 0.1   | 0.545 | 0.752 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 39750  | 2506    | 16.06 | 17.50 | 1.393 | 42.9 | 1.009 | -0.17 | 0.512 | 0.720 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 40185  | 2549.5  | 16.24 | 17.50 | 1.337 | 42.9 | 1.009 | 0.04  | 0.533 | 0.719 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 41055  | 2636.5  | 16.28 | 17.50 | 1.324 | 42.9 | 1.009 | -0.01 | 0.518 | 0.692 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 41490  | 2680    | 16.15 | 17.50 | 1.365 | 42.9 | 1.009 | -0.08 | 0.520 | 0.716 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 100 | 0  | -             | Front | 5mm | Ant 1 | Sensor On | 40620  | 2593    | 16.33 | 17.50 | 1.309 | 42.9 | 1.009 | -0.03 | 0.576 | 0.761 |
|         | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -    | -     | -0.17 | 0.441 | 0.482 |
| 21      | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm | Ant 1 | Sensor On | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -    | -     | -0.1  | 0.513 | 0.564 |
|         | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 2 | Sensor On | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50   | 1.000 | -0.06 | 0.421 | 0.582 |
|         | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 2 | Sensor On | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50   | 1.000 | -0.14 | 0.303 | 0.423 |
|         | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50   | 1.000 | 0.08  | 0.454 | 0.592 |





# FCC SAR Test Report

Report No. : FA250505

|              |                      |      |      |     |    |               |       |     |       |           |        |         |       |       |       |      |       |       |       |       |
|--------------|----------------------|------|------|-----|----|---------------|-------|-----|-------|-----------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
|              | FR1 n41 HPUE SA      | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50   | 1.000 | 0.16  | 0.514 | 0.676 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50   | 1.000 | -0.13 | 0.311 | 0.392 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50   | 1.000 | 0.05  | 0.352 | 0.450 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 518598 | 2592.99 | 23.01 | 23.50 | 1.119 | 50   | 1.000 | 0.18  | 0.657 | 0.735 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 518598 | 2592.99 | 22.96 | 23.50 | 1.132 | 50   | 1.000 | 0.14  | 0.591 | 0.669 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 518598 | 2592.99 | 21.09 | 21.50 | 1.099 | 50   | 1.000 | 0.18  | 0.431 | 0.474 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 518598 | 2592.99 | 21.06 | 21.50 | 1.107 | 50   | 1.000 | 0.14  | 0.388 | 0.429 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 518598 | 2592.99 | 18.60 | 20.00 | 1.380 | 50   | 1.000 | 0.03  | 0.486 | 0.671 |
| 22           | FR1 n41 HPUE         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 518598 | 2592.99 | 18.57 | 20.00 | 1.390 | 50   | 1.000 | 0.06  | 0.545 | 0.758 |
|              | FR1 n41 HPUE         | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 518598 | 2592.99 | 18.53 | 20.00 | 1.403 | 50   | 1.000 | 0.01  | 0.521 | 0.731 |
| 3500-3900MHz |                      |      |      |     |    |               |       |     |       |           |        |         |       |       |       |      |       |       |       |       |
| 23           | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Front | 5mm | Ant 9 | Sensor On | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | -0.13 | 0.100 | 0.106 |
|              | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Front | 5mm | Ant 9 | Sensor On | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.17  | 0.078 | 0.083 |
| 24           | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | 0.03  | 0.068 | 0.083 |
|              | FR1 n48              | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.18  | 0.063 | 0.078 |
| 25           | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | 0.16  | 0.297 | 0.370 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | -0.15 | 0.207 | 0.259 |
|              | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50   | 1.000 | -0.03 | 0.191 | 0.238 |
|              | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50   | 1.000 | 0.09  | 0.133 | 0.167 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50   | 1.000 | -0.08 | 0.136 | 0.172 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50   | 1.000 | -0.1  | 0.146 | 0.187 |
|              | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50   | 1.000 | 0.18  | 0.093 | 0.118 |
|              | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 8 | Sensor On | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50   | 1.000 | -0.19 | 0.100 | 0.128 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50   | 1.000 | 0.11  | 0.281 | 0.294 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50   | 1.000 | -0.13 | 0.194 | 0.204 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50   | 1.000 | -0.15 | 0.126 | 0.159 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 1 | Sensor On | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50   | 1.000 | -0.12 | 0.100 | 0.127 |
|              | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50   | 1.000 | 0.16  | 0.074 | 0.082 |
|              | FR1 n77 Part 270     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50   | 1.000 | -0.1  | 0.075 | 0.085 |
|              | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50   | 1.000 | -0.08 | 0.220 | 0.307 |
|              | FR1 n77 Part 27Q     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 9 | Sensor On | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50   | 1.000 | -0.04 | 0.172 | 0.241 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 2 | Sensor On | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50   | 1.000 | 0.16  | 0.222 | 0.270 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 2 | Sensor On | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50   | 1.000 | -0.1  | 0.204 | 0.254 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm | Ant 2 | Sensor On | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50   | 1.000 | -0.15 | 0.258 | 0.360 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm | Ant 2 | Sensor On | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50   | 1.000 | -0.15 | 0.255 | 0.359 |



| Plot No.             | Band       | Mode                | Test Position | Gap (mm) | Antenna    | Power Reduction | Ch. | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------------------|------------|---------------------|---------------|----------|------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| <b>WLAN/BT/ LORA</b> |            |                     |               |          |            |                 |     |             |                     |                     |                        |              |                           |                  |                        |                        |
| 26                   | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.07            | 0.252                  | <b>0.392</b>           |
|                      | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(4) | Full power      | 6   | 2437        | 13.21               | 15.00               | 1.510                  | 100          | 1.000                     | 0.12             | 0.245                  | 0.370                  |
|                      | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(4) | Full power      | 11  | 2462        | 13.17               | 15.00               | 1.524                  | 100          | 1.000                     | 0.03             | 0.227                  | 0.346                  |
| 27                   | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | -0.05            | 0.042                  | <b>0.046</b>           |
|                      | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 39  | 2441        | 8.15                | 8.50                | 1.084                  | 76.64        | 1.087                     | 0.02             | 0.036                  | 0.042                  |
|                      | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 78  | 2480        | 7.72                | 8.00                | 1.067                  | 76.64        | 1.087                     | 0.03             | 0.033                  | 0.038                  |
|                      | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | -0.01            | 0.036                  | 0.041                  |
| 28                   | WLAN5.3GHz | 802.11n-HT40 MCS0   | Front         | 5mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | 0.01             | 0.070                  | <b>0.105</b>           |
| 29                   | WLAN5.5GHz | 802.11n-HT40 MCS0   | Front         | 5mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.08            | 0.062                  | <b>0.094</b>           |
| 30                   | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Front         | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.08             | 0.054                  | <b>0.085</b>           |
| 31                   | LORA       | DTS-500K            | Front         | 5mm      | Ant 8      | Sensor On       | 1   | 904         | 26.48               | 27.00               | 1.127                  | 100          | 0.500                     | 0.18             | 1.830                  | <b>1.031</b>           |
|                      | LORA       | DTS-500K            | Front         | 5mm      | Ant 8      | Sensor On       | 12  | 915         | 25.96               | 27.00               | 1.271                  | 100          | 0.500                     | 0.16             | 1.350                  | 0.858                  |
|                      | LORA       | DTS-500K            | Front         | 5mm      | Ant 8      | Sensor On       | 23  | 926         | 25.25               | 27.00               | 1.496                  | 100          | 0.500                     | -0.1             | 0.922                  | 0.690                  |



## 15.2 Hotspot SAR

| Plot No. | Band            | BW (MHz) | Modulation | RB Size | RB offset | Mode | Test Position | Gap (mm) | Antenna | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-----------------|----------|------------|---------|-----------|------|---------------|----------|---------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 750MHz   |                 |          |            |         |           |      |               |          |         |                 |       |             |                     |                     |                        |              |                           |                  |                        |                        |
|          | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -    | Front         | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.08             | 0.692                  | 0.793                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -    | Front         | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.01             | 0.659                  | 0.753                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -    | Back          | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.03             | 0.725                  | 0.830                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -    | Back          | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | -0.08            | 0.620                  | 0.709                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 50      | 0         | -    | Back          | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.46               | 23.00               | 1.132                  | -            | -                         | 0.05             | 0.611                  | 0.692                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | -0.08            | 0.229                  | 0.262                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.1              | 0.190                  | 0.217                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | -0.18            | 0.228                  | 0.261                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -    | Right Side    | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.1              | 0.170                  | 0.194                  |
| 32       | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -    | Top Side      | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.12             | 0.980                  | 1.123                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -    | Top Side      | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.08             | 0.771                  | 0.881                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 50      | 0         | -    | Top Side      | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.46               | 23.00               | 1.132                  | -            | -                         | -0.17            | 0.766                  | 0.867                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -    | Bottom Side   | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | -0.03            | 0.113                  | 0.129                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -    | Bottom Side   | 5mm      | Ant 1   | Full Power      | 23095 | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.14             | 0.103                  | 0.118                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -    | Front         | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | 0.08             | 0.420                  | 0.472                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -    | Front         | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | 0.01             | 0.382                  | 0.434                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -    | Back          | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | -0.08            | 0.482                  | 0.542                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -    | Back          | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | -0.08            | 0.359                  | 0.407                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | -0.18            | 0.133                  | 0.150                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | 0.1              | 0.110                  | 0.125                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | 0.12             | 0.102                  | 0.115                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -    | Right Side    | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | 0.08             | 0.099                  | 0.112                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -    | Top Side      | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | 0.07             | 0.568                  | 0.639                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -    | Top Side      | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | -0.17            | 0.273                  | 0.310                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -    | Bottom Side   | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | 0.14             | 0.065                  | 0.073                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -    | Bottom Side   | 5mm      | Ant 1   | Sensor On       | 23095 | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | 0.11             | 0.060                  | 0.068                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -    | Front         | 31mm     | Ant 1   | Full power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.08             | 0.138                  | 0.158                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -    | Back          | 30mm     | Ant 1   | Full power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.01             | 0.135                  | 0.155                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 32mm     | Ant 1   | Full power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.03             | 0.001                  | 0.001                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 20mm     | Ant 1   | Full power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | -0.08            | 0.089                  | 0.102                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -    | Top Side      | 30mm     | Ant 1   | Full power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | -0.08            | 0.001                  | 0.001                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -    | Bottom Side   | 31mm     | Ant 1   | Full power      | 23095 | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.1              | 0.001                  | 0.001                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -    | Front         | 5mm      | Ant 1   | Full power      | 23230 | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.11             | 0.764                  | 0.904                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -    | Front         | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | -0.05            | 0.666                  | 0.793                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 50      | 0         | -    | Front         | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.34               | 24.00               | 1.164                  | -            | -                         | 0.05             | 0.651                  | 0.758                  |
| 33       | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -    | Back          | 5mm      | Ant 1   | Full power      | 23230 | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.18             | 0.966                  | 1.143                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -    | Back          | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | 0.14             | 0.766                  | 0.912                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 50      | 0         | -    | Back          | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.34               | 24.00               | 1.164                  | -            | -                         | -0.17            | 0.751                  | 0.874                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 5mm      | Ant 1   | Full power      | 23230 | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.17             | 0.262                  | 0.310                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | -0.05            | 0.214                  | 0.255                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -    | Right Side    | 5mm      | Ant 1   | Full power      | 23230 | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.01             | 0.350                  | 0.414                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -    | Right Side    | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | 0.1              | 0.311                  | 0.370                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -    | Top Side      | 5mm      | Ant 1   | Full power      | 23230 | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | -0.17            | 0.511                  | 0.605                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -    | Top Side      | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | 0.04             | 0.444                  | 0.529                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -    | Bottom Side   | 5mm      | Ant 1   | Full power      | 23230 | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | -0.01            | 0.160                  | 0.189                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -    | Bottom Side   | 5mm      | Ant 1   | Full power      | 23230 | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | -0.08            | 0.145                  | 0.173                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 1       | 0         | -    | Front         | 5mm      | Ant 1   | Sensor On       | 23230 | 782         | 21.36               | 22.00               | 1.159                  | -            | -                         | -0.05            | 0.429                  | 0.497                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 25      | 0         | -    | Front         | 5mm      | Ant 1   | Sensor On       | 23230 | 782         | 21.35               | 22.00               | 1.161                  | -            | -                         | 0.18             | 0.374                  | 0.434                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 1       | 0         | -    | Back          | 5mm      | Ant 1   | Sensor On       | 23230 | 782         | 21.36               | 22.00               | 1.159                  | -            | -                         | 0.07             | 0.542                  | 0.628                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 25      | 0         | -    | Back          | 5mm      | Ant 1   | Sensor On       | 23230 | 782         | 21.35               | 22.00               | 1.161                  | -            | -                         | -0.17            | 0.435                  | 0.505                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 1       | 0         | -    | Left Side     | 5mm      | Ant 1   | Sensor On       | 23230 | 782         | 21.36               | 22.00               | 1.159                  | -            | -                         | -0.05            | 0.147                  | 0.170                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 25      | 0         | -    | Left Side     | 5mm      | Ant 1   | Sensor On       | 23230 | 782         | 21.35               | 22.00               | 1.161                  | -            | -                         | 0.01             | 0.120                  | 0.139                  |



# FCC SAR Test Report

Report No. : FA250505

|    |                 |     |      |     |   |   |             |      |       |            |        |     |       |       |       |   |   |       |       |       |
|----|-----------------|-----|------|-----|---|---|-------------|------|-------|------------|--------|-----|-------|-------|-------|---|---|-------|-------|-------|
|    | LTE Band 13 NSA | 10M | QPSK | 1   | 0 | - | Right Side  | 5mm  | Ant 1 | Sensor On  | 23230  | 782 | 21.36 | 22.00 | 1.159 | - | - | 0.1   | 0.106 | 0.123 |
|    | LTE Band 13 NSA | 10M | QPSK | 25  | 0 | - | Right Side  | 5mm  | Ant 1 | Sensor On  | 23230  | 782 | 21.35 | 22.00 | 1.161 | - | - | -0.17 | 0.114 | 0.132 |
|    | LTE Band 13 NSA | 10M | QPSK | 1   | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23230  | 782 | 21.36 | 22.00 | 1.159 | - | - | 0.04  | 0.287 | 0.333 |
|    | LTE Band 13 NSA | 10M | QPSK | 25  | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23230  | 782 | 21.35 | 22.00 | 1.161 | - | - | -0.01 | 0.249 | 0.289 |
|    | LTE Band 13 NSA | 10M | QPSK | 1   | 0 | - | Bottom Side | 5mm  | Ant 1 | Sensor On  | 23230  | 782 | 21.36 | 22.00 | 1.159 | - | - | -0.08 | 0.090 | 0.104 |
|    | LTE Band 13 NSA | 10M | QPSK | 25  | 0 | - | Bottom Side | 5mm  | Ant 1 | Sensor On  | 23230  | 782 | 21.35 | 22.00 | 1.161 | - | - | 0.05  | 0.081 | 0.094 |
|    | LTE Band 13     | 10M | QPSK | 1   | 0 | - | Front       | 31mm | Ant 1 | Full power | 23230  | 782 | 24.27 | 25.00 | 1.183 | - | - | 0.08  | 0.144 | 0.170 |
|    | LTE Band 13     | 10M | QPSK | 1   | 0 | - | Back        | 30mm | Ant 1 | Full power | 23230  | 782 | 24.27 | 25.00 | 1.183 | - | - | 0.01  | 0.140 | 0.166 |
|    | LTE Band 13     | 10M | QPSK | 1   | 0 | - | Left Side   | 32mm | Ant 1 | Full power | 23230  | 782 | 24.27 | 25.00 | 1.183 | - | - | 0.03  | 0.055 | 0.065 |
|    | LTE Band 13     | 10M | QPSK | 1   | 0 | - | Right Side  | 20mm | Ant 1 | Full power | 23230  | 782 | 24.27 | 25.00 | 1.183 | - | - | -0.08 | 0.102 | 0.121 |
|    | LTE Band 13     | 10M | QPSK | 1   | 0 | - | Top Side    | 30mm | Ant 1 | Full power | 23230  | 782 | 24.27 | 25.00 | 1.183 | - | - | -0.08 | 0.001 | 0.001 |
|    | LTE Band 13     | 10M | QPSK | 1   | 0 | - | Bottom Side | 31mm | Ant 1 | Full power | 23230  | 782 | 24.27 | 25.00 | 1.183 | - | - | 0.1   | 0.001 | 0.001 |
|    | LTE Band 14 SA  | 10M | QPSK | 1   | 0 | - | Front       | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 24.21 | 24.50 | 1.069 | - | - | 0.05  | 0.865 | 0.925 |
|    | LTE Band 14 SA  | 10M | QPSK | 25  | 0 | - | Front       | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.68 | 24.00 | 1.076 | - | - | 0.06  | 0.667 | 0.718 |
|    | LTE Band 14 SA  | 10M | QPSK | 50  | 0 | - | Front       | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.58 | 24.00 | 1.102 | - | - | 0.01  | 0.648 | 0.714 |
| 34 | LTE Band 14 SA  | 10M | QPSK | 1   | 0 | - | Back        | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 24.21 | 24.50 | 1.069 | - | - | -0.09 | 1.010 | 1.080 |
|    | LTE Band 14 SA  | 10M | QPSK | 25  | 0 | - | Back        | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.68 | 24.00 | 1.076 | - | - | -0.08 | 0.875 | 0.942 |
|    | LTE Band 14 SA  | 10M | QPSK | 50  | 0 | - | Back        | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.58 | 24.00 | 1.102 | - | - | 0.13  | 0.873 | 0.962 |
|    | LTE Band 14 SA  | 10M | QPSK | 1   | 0 | - | Left Side   | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 24.21 | 24.50 | 1.069 | - | - | 0.12  | 0.287 | 0.307 |
|    | LTE Band 14 SA  | 10M | QPSK | 25  | 0 | - | Left Side   | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.68 | 24.00 | 1.076 | - | - | 0.03  | 0.252 | 0.271 |
|    | LTE Band 14 SA  | 10M | QPSK | 1   | 0 | - | Right Side  | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 24.21 | 24.50 | 1.069 | - | - | 0.18  | 0.309 | 0.330 |
|    | LTE Band 14 SA  | 10M | QPSK | 25  | 0 | - | Right Side  | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.68 | 24.00 | 1.076 | - | - | 0.16  | 0.247 | 0.266 |
|    | LTE Band 14 SA  | 10M | QPSK | 1   | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 24.21 | 24.50 | 1.069 | - | - | -0.1  | 0.980 | 1.048 |
|    | LTE Band 14 SA  | 10M | QPSK | 25  | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.68 | 24.00 | 1.076 | - | - | 0.07  | 0.625 | 0.673 |
|    | LTE Band 14 SA  | 10M | QPSK | 50  | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.58 | 24.00 | 1.102 | - | - | 0.05  | 0.608 | 0.670 |
|    | LTE Band 14 SA  | 10M | QPSK | 1   | 0 | - | Bottom Side | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 24.21 | 24.50 | 1.069 | - | - | 0.18  | 0.122 | 0.130 |
|    | LTE Band 14 SA  | 10M | QPSK | 25  | 0 | - | Bottom Side | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 23.68 | 24.00 | 1.076 | - | - | -0.1  | 0.101 | 0.109 |
|    | LTE Band 14 NSA | 10M | QPSK | 1   | 0 | - | Front       | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.25 | 21.50 | 1.059 | - | - | 0.06  | 0.455 | 0.482 |
|    | LTE Band 14 NSA | 10M | QPSK | 25  | 0 | - | Front       | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.19 | 21.50 | 1.074 | - | - | -0.09 | 0.412 | 0.442 |
|    | LTE Band 14 NSA | 10M | QPSK | 1   | 0 | - | Back        | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.25 | 21.50 | 1.059 | - | - | -0.01 | 0.565 | 0.598 |
|    | LTE Band 14 NSA | 10M | QPSK | 25  | 0 | - | Back        | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.19 | 21.50 | 1.074 | - | - | 0.13  | 0.461 | 0.495 |
|    | LTE Band 14 NSA | 10M | QPSK | 1   | 0 | - | Left Side   | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.25 | 21.50 | 1.059 | - | - | 0.03  | 0.162 | 0.172 |
|    | LTE Band 14 NSA | 10M | QPSK | 25  | 0 | - | Left Side   | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.19 | 21.50 | 1.074 | - | - | 0.18  | 0.133 | 0.143 |
|    | LTE Band 14 NSA | 10M | QPSK | 1   | 0 | - | Right Side  | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.25 | 21.50 | 1.059 | - | - | 0.16  | 0.127 | 0.135 |
|    | LTE Band 14 NSA | 10M | QPSK | 25  | 0 | - | Right Side  | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.19 | 21.50 | 1.074 | - | - | -0.1  | 0.104 | 0.112 |
|    | LTE Band 14 NSA | 10M | QPSK | 1   | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.25 | 21.50 | 1.059 | - | - | 0.07  | 0.516 | 0.547 |
|    | LTE Band 14 NSA | 10M | QPSK | 25  | 0 | - | Top Side    | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.19 | 21.50 | 1.074 | - | - | 0.18  | 0.344 | 0.369 |
|    | LTE Band 14 NSA | 10M | QPSK | 1   | 0 | - | Bottom Side | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.25 | 21.50 | 1.059 | - | - | 0.01  | 0.069 | 0.073 |
|    | LTE Band 14 NSA | 10M | QPSK | 25  | 0 | - | Bottom Side | 5mm  | Ant 1 | Sensor On  | 23330  | 793 | 21.19 | 21.50 | 1.074 | - | - | -0.15 | 0.053 | 0.057 |
|    | LTE Band 14     | 10M | QPSK | 1   | 0 | - | Front       | 31mm | Ant 1 | Full power | 23330  | 793 | 24.63 | 25.00 | 1.089 | - | - | -0.18 | 0.115 | 0.125 |
|    | LTE Band 14     | 10M | QPSK | 1   | 0 | - | Back        | 30mm | Ant 1 | Full power | 23330  | 793 | 24.63 | 25.00 | 1.089 | - | - | 0.1   | 0.132 | 0.144 |
|    | LTE Band 14     | 10M | QPSK | 1   | 0 | - | Left Side   | 32mm | Ant 1 | Full power | 23330  | 793 | 24.63 | 25.00 | 1.089 | - | - | 0.12  | 0.085 | 0.093 |
|    | LTE Band 14     | 10M | QPSK | 1   | 0 | - | Right Side  | 20mm | Ant 1 | Full power | 23330  | 793 | 24.63 | 25.00 | 1.089 | - | - | 0.08  | 0.128 | 0.139 |
|    | LTE Band 14     | 10M | QPSK | 1   | 0 | - | Top Side    | 30mm | Ant 1 | Full power | 23330  | 793 | 24.63 | 25.00 | 1.089 | - | - | -0.17 | 0.001 | 0.001 |
|    | LTE Band 14     | 10M | QPSK | 1   | 0 | - | Bottom Side | 31mm | Ant 1 | Full power | 23330  | 793 | 24.63 | 25.00 | 1.089 | - | - | -0.03 | 0.001 | 0.001 |
|    | LTE Band 71     | 20M | QPSK | 1   | 0 | - | Front       | 5mm  | Ant 1 | Full power | 133322 | 683 | 23.94 | 25.00 | 1.276 | - | - | 0.08  | 0.715 | 0.913 |
|    | LTE Band 71     | 20M | QPSK | 50  | 0 | - | Front       | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.88 | 24.00 | 1.294 | - | - | 0.01  | 0.558 | 0.722 |
|    | LTE Band 71     | 20M | QPSK | 100 | 0 | - | Front       | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.91 | 24.00 | 1.285 | - | - | 0.05  | 0.523 | 0.672 |
|    | LTE Band 71     | 20M | QPSK | 1   | 0 | - | Back        | 5mm  | Ant 1 | Full power | 133322 | 683 | 23.94 | 25.00 | 1.276 | - | - | 0.03  | 0.710 | 0.906 |
|    | LTE Band 71     | 20M | QPSK | 50  | 0 | - | Back        | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.88 | 24.00 | 1.294 | - | - | -0.08 | 0.579 | 0.749 |
|    | LTE Band 71     | 20M | QPSK | 100 | 0 | - | Back        | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.91 | 24.00 | 1.285 | - | - | 0.01  | 0.559 | 0.718 |
|    | LTE Band 71     | 20M | QPSK | 1   | 0 | - | Left Side   | 5mm  | Ant 1 | Full power | 133322 | 683 | 23.94 | 25.00 | 1.276 | - | - | -0.08 | 0.226 | 0.288 |
|    | LTE Band 71     | 20M | QPSK | 50  | 0 | - | Left Side   | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.88 | 24.00 | 1.294 | - | - | 0.1   | 0.174 | 0.225 |
|    | LTE Band 71     | 20M | QPSK | 1   | 0 | - | Right Side  | 5mm  | Ant 1 | Full power | 133322 | 683 | 23.94 | 25.00 | 1.276 | - | - | -0.18 | 0.205 | 0.262 |
|    | LTE Band 71     | 20M | QPSK | 50  | 0 | - | Right Side  | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.88 | 24.00 | 1.294 | - | - | 0.1   | 0.169 | 0.219 |
| 35 | LTE Band 71     | 20M | QPSK | 1   | 0 | - | Top Side    | 5mm  | Ant 1 | Full power | 133322 | 683 | 23.94 | 25.00 | 1.276 | - | - | 0.12  | 0.840 | 1.072 |
|    | LTE Band 71     | 20M | QPSK | 50  | 0 | - | Top Side    | 5mm  | Ant 1 | Full power | 133322 | 683 | 22.88 | 24.00 | 1.294 | - | - | 0.08  | 0.646 | 0.836 |



# FCC SAR Test Report

Report No. : FA250505

|    |             |     |      |     |    |               |             |      |       |            |        |       |       |       |       |   |   |       |       |       |
|----|-------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|-------|-------|-------|-------|---|---|-------|-------|-------|
|    | LTE Band 71 | 20M | QPSK | 100 | 0  | -             | Top Side    | 5mm  | Ant 1 | Full power | 133322 | 683   | 22.91 | 24.00 | 1.285 | - | - | -0.17 | 0.637 | 0.819 |
|    | LTE Band 71 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Full power | 133322 | 683   | 23.94 | 25.00 | 1.276 | - | - | -0.03 | 0.009 | 0.011 |
|    | LTE Band 71 | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Full power | 133322 | 683   | 22.88 | 24.00 | 1.294 | - | - | 0.14  | 0.005 | 0.006 |
|    | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.18 | 24.00 | 1.208 | - | - | -0.18 | 0.636 | 0.768 |
|    | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.17 | 24.00 | 1.211 | - | - | -0.09 | 0.617 | 0.747 |
| 36 | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.18 | 24.00 | 1.208 | - | - | -0.04 | 0.679 | 0.820 |
|    | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.17 | 24.00 | 1.211 | - | - | -0.17 | 0.641 | 0.776 |
|    | FR1 n12     | 15M | QPSK | 75  | 0  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 22.21 | 23.00 | 1.199 | - | - | 0.13  | 0.540 | 0.648 |
|    | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.18 | 24.00 | 1.208 | - | - | -0.16 | 0.189 | 0.228 |
|    | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.17 | 24.00 | 1.211 | - | - | 0.08  | 0.158 | 0.191 |
|    | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.18 | 24.00 | 1.208 | - | - | -0.09 | 0.179 | 0.216 |
|    | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.17 | 24.00 | 1.211 | - | - | 0.16  | 0.157 | 0.190 |
|    | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.18 | 24.00 | 1.208 | - | - | -0.17 | 0.630 | 0.761 |
|    | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.17 | 24.00 | 1.211 | - | - | 0.04  | 0.603 | 0.730 |
|    | FR1 n12     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.18 | 24.00 | 1.208 | - | - | -0.04 | 0.157 | 0.190 |
|    | FR1 n12     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Full power | 141500 | 707.5 | 23.17 | 24.00 | 1.211 | - | - | 0.14  | 0.141 | 0.171 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.25 | 23.00 | 1.189 | - | - | -0.02 | 0.422 | 0.502 |
|    | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.23 | 23.00 | 1.194 | - | - | 0.13  | 0.522 | 0.623 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.25 | 23.00 | 1.189 | - | - | -0.16 | 0.552 | 0.656 |
| 37 | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.23 | 23.00 | 1.194 | - | - | -0.05 | 0.592 | 0.707 |
|    | FR1 n13     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.21 | 23.00 | 1.199 | - | - | 0.03  | 0.534 | 0.641 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.25 | 23.00 | 1.189 | - | - | 0.03  | 0.170 | 0.202 |
|    | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.23 | 23.00 | 1.194 | - | - | 0.11  | 0.182 | 0.217 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.25 | 23.00 | 1.189 | - | - | -0.03 | 0.168 | 0.200 |
|    | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.23 | 23.00 | 1.194 | - | - | 0.18  | 0.221 | 0.264 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.25 | 23.00 | 1.189 | - | - | -0.14 | 0.381 | 0.453 |
|    | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.23 | 23.00 | 1.194 | - | - | 0.07  | 0.340 | 0.406 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.25 | 23.00 | 1.189 | - | - | 0.09  | 0.088 | 0.105 |
|    | FR1 n13     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 156400 | 782   | 22.23 | 23.00 | 1.194 | - | - | -0.08 | 0.079 | 0.094 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | -0.01 | 0.139 | 0.166 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | -0.08 | 0.138 | 0.165 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | 0.05  | 0.077 | 0.092 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | 0.06  | 0.124 | 0.148 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | -0.09 | 0.001 | 0.001 |
|    | FR1 n13     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | -0.08 | 0.001 | 0.001 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | 0.11  | 0.756 | 0.961 |
|    | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | -0.05 | 0.711 | 0.908 |
|    | FR1 n14     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.92 | 24.00 | 1.282 | - | - | 0.05  | 0.688 | 0.882 |
| 38 | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | 0.18  | 0.923 | 1.173 |
|    | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | 0.14  | 0.846 | 1.080 |
|    | FR1 n14     | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.92 | 24.00 | 1.282 | - | - | -0.17 | 0.828 | 1.062 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | 0.17  | 0.264 | 0.335 |
|    | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | -0.05 | 0.220 | 0.281 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | 0.01  | 0.280 | 0.356 |
|    | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | 0.1   | 0.232 | 0.296 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | -0.17 | 0.581 | 0.738 |
|    | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | 0.04  | 0.536 | 0.684 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | -0.01 | 0.153 | 0.194 |
|    | FR1 n14     | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | -0.08 | 0.106 | 0.135 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.13  | 0.131 | 0.167 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.12  | 0.125 | 0.160 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.03  | 0.066 | 0.084 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.18  | 0.115 | 0.147 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.16  | 0.001 | 0.001 |
|    | FR1 n14     | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | -0.1  | 0.001 | 0.001 |
|    | FR1 n71     | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | 0.03  | 0.539 | 0.613 |
|    | FR1 n71     | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | 0.01  | 0.477 | 0.553 |



# FCC SAR Test Report

Report No. : FA250505

|        |                |     |      |     |    |               |             |      |       |            |        |       |       |       |       |   |   |       |       |       |
|--------|----------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|-------|-------|-------|-------|---|---|-------|-------|-------|
|        | FR1 n71        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | 0.13  | 0.509 | 0.579 |
|        | FR1 n71        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | 0.16  | 0.500 | 0.579 |
|        | FR1 n71        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | -0.11 | 0.140 | 0.159 |
|        | FR1 n71        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | -0.13 | 0.136 | 0.158 |
|        | FR1 n71        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | 0.08  | 0.120 | 0.137 |
|        | FR1 n71        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | 0.12  | 0.108 | 0.125 |
| 39     | FR1 n71        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | -0.07 | 0.601 | 0.684 |
|        | FR1 n71        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | 0.13  | 0.509 | 0.590 |
|        | FR1 n71        | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 23.54 | 24.00 | 1.112 | - | - | 0.13  | 0.501 | 0.557 |
|        | FR1 n71        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | 0.11  | 0.010 | 0.011 |
|        | FR1 n71        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | -0.04 | 0.006 | 0.007 |
| 835MHz |                |     |      |     |    |               |             |      |       |            |        |       |       |       |       |   |   |       |       |       |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | 0.05  | 0.778 | 0.929 |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.80 | 24.00 | 1.318 | - | - | 0.05  | 0.681 | 0.898 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | 0.06  | 0.695 | 0.837 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.91 | 24.00 | 1.285 | - | - | 0.06  | 0.648 | 0.833 |
|        | LTE Band 26 SA | 15M | QPSK | 75  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.10 | 24.00 | 1.230 | - | - | 0.02  | 0.645 | 0.794 |
| 40     | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | -0.09 | 0.910 | 1.087 |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.80 | 24.00 | 1.318 | - | - | 0.05  | 0.801 | 1.056 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | 0.12  | 0.757 | 0.912 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.91 | 24.00 | 1.285 | - | - | 0.05  | 0.678 | 0.871 |
|        | LTE Band 26 SA | 15M | QPSK | 75  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.10 | 24.00 | 1.230 | - | - | 0.03  | 0.753 | 0.926 |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | 0.18  | 0.343 | 0.410 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | 0.16  | 0.275 | 0.331 |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | -0.1  | 0.297 | 0.355 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | 0.07  | 0.197 | 0.237 |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | 0.18  | 0.475 | 0.567 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | -0.1  | 0.278 | 0.335 |
|        | LTE Band 26 SA | 15M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | 0.01  | 0.020 | 0.024 |
|        | LTE Band 26 SA | 15M | QPSK | 36  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | -0.15 | 0.006 | 0.007 |
|        | LTE Band 5 NSA | 10M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.13 | 0.487 | 0.601 |
|        | LTE Band 5 NSA | 10M | QPSK | 25  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | 0.06  | 0.372 | 0.464 |
|        | LTE Band 5 NSA | 10M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.04 | 0.569 | 0.702 |
|        | LTE Band 5 NSA | 10M | QPSK | 25  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | -0.03 | 0.474 | 0.591 |
|        | LTE Band 5 NSA | 10M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.07 | 0.215 | 0.265 |
|        | LTE Band 5 NSA | 10M | QPSK | 25  | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | 0.05  | 0.172 | 0.215 |
|        | LTE Band 5 NSA | 10M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.11 | 0.106 | 0.131 |
|        | LTE Band 5 NSA | 10M | QPSK | 25  | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | -0.12 | 0.113 | 0.141 |
|        | LTE Band 5 NSA | 10M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | 0.03  | 0.297 | 0.366 |
|        | LTE Band 5 NSA | 10M | QPSK | 25  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | -0.16 | 0.274 | 0.342 |
|        | LTE Band 5 NSA | 10M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.02 | 0.010 | 0.012 |
|        | LTE Band 5 NSA | 10M | QPSK | 25  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | 0.15  | 0.006 | 0.007 |
|        | LTE Band 26    | 15M | QPSK | 1   | 1  | -             | Front       | 31mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | 0.07  | 0.172 | 0.233 |
|        | LTE Band 26    | 15M | QPSK | 1   | 1  | -             | Back        | 30mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | 0.18  | 0.180 | 0.243 |
|        | LTE Band 26    | 15M | QPSK | 1   | 1  | -             | Left Side   | 32mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | -0.1  | 0.063 | 0.085 |
|        | LTE Band 26    | 15M | QPSK | 1   | 1  | -             | Right Side  | 20mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | 0.01  | 0.133 | 0.180 |
|        | LTE Band 26    | 15M | QPSK | 1   | 1  | -             | Top Side    | 30mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | -0.15 | 0.001 | 0.001 |
|        | LTE Band 26    | 15M | QPSK | 1   | 1  | -             | Bottom Side | 31mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | 0.19  | 0.001 | 0.001 |
|        | FR1 n26        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.65 | 23.00 | 1.084 | - | - | 0.19  | 0.716 | 0.776 |
|        | FR1 n26        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.60 | 23.00 | 1.096 | - | - | 0.07  | 0.682 | 0.748 |
|        | FR1 n26        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.65 | 23.00 | 1.084 | - | - | -0.18 | 0.859 | 0.931 |
|        | FR1 n26        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 164800 | 824   | 22.61 | 23.00 | 1.094 | - | - | 0.08  | 0.823 | 0.900 |
|        | FR1 n26        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 166300 | 831.5 | 22.58 | 23.00 | 1.102 | - | - | 0.01  | 0.818 | 0.901 |
| 41     | FR1 n26        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.60 | 23.00 | 1.096 | - | - | 0.03  | 0.972 | 1.066 |
|        | FR1 n26        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 164800 | 824   | 22.52 | 23.00 | 1.117 | - | - | 0.06  | 0.935 | 1.044 |
|        | FR1 n26        | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 166300 | 831.5 | 22.50 | 23.00 | 1.122 | - | - | 0.02  | 0.928 | 1.041 |
|        | FR1 n26        | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.59 | 23.00 | 1.099 | - | - | 0.11  | 0.767 | 0.843 |
|        | FR1 n26        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.65 | 23.00 | 1.084 | - | - | -0.08 | 0.311 | 0.337 |





# FCC SAR Test Report

Report No. : FA250505

|         |                 |     |      |     |    |               |             |      |       |            |        |      |       |       |       |   |   |       |       |       |
|---------|-----------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|------|-------|-------|-------|---|---|-------|-------|-------|
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.60 | 23.00 | 1.096 | - | - | -0.17 | 0.360 | 0.395 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.65 | 23.00 | 1.084 | - | - | -0.08 | 0.307 | 0.333 |
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.60 | 23.00 | 1.096 | - | - | -0.04 | 0.249 | 0.273 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.65 | 23.00 | 1.084 | - | - | -0.08 | 0.626 | 0.679 |
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.60 | 23.00 | 1.096 | - | - | 0.17  | 0.664 | 0.728 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.65 | 23.00 | 1.084 | - | - | 0.18  | 0.225 | 0.244 |
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 167800 | 839  | 22.60 | 23.00 | 1.096 | - | - | -0.04 | 0.197 | 0.216 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 1 | Full power | 167800 | 839  | 23.66 | 24.00 | 1.081 | - | - | 0.07  | 0.166 | 0.180 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 1 | Full power | 167800 | 839  | 23.66 | 24.00 | 1.081 | - | - | -0.18 | 0.173 | 0.187 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 1 | Full power | 167800 | 839  | 23.66 | 24.00 | 1.081 | - | - | 0.03  | 0.056 | 0.061 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 1 | Full power | 167800 | 839  | 23.66 | 24.00 | 1.081 | - | - | -0.15 | 0.124 | 0.134 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 1 | Full power | 167800 | 839  | 23.66 | 24.00 | 1.081 | - | - | -0.15 | 0.001 | 0.001 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 1 | Full power | 167800 | 839  | 23.66 | 24.00 | 1.081 | - | - | 0.11  | 0.001 | 0.001 |
| 1750MHz |                 |     |      |     |    |               |             |      |       |            |        |      |       |       |       |   |   |       |       |       |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.22 | 20.00 | 1.197 | - | - | -0.08 | 0.626 | 0.749 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.18 | 20.00 | 1.208 | - | - | -0.13 | 0.524 | 0.633 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.22 | 20.00 | 1.197 | - | - | -0.13 | 0.336 | 0.402 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.18 | 20.00 | 1.208 | - | - | 0.06  | 0.290 | 0.350 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.22 | 20.00 | 1.197 | - | - | -0.03 | 0.137 | 0.164 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.18 | 20.00 | 1.208 | - | - | -0.03 | 0.146 | 0.176 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.22 | 20.00 | 1.197 | - | - | 0.08  | 0.207 | 0.248 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.18 | 20.00 | 1.208 | - | - | -0.07 | 0.161 | 0.194 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.22 | 20.00 | 1.197 | - | - | 0.05  | 0.852 | 1.020 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 132072 | 1720 | 18.96 | 20.00 | 1.271 | - | - | -0.11 | 0.835 | 1.061 |
| 42      | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 132572 | 1770 | 18.96 | 20.00 | 1.271 | - | - | -0.12 | 0.916 | 1.164 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.18 | 20.00 | 1.208 | - | - | 0.03  | 0.510 | 0.616 |
|         | LTE Band 66     | 20M | QPSK | 100 | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.08 | 20.00 | 1.236 | - | - | -0.16 | 0.608 | 0.751 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.22 | 20.00 | 1.197 | - | - | -0.02 | 0.021 | 0.025 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 132322 | 1745 | 19.18 | 20.00 | 1.208 | - | - | 0.15  | 0.023 | 0.028 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Front       | 31mm | Ant 1 | Full power | 132322 | 1745 | 24.12 | 25.00 | 1.225 | - | - | -0.08 | 0.094 | 0.115 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Back        | 30mm | Ant 1 | Full power | 132322 | 1745 | 24.12 | 25.00 | 1.225 | - | - | -0.17 | 0.118 | 0.145 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Left Side   | 32mm | Ant 1 | Full power | 132322 | 1745 | 24.12 | 25.00 | 1.225 | - | - | -0.08 | 0.050 | 0.061 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Right Side  | 20mm | Ant 1 | Full power | 132322 | 1745 | 24.12 | 25.00 | 1.225 | - | - | -0.04 | 0.137 | 0.168 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Top Side    | 30mm | Ant 1 | Full power | 132322 | 1745 | 24.12 | 25.00 | 1.225 | - | - | -0.08 | 0.113 | 0.138 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Bottom Side | 31mm | Ant 1 | Full power | 132322 | 1745 | 24.12 | 25.00 | 1.225 | - | - | 0.17  | 0.001 | 0.001 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.79 | 19.00 | 1.050 | - | - | -0.09 | 0.318 | 0.334 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.76 | 19.00 | 1.057 | - | - | 0.11  | 0.294 | 0.311 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.79 | 19.00 | 1.050 | - | - | -0.05 | 0.443 | 0.465 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.76 | 19.00 | 1.057 | - | - | -0.08 | 0.382 | 0.404 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.79 | 19.00 | 1.050 | - | - | 0.16  | 0.186 | 0.195 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.76 | 19.00 | 1.057 | - | - | 0.05  | 0.154 | 0.163 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.79 | 19.00 | 1.050 | - | - | 0.05  | 0.187 | 0.196 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.76 | 19.00 | 1.057 | - | - | -0.03 | 0.175 | 0.185 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.79 | 19.00 | 1.050 | - | - | -0.15 | 0.079 | 0.083 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.76 | 19.00 | 1.057 | - | - | 0.02  | 0.071 | 0.075 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.79 | 19.00 | 1.050 | - | - | 0.07  | 0.480 | 0.504 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 132072 | 1720 | 18.48 | 19.00 | 1.127 | - | - | 0.16  | 0.438 | 0.494 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 132572 | 1770 | 18.70 | 19.00 | 1.072 | - | - | 0.13  | 0.507 | 0.543 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.76 | 19.00 | 1.057 | - | - | -0.18 | 0.369 | 0.390 |
|         | LTE Band 66 NSA | 20M | QPSK | 100 | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 132322 | 1745 | 18.74 | 19.00 | 1.062 | - | - | 0.02  | 0.370 | 0.393 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Front       | 31mm | Ant 2 | Full power | 132322 | 1745 | 23.70 | 24.00 | 1.072 | - | - | 0.18  | 0.206 | 0.221 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Back        | 30mm | Ant 2 | Full power | 132322 | 1745 | 23.70 | 24.00 | 1.072 | - | - | -0.04 | 0.066 | 0.071 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Left Side   | 32mm | Ant 2 | Full power | 132322 | 1745 | 23.70 | 24.00 | 1.072 | - | - | -0.08 | 0.072 | 0.077 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Right Side  | 20mm | Ant 2 | Full power | 132322 | 1745 | 23.70 | 24.00 | 1.072 | - | - | -0.13 | 0.176 | 0.189 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Top Side    | 30mm | Ant 2 | Full power | 132322 | 1745 | 23.70 | 24.00 | 1.072 | - | - | -0.13 | 0.054 | 0.058 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Bottom Side | 31mm | Ant 2 | Full power | 132322 | 1745 | 23.70 | 24.00 | 1.072 | - | - | 0.06  | 0.542 | 0.581 |
|         | FR1 n66 SA      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 349000 | 1745 | 19.38 | 20.50 | 1.294 | - | - | 0.16  | 0.605 | 0.783 |
|         | FR1 n66 SA      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 349000 | 1745 | 19.36 | 20.50 | 1.300 | - | - | -0.03 | 0.555 | 0.722 |





# FCC SAR Test Report

Report No. : FA250505

|    |             |     |      |     |    |               |             |      |       |            |        |        |       |       |       |   |   |       |       |       |
|----|-------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|--------|-------|-------|-------|---|---|-------|-------|-------|
|    | FR1 n66 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | 0.07  | 0.265 | 0.343 |
|    | FR1 n66 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | 0.18  | 0.289 | 0.376 |
|    | FR1 n66 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | 0.01  | 0.121 | 0.157 |
|    | FR1 n66 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | -0.01 | 0.152 | 0.198 |
|    | FR1 n66 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | -0.06 | 0.168 | 0.217 |
|    | FR1 n66 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | -0.04 | 0.242 | 0.315 |
|    | FR1 n66 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | -0.09 | 0.784 | 1.015 |
| 43 | FR1 n66 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | -0.17 | 0.819 | 1.065 |
|    | FR1 n66 SA  | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.34 | 20.50 | 1.306 | - | - | -0.1  | 0.745 | 0.973 |
|    | FR1 n66 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | 0.18  | 0.032 | 0.041 |
|    | FR1 n66 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | -0.17 | 0.031 | 0.040 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | 0.08  | 0.395 | 0.496 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | 0.01  | 0.493 | 0.622 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | -0.08 | 0.173 | 0.217 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | -0.08 | 0.189 | 0.238 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | -0.18 | 0.079 | 0.099 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | 0.1   | 0.099 | 0.125 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | 0.12  | 0.110 | 0.138 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | 0.08  | 0.158 | 0.199 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | -0.17 | 0.486 | 0.610 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | 0.01  | 0.535 | 0.675 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | 0.14  | 0.021 | 0.026 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | 0.11  | 0.020 | 0.025 |
|    | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | -0.03 | 0.088 | 0.113 |
|    | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | -0.03 | 0.109 | 0.139 |
|    | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | 0.08  | 0.053 | 0.068 |
|    | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | -0.07 | 0.125 | 0.160 |
|    | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | 0.05  | 0.098 | 0.125 |
|    | FR1 n66     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | -0.11 | 0.001 | 0.001 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.05 | 0.347 | 0.440 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | 0.18  | 0.355 | 0.452 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.17 | 0.438 | 0.555 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | -0.04 | 0.443 | 0.564 |
|    | FR1 n66 NSA | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.92 | 20.00 | 1.282 | - | - | 0.17  | 0.418 | 0.536 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.05 | 0.234 | 0.297 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | 0.01  | 0.307 | 0.391 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.17 | 0.238 | 0.302 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | 0.04  | 0.253 | 0.322 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.08 | 0.092 | 0.117 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | 0.05  | 0.101 | 0.129 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | 0.06  | 0.380 | 0.482 |
|    | FR1 n66 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | -0.09 | 0.362 | 0.461 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | -0.12 | 0.216 | 0.274 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | 0.03  | 0.087 | 0.110 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | -0.16 | 0.051 | 0.065 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | -0.02 | 0.188 | 0.238 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | 0.15  | 0.063 | 0.080 |
|    | FR1 n66 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | -0.09 | 0.529 | 0.671 |
|    | FR1 n70     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | 0.08  | 0.613 | 0.790 |
|    | FR1 n70     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Front       | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | 0.01  | 0.594 | 0.772 |
|    | FR1 n70     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | 0.03  | 0.617 | 0.795 |
|    | FR1 n70     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | -0.08 | 0.597 | 0.776 |
|    | FR1 n70     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | -0.08 | 0.374 | 0.482 |
|    | FR1 n70     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | 0.1   | 0.327 | 0.425 |
|    | FR1 n70     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | -0.18 | 0.300 | 0.386 |
|    | FR1 n70     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | 0.1   | 0.232 | 0.302 |
|    | FR1 n70     | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | 0.12  | 0.102 | 0.131 |
|    | FR1 n70     | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | 0.08  | 0.107 | 0.139 |



# FCC SAR Test Report

Report No. : FA250505

|         |                 |     |      |     |    |               |             |      |       |            |        |        |       |       |       |   |   |       |       |       |
|---------|-----------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|--------|-------|-------|-------|---|---|-------|-------|-------|
| 44      | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | -0.17 | 0.907 | 1.168 |
|         | FR1 n70         | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | -0.03 | 0.889 | 1.156 |
|         | FR1 n70         | 15M | QPSK | 75  | 0  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.33 | 19.50 | 1.309 | - | - | 0.14  | 0.859 | 1.125 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | 0.11  | 0.256 | 0.333 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | -0.05 | 0.106 | 0.138 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | -0.08 | 0.061 | 0.079 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | 0.16  | 0.209 | 0.272 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | 0.05  | 0.051 | 0.066 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | 0.05  | 0.516 | 0.671 |
| 1900MHz |                 |     |      |     |    |               |             |      |       |            |        |        |       |       |       |   |   |       |       |       |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | 0.11  | 0.863 | 0.962 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26140  | 1860   | 17.22 | 18.00 | 1.197 | - | - | -0.05 | 0.852 | 1.020 |
| 45      | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26590  | 1905   | 17.23 | 18.00 | 1.194 | - | - | 0.18  | 0.870 | 1.039 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | 0.14  | 0.603 | 0.691 |
|         | LTE Band 25 SA  | 20M | QPSK | 100 | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.40 | 18.00 | 1.148 | - | - | -0.17 | 0.605 | 0.695 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | 0.17  | 0.455 | 0.507 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | -0.05 | 0.372 | 0.426 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | 0.01  | 0.175 | 0.195 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | 0.1   | 0.133 | 0.152 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | -0.17 | 0.361 | 0.402 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | 0.04  | 0.293 | 0.336 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | -0.01 | 0.494 | 0.550 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | -0.08 | 0.438 | 0.502 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | 0.05  | 0.047 | 0.052 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | 0.06  | 0.031 | 0.036 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | -0.13 | 0.485 | 0.558 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | 0.06  | 0.398 | 0.462 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | -0.07 | 0.301 | 0.346 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | -0.12 | 0.246 | 0.286 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | 0.15  | 0.116 | 0.133 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | -0.05 | 0.088 | 0.102 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | 0.05  | 0.119 | 0.137 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | 0.02  | 0.104 | 0.121 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | -0.18 | 0.326 | 0.375 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | -0.03 | 0.290 | 0.337 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | -0.01 | 0.031 | 0.036 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | -0.06 | 0.021 | 0.024 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Front       | 31mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | -0.03 | 0.218 | 0.285 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Back        | 30mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | -0.15 | 0.200 | 0.261 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Left Side   | 32mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | 0.02  | 0.049 | 0.064 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Right Side  | 20mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | 0.07  | 0.304 | 0.397 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Top Side    | 30mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | 0.16  | 0.143 | 0.187 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Bottom Side | 31mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | 0.13  | 0.047 | 0.061 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | -0.09 | 0.412 | 0.430 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 26140  | 1860   | 17.47 | 18.00 | 1.130 | - | - | -0.08 | 0.429 | 0.485 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 26590  | 1905   | 17.76 | 18.00 | 1.057 | - | - | 0.13  | 0.399 | 0.422 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | 0.12  | 0.381 | 0.401 |
|         | LTE Band 25 NSA | 20M | QPSK | 100 | 0  | -             | Front       | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.75 | 18.00 | 1.059 | - | - | 0.03  | 0.404 | 0.428 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | 0.18  | 0.288 | 0.301 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | 0.16  | 0.253 | 0.266 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | -0.1  | 0.027 | 0.028 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | 0.07  | 0.029 | 0.031 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | 0.18  | 0.134 | 0.140 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | -0.1  | 0.125 | 0.131 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | 0.01  | 0.031 | 0.032 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | -0.15 | 0.027 | 0.028 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | 0.19  | 0.356 | 0.372 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | 0.07  | 0.349 | 0.367 |



# FCC SAR Test Report

Report No. : FA250505

|    |             |     |      |     |    |               |             |      |       |            |        |        |       |       |       |   |   |       |       |       |
|----|-------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|--------|-------|-------|-------|---|---|-------|-------|-------|
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Front       | 31mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | -0.18 | 0.321 | 0.350 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Back        | 30mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | 0.02  | 0.114 | 0.124 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Left Side   | 32mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | 0.16  | 0.072 | 0.079 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Right Side  | 20mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | -0.03 | 0.215 | 0.235 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Top Side    | 30mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | 0.07  | 0.044 | 0.048 |
|    | LTE Band 25 | 20M | QPSK | 1   | 0  | -             | Bottom Side | 31mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | 0.01  | 0.521 | 0.569 |
|    | FR1 n25 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.18 | 0.752 | 0.929 |
| 46 | FR1 n25 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | 0.03  | 0.871 | 1.079 |
|    | FR1 n25 SA  | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.05 | 19.00 | 1.245 | - | - | -0.15 | 0.797 | 0.992 |
|    | FR1 n25 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.15 | 0.627 | 0.775 |
|    | FR1 n25 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | 0.11  | 0.601 | 0.745 |
|    | FR1 n25 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.08 | 0.145 | 0.179 |
|    | FR1 n25 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | -0.17 | 0.119 | 0.147 |
|    | FR1 n25 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.08 | 0.345 | 0.426 |
|    | FR1 n25 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | -0.04 | 0.418 | 0.518 |
|    | FR1 n25 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.08 | 0.510 | 0.630 |
|    | FR1 n25 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | 0.17  | 0.592 | 0.733 |
|    | FR1 n25 SA  | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | 0.18  | 0.046 | 0.057 |
|    | FR1 n25 SA  | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | -0.04 | 0.039 | 0.048 |
|    | FR1 n25 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | -0.13 | 0.464 | 0.525 |
|    | FR1 n25 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | 0.07  | 0.537 | 0.615 |
|    | FR1 n25 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | 0.16  | 0.399 | 0.452 |
|    | FR1 n25 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | 0.01  | 0.399 | 0.457 |
|    | FR1 n25 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | 0.1   | 0.090 | 0.102 |
|    | FR1 n25 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | -0.04 | 0.074 | 0.085 |
|    | FR1 n25 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | -0.01 | 0.213 | 0.241 |
|    | FR1 n25 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | 0.07  | 0.258 | 0.296 |
|    | FR1 n25 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | -0.06 | 0.315 | 0.357 |
|    | FR1 n25 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | -0.15 | 0.365 | 0.418 |
|    | FR1 n25 NSA | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | -0.13 | 0.029 | 0.033 |
|    | FR1 n25 NSA | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | 0.16  | 0.024 | 0.027 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.01 | 0.189 | 0.232 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.06 | 0.176 | 0.216 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.04 | 0.051 | 0.063 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.09 | 0.301 | 0.369 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.17 | 0.121 | 0.149 |
|    | FR1 n25     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.1  | 0.033 | 0.041 |
|    | FR1 n2 NSA  | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.24 | 19.00 | 1.191 | - | - | -0.08 | 0.414 | 0.493 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front       | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.21 | 19.00 | 1.199 | - | - | -0.13 | 0.408 | 0.489 |
|    | FR1 n2 NSA  | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.24 | 19.00 | 1.191 | - | - | -0.13 | 0.258 | 0.307 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back        | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.21 | 19.00 | 1.199 | - | - | 0.06  | 0.303 | 0.363 |
|    | FR1 n2 NSA  | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.24 | 19.00 | 1.191 | - | - | -0.03 | 0.034 | 0.041 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.21 | 19.00 | 1.199 | - | - | -0.03 | 0.030 | 0.036 |
|    | FR1 n2 NSA  | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.24 | 19.00 | 1.191 | - | - | 0.08  | 0.163 | 0.194 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.21 | 19.00 | 1.199 | - | - | -0.07 | 0.172 | 0.206 |
|    | FR1 n2 NSA  | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.24 | 19.00 | 1.191 | - | - | 0.05  | 0.028 | 0.033 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.21 | 19.00 | 1.199 | - | - | -0.11 | 0.024 | 0.029 |
|    | FR1 n2 NSA  | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.24 | 19.00 | 1.191 | - | - | -0.12 | 0.492 | 0.586 |
| 47 | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.21 | 19.00 | 1.199 | - | - | 0.03  | 0.569 | 0.683 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 372000 | 1860   | 18.12 | 19.00 | 1.225 | - | - | -0.16 | 0.552 | 0.676 |
|    | FR1 n2 NSA  | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 380000 | 1900   | 18.12 | 19.00 | 1.225 | - | - | -0.02 | 0.531 | 0.650 |
|    | FR1 n2 NSA  | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 376000 | 1880   | 18.20 | 19.00 | 1.202 | - | - | 0.15  | 0.397 | 0.477 |
|    | FR1 n2      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 2 | Full power | 376000 | 1880   | 24.26 | 25.00 | 1.186 | - | - | 0.18  | 0.331 | 0.392 |
|    | FR1 n2      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 2 | Full power | 376000 | 1880   | 24.26 | 25.00 | 1.186 | - | - | -0.17 | 0.124 | 0.147 |
|    | FR1 n2      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 2 | Full power | 376000 | 1880   | 24.26 | 25.00 | 1.186 | - | - | -0.04 | 0.088 | 0.104 |
|    | FR1 n2      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 2 | Full power | 376000 | 1880   | 24.26 | 25.00 | 1.186 | - | - | -0.05 | 0.235 | 0.279 |
|    | FR1 n2      | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 2 | Full power | 376000 | 1880   | 24.26 | 25.00 | 1.186 | - | - | -0.01 | 0.053 | 0.063 |



# FCC SAR Test Report

Report No. : FA250505

|         |               |     |      |     |    |               |             |      |       |            |        |      |       |       |       |   |   |       |       |       |
|---------|---------------|-----|------|-----|----|---------------|-------------|------|-------|------------|--------|------|-------|-------|-------|---|---|-------|-------|-------|
|         | FR1 n2        | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 2 | Full power | 376000 | 1880 | 24.26 | 25.00 | 1.186 | - | - | -0.13 | 0.531 | 0.630 |
| 2300MHz |               |     |      |     |    |               |             |      |       |            |        |      |       |       |       |   |   |       |       |       |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.73 | 17.50 | 1.194 | - | - | -0.04 | 0.375 | 0.448 |
|         | LTE Band 30   | 10M | QPSK | 25  | 0  | -             | Front       | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.69 | 17.50 | 1.205 | - | - | 0.13  | 0.257 | 0.310 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.73 | 17.50 | 1.194 | - | - | 0.07  | 0.366 | 0.437 |
|         | LTE Band 30   | 10M | QPSK | 25  | 0  | -             | Back        | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.69 | 17.50 | 1.205 | - | - | 0.08  | 0.298 | 0.359 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.73 | 17.50 | 1.194 | - | - | -0.06 | 0.012 | 0.014 |
|         | LTE Band 30   | 10M | QPSK | 25  | 0  | -             | Left Side   | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.69 | 17.50 | 1.205 | - | - | 0.07  | 0.008 | 0.010 |
| 48      | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.73 | 17.50 | 1.194 | - | - | 0.01  | 0.475 | 0.567 |
|         | LTE Band 30   | 10M | QPSK | 25  | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.69 | 17.50 | 1.205 | - | - | -0.03 | 0.433 | 0.522 |
|         | LTE Band 30   | 10M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.67 | 17.50 | 1.211 | - | - | 0.07  | 0.406 | 0.492 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.73 | 17.50 | 1.194 | - | - | -0.12 | 0.005 | 0.006 |
|         | LTE Band 30   | 10M | QPSK | 25  | 0  | -             | Top Side    | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.69 | 17.50 | 1.205 | - | - | -0.03 | 0.003 | 0.004 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.73 | 17.50 | 1.194 | - | - | 0.02  | 0.216 | 0.258 |
|         | LTE Band 30   | 10M | QPSK | 25  | 0  | -             | Bottom Side | 5mm  | Ant 9 | Sensor On  | 27710  | 2310 | 16.69 | 17.50 | 1.205 | - | - | 0.12  | 0.177 | 0.213 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Front       | 31mm | Ant 9 | Full power | 27710  | 2310 | 24.11 | 25.00 | 1.227 | - | - | -0.09 | 0.156 | 0.191 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Back        | 30mm | Ant 9 | Full power | 27710  | 2310 | 24.11 | 25.00 | 1.227 | - | - | 0.05  | 0.096 | 0.118 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Left Side   | 32mm | Ant 9 | Full power | 27710  | 2310 | 24.11 | 25.00 | 1.227 | - | - | 0.02  | 0.001 | 0.001 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Right Side  | 20mm | Ant 9 | Full power | 27710  | 2310 | 24.11 | 25.00 | 1.227 | - | - | -0.13 | 0.192 | 0.236 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Top Side    | 30mm | Ant 9 | Full power | 27710  | 2310 | 24.11 | 25.00 | 1.227 | - | - | 0.17  | 0.001 | 0.001 |
|         | LTE Band 30   | 10M | QPSK | 1   | 0  | -             | Bottom Side | 31mm | Ant 9 | Full power | 27710  | 2310 | 24.11 | 25.00 | 1.227 | - | - | 0.06  | 0.214 | 0.263 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.08 | 17.00 | 1.236 | - | - | -0.08 | 0.332 | 0.410 |
|         | FR1 n30       | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front       | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.05 | 17.00 | 1.245 | - | - | -0.08 | 0.213 | 0.265 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.08 | 17.00 | 1.236 | - | - | 0.01  | 0.327 | 0.404 |
|         | FR1 n30       | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back        | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.05 | 17.00 | 1.245 | - | - | -0.11 | 0.208 | 0.259 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.08 | 17.00 | 1.236 | - | - | -0.05 | 0.024 | 0.030 |
|         | FR1 n30       | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.05 | 17.00 | 1.245 | - | - | 0.14  | 0.017 | 0.021 |
| 49      | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.08 | 17.00 | 1.236 | - | - | 0.05  | 0.550 | 0.680 |
|         | FR1 n30       | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.05 | 17.00 | 1.245 | - | - | -0.01 | 0.337 | 0.419 |
|         | FR1 n30       | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.03 | 17.00 | 1.250 | - | - | -0.12 | 0.288 | 0.360 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.08 | 17.00 | 1.236 | - | - | 0.07  | 0.017 | 0.021 |
|         | FR1 n30       | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.05 | 17.00 | 1.245 | - | - | 0.09  | 0.015 | 0.019 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.08 | 17.00 | 1.236 | - | - | 0.04  | 0.228 | 0.282 |
|         | FR1 n30       | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 462000 | 2310 | 16.05 | 17.00 | 1.245 | - | - | 0.11  | 0.150 | 0.187 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 9 | Full power | 462000 | 2310 | 24.05 | 25.00 | 1.245 | - | - | 0.04  | 0.144 | 0.179 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 9 | Full power | 462000 | 2310 | 24.05 | 25.00 | 1.245 | - | - | -0.04 | 0.088 | 0.110 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 9 | Full power | 462000 | 2310 | 24.05 | 25.00 | 1.245 | - | - | -0.15 | 0.001 | 0.001 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 9 | Full power | 462000 | 2310 | 24.05 | 25.00 | 1.245 | - | - | 0.11  | 0.179 | 0.223 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 9 | Full power | 462000 | 2310 | 24.05 | 25.00 | 1.245 | - | - | -0.02 | 0.001 | 0.001 |
|         | FR1 n30       | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 9 | Full power | 462000 | 2310 | 24.05 | 25.00 | 1.245 | - | - | 0.1   | 0.184 | 0.229 |
| 2600MHz |               |     |      |     |    |               |             |      |       |            |        |      |       |       |       |   |   |       |       |       |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.65 | 14.50 | 1.216 | - | - | -0.18 | 0.436 | 0.530 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.61 | 14.50 | 1.227 | - | - | 0.1   | 0.372 | 0.457 |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.65 | 14.50 | 1.216 | - | - | 0.12  | 0.201 | 0.244 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.61 | 14.50 | 1.227 | - | - | 0.08  | 0.179 | 0.220 |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.65 | 14.50 | 1.216 | - | - | -0.17 | 0.046 | 0.056 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.61 | 14.50 | 1.227 | - | - | -0.03 | 0.020 | 0.025 |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.65 | 14.50 | 1.216 | - | - | 0.14  | 0.010 | 0.012 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.61 | 14.50 | 1.227 | - | - | 0.11  | 0.006 | 0.007 |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.65 | 14.50 | 1.216 | - | - | -0.05 | 0.793 | 0.964 |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 20850  | 2510 | 13.45 | 14.50 | 1.274 | - | - | 0.18  | 0.785 | 1.000 |
| 50      | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21350  | 2560 | 13.49 | 14.50 | 1.262 | - | - | 0.14  | 0.820 | 1.035 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.61 | 14.50 | 1.227 | - | - | -0.17 | 0.741 | 0.910 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 20850  | 2510 | 13.45 | 14.50 | 1.274 | - | - | 0.05  | 0.723 | 0.921 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21350  | 2560 | 13.49 | 14.50 | 1.262 | - | - | 0.01  | 0.718 | 0.906 |
|         | LTE Band 7 SA | 20M | QPSK | 100 | 0  | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.58 | 14.50 | 1.236 | - | - | 0.17  | 0.716 | 0.885 |
|         | LTE Band 7 SA | 20M | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.65 | 14.50 | 1.216 | - | - | -0.05 | 0.007 | 0.009 |
|         | LTE Band 7 SA | 20M | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 21100  | 2535 | 13.61 | 14.50 | 1.227 | - | - | 0.01  | 0.004 | 0.005 |



# FCC SAR Test Report

Report No. : FA250505

|    |                  |     |      |     |   |               |             |      |       |            |        |        |       |       |       |      |       |       |       |       |
|----|------------------|-----|------|-----|---|---------------|-------------|------|-------|------------|--------|--------|-------|-------|-------|------|-------|-------|-------|-------|
|    | LTE Band 7 NSA   | 20M | QPSK | 1   | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.71 | 12.50 | 1.199 | -    | -     | -0.05 | 0.284 | 0.341 |
|    | LTE Band 7 NSA   | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.68 | 12.50 | 1.208 | -    | -     | -0.15 | 0.243 | 0.293 |
|    | LTE Band 7 NSA   | 20M | QPSK | 1   | 0 | -             | Back        | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.71 | 12.50 | 1.199 | -    | -     | 0.01  | 0.131 | 0.157 |
|    | LTE Band 7 NSA   | 20M | QPSK | 50  | 0 | -             | Back        | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.68 | 12.50 | 1.208 | -    | -     | 0.02  | 0.117 | 0.141 |
|    | LTE Band 7 NSA   | 20M | QPSK | 1   | 0 | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.71 | 12.50 | 1.199 | -    | -     | -0.11 | 0.030 | 0.036 |
|    | LTE Band 7 NSA   | 20M | QPSK | 50  | 0 | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.68 | 12.50 | 1.208 | -    | -     | -0.01 | 0.023 | 0.028 |
|    | LTE Band 7 NSA   | 20M | QPSK | 1   | 0 | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.71 | 12.50 | 1.199 | -    | -     | 0.09  | 0.016 | 0.019 |
|    | LTE Band 7 NSA   | 20M | QPSK | 50  | 0 | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.68 | 12.50 | 1.208 | -    | -     | 0.1   | 0.011 | 0.013 |
|    | LTE Band 7 NSA   | 20M | QPSK | 1   | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.71 | 12.50 | 1.199 | -    | -     | -0.04 | 0.524 | 0.629 |
|    | LTE Band 7 NSA   | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.68 | 12.50 | 1.208 | -    | -     | 0.09  | 0.418 | 0.505 |
|    | LTE Band 7 NSA   | 20M | QPSK | 1   | 0 | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.71 | 12.50 | 1.199 | -    | -     | -0.18 | 0.006 | 0.007 |
|    | LTE Band 7 NSA   | 20M | QPSK | 50  | 0 | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 21100  | 2535   | 11.68 | 12.50 | 1.208 | -    | -     | -0.03 | 0.003 | 0.004 |
|    | LTE Band 7       | 20M | QPSK | 1   | 0 | -             | Front       | 31mm | Ant 1 | Full power | 21100  | 2535   | 24.06 | 25.00 | 1.242 | -    | -     | 0.13  | 0.253 | 0.314 |
|    | LTE Band 7       | 20M | QPSK | 1   | 0 | -             | Back        | 30mm | Ant 1 | Full power | 21100  | 2535   | 24.06 | 25.00 | 1.242 | -    | -     | -0.18 | 0.190 | 0.236 |
|    | LTE Band 7       | 20M | QPSK | 1   | 0 | -             | Left Side   | 32mm | Ant 1 | Full power | 21100  | 2535   | 24.06 | 25.00 | 1.242 | -    | -     | -0.11 | 0.149 | 0.185 |
|    | LTE Band 7       | 20M | QPSK | 1   | 0 | -             | Right Side  | 20mm | Ant 1 | Full power | 21100  | 2535   | 24.06 | 25.00 | 1.242 | -    | -     | -0.16 | 0.149 | 0.185 |
|    | LTE Band 7       | 20M | QPSK | 1   | 0 | -             | Top Side    | 30mm | Ant 1 | Full power | 21100  | 2535   | 24.06 | 25.00 | 1.242 | -    | -     | -0.15 | 0.772 | 0.959 |
|    | LTE Band 7       | 20M | QPSK | 1   | 0 | -             | Bottom Side | 31mm | Ant 1 | Full power | 21100  | 2535   | 24.06 | 25.00 | 1.242 | -    | -     | -0.06 | 0.001 | 0.001 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | -0.09 | 0.702 | 0.894 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 39750  | 2506   | 16.10 | 17.50 | 1.380 | 42.9 | 1.009 | -0.05 | 0.676 | 0.942 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 40185  | 2549.5 | 16.18 | 17.50 | 1.355 | 42.9 | 1.009 | -0.08 | 0.682 | 0.933 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 41055  | 2636.5 | 16.29 | 17.50 | 1.321 | 42.9 | 1.009 | 0.16  | 0.636 | 0.848 |
| 51 | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 41490  | 2680   | 16.17 | 17.50 | 1.358 | 42.9 | 1.009 | 0.05  | 0.774 | 1.061 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | 0.05  | 0.577 | 0.741 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 39790  | 2510   | 16.14 | 17.50 | 1.368 | 42.9 | 1.009 | 0.1   | 0.545 | 0.752 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 39750  | 2506   | 16.06 | 17.50 | 1.393 | 42.9 | 1.009 | -0.17 | 0.512 | 0.720 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 40185  | 2549.5 | 16.24 | 17.50 | 1.337 | 42.9 | 1.009 | 0.04  | 0.533 | 0.719 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 41055  | 2636.5 | 16.28 | 17.50 | 1.324 | 42.9 | 1.009 | -0.01 | 0.518 | 0.692 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 41490  | 2680   | 16.15 | 17.50 | 1.365 | 42.9 | 1.009 | -0.08 | 0.520 | 0.716 |
|    | LTE Band 41 HPUE | 20M | QPSK | 100 | 0 | -             | Front       | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.33 | 17.50 | 1.309 | 42.9 | 1.009 | -0.03 | 0.576 | 0.761 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Back        | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | -0.15 | 0.463 | 0.589 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Back        | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | 0.02  | 0.448 | 0.576 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | 0.07  | 0.112 | 0.143 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Left Side   | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | 0.16  | 0.089 | 0.114 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | 0.13  | 0.019 | 0.024 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Right Side  | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | -0.18 | 0.010 | 0.013 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | 0.02  | 0.607 | 0.773 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 39750  | 2506   | 16.10 | 17.50 | 1.380 | 42.9 | 1.009 | -0.03 | 0.603 | 0.840 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 40185  | 2549.5 | 16.18 | 17.50 | 1.355 | 42.9 | 1.009 | 0.07  | 0.573 | 0.784 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 41055  | 2636.5 | 16.29 | 17.50 | 1.321 | 42.9 | 1.009 | 0.02  | 0.544 | 0.725 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 41490  | 2680   | 16.17 | 17.50 | 1.358 | 42.9 | 1.009 | 0.01  | 0.600 | 0.822 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | -0.01 | 0.528 | 0.678 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 39790  | 2510   | 16.14 | 17.50 | 1.368 | 42.9 | 1.009 | 0.05  | 0.485 | 0.669 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 39750  | 2506   | 16.06 | 17.50 | 1.393 | 42.9 | 1.009 | 0.06  | 0.499 | 0.701 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 40185  | 2549.5 | 16.24 | 17.50 | 1.337 | 42.9 | 1.009 | -0.09 | 0.511 | 0.689 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 41055  | 2636.5 | 16.28 | 17.50 | 1.324 | 42.9 | 1.009 | -0.08 | 0.507 | 0.677 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 41490  | 2680   | 16.15 | 17.50 | 1.365 | 42.9 | 1.009 | 0.13  | 0.501 | 0.690 |
|    | LTE Band 41 HPUE | 20M | QPSK | 100 | 0 | -             | Top Side    | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.33 | 17.50 | 1.309 | 42.9 | 1.009 | -0.06 | 0.532 | 0.703 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | -0.04 | 0.013 | 0.017 |
|    | LTE Band 41 HPUE | 20M | QPSK | 50  | 0 | -             | Bottom Side | 5mm  | Ant 1 | Sensor On  | 40620  | 2593   | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | -0.09 | 0.008 | 0.010 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Front       | 31mm | Ant 1 | Full power | 40620  | 2593   | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | -0.14 | 0.271 | 0.356 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Back        | 30mm | Ant 1 | Full power | 40620  | 2593   | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | -0.19 | 0.155 | 0.203 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Left Side   | 32mm | Ant 1 | Full power | 40620  | 2593   | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | 0.01  | 0.157 | 0.206 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Right Side  | 20mm | Ant 1 | Full power | 40620  | 2593   | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | 0.06  | 0.107 | 0.140 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Top Side    | 30mm | Ant 1 | Full power | 40620  | 2593   | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | 0.02  | 0.553 | 0.725 |
|    | LTE Band 41 HPUE | 20M | QPSK | 1   | 0 | -             | Bottom Side | 31mm | Ant 1 | Full power | 40620  | 2593   | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | 0.12  | 0.001 | 0.001 |
|    | FR1 n7           | 40M | QPSK | 1   | 1 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 507000 | 2535   | 14.61 | 15.00 | 1.094 | -    | -     | -0.17 | 0.441 | 0.482 |





# FCC SAR Test Report

Report No. : FA250505

|    |                  |      |      |     |    |               |             |      |       |            |        |         |       |       |       |    |       |       |       |       |
|----|------------------|------|------|-----|----|---------------|-------------|------|-------|------------|--------|---------|-------|-------|-------|----|-------|-------|-------|-------|
|    | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front       | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -  | -     | -0.1  | 0.513 | 0.564 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -  | -     | 0.18  | 0.215 | 0.235 |
|    | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Back        | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -  | -     | -0.17 | 0.235 | 0.258 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -  | -     | -0.04 | 0.047 | 0.051 |
|    | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -  | -     | -0.05 | 0.059 | 0.065 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -  | -     | 0.01  | 0.022 | 0.024 |
|    | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -  | -     | -0.13 | 0.031 | 0.034 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -  | -     | -0.01 | 0.758 | 0.829 |
| 52 | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -  | -     | -0.09 | 0.889 | 0.977 |
|    | FR1 n7           | 40M  | QPSK | 216 | 0  | DFT-SCS-15KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.56 | 15.00 | 1.107 | -  | -     | 0.05  | 0.827 | 0.915 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -  | -     | 0.02  | 0.012 | 0.013 |
|    | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -  | -     | -0.13 | 0.012 | 0.013 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front       | 31mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -  | -     | -0.16 | 0.268 | 0.295 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back        | 30mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -  | -     | -0.12 | 0.184 | 0.202 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Left Side   | 32mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -  | -     | 0.07  | 0.133 | 0.146 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Right Side  | 20mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -  | -     | -0.02 | 0.125 | 0.137 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Top Side    | 30mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -  | -     | -0.05 | 0.745 | 0.819 |
|    | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Bottom Side | 31mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -  | -     | -0.13 | 0.001 | 0.001 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50 | 1.000 | -0.06 | 0.421 | 0.582 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50 | 1.000 | -0.14 | 0.303 | 0.423 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50 | 1.000 | -0.19 | 0.193 | 0.267 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50 | 1.000 | 0.01  | 0.146 | 0.204 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50 | 1.000 | 0.06  | 0.021 | 0.029 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50 | 1.000 | 0.02  | 0.022 | 0.031 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50 | 1.000 | 0.12  | 0.104 | 0.144 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50 | 1.000 | -0.16 | 0.103 | 0.144 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50 | 1.000 | -0.12 | 0.016 | 0.022 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50 | 1.000 | 0.07  | 0.022 | 0.031 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50 | 1.000 | -0.02 | 0.784 | 1.085 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50 | 1.000 | -0.05 | 0.746 | 1.042 |
|    | FR1 n41 HPUE     | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.54 | 18.00 | 1.400 | 50 | 1.000 | -0.13 | 0.713 | 0.998 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50 | 1.000 | 0.08  | 0.287 | 0.397 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50 | 1.000 | 0.16  | 0.238 | 0.329 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50 | 1.000 | 0.01  | 0.079 | 0.109 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50 | 1.000 | -0.16 | 0.278 | 0.385 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50 | 1.000 | 0.1   | 0.044 | 0.061 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50 | 1.000 | -0.04 | 0.318 | 0.440 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50 | 1.000 | 0.08  | 0.454 | 0.592 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50 | 1.000 | 0.16  | 0.514 | 0.676 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50 | 1.000 | 0.01  | 0.211 | 0.275 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50 | 1.000 | -0.16 | 0.231 | 0.304 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50 | 1.000 | 0.1   | 0.041 | 0.053 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50 | 1.000 | -0.04 | 0.052 | 0.068 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50 | 1.000 | -0.01 | 0.028 | 0.036 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50 | 1.000 | 0.02  | 0.023 | 0.030 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50 | 1.000 | -0.11 | 0.723 | 0.942 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50 | 1.000 | -0.06 | 0.788 | 1.036 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.80 | 16.00 | 1.318 | 50 | 1.000 | -0.15 | 0.711 | 0.937 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50 | 1.000 | 0.03  | 0.015 | 0.020 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50 | 1.000 | -0.13 | 0.009 | 0.012 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50 | 1.000 | -0.13 | 0.311 | 0.392 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50 | 1.000 | 0.05  | 0.352 | 0.450 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50 | 1.000 | -0.11 | 0.144 | 0.182 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50 | 1.000 | 0.07  | 0.158 | 0.202 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50 | 1.000 | -0.12 | 0.028 | 0.035 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50 | 1.000 | 0.19  | 0.036 | 0.046 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50 | 1.000 | -0.01 | 0.019 | 0.024 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50 | 1.000 | -0.19 | 0.016 | 0.020 |



# FCC SAR Test Report

Report No. : FA250505

|    |                  |      |      |     |    |               |             |      |       |            |               |       |       |       |    |       |       |       |       |
|----|------------------|------|------|-----|----|---------------|-------------|------|-------|------------|---------------|-------|-------|-------|----|-------|-------|-------|-------|
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 5185982592.99 | 12.99 | 14.00 | 1.262 | 50 | 1.000 | -0.03 | 0.526 | 0.664 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 5185982592.99 | 12.93 | 14.00 | 1.279 | 50 | 1.000 | 0.01  | 0.539 | 0.690 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 5185982592.99 | 12.99 | 14.00 | 1.262 | 50 | 1.000 | 0.1   | 0.010 | 0.013 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 5185982592.99 | 12.93 | 14.00 | 1.279 | 50 | 1.000 | 0.15  | 0.006 | 0.008 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 8 | Full power | 5185982592.99 | 25.84 | 27.00 | 1.306 | 50 | 1.000 | -0.01 | 0.188 | 0.246 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 8 | Full power | 5185982592.99 | 25.84 | 27.00 | 1.306 | 50 | 1.000 | -0.13 | 0.213 | 0.278 |
| 53 | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 5185982592.99 | 25.84 | 27.00 | 1.306 | 50 | 1.000 | -0.11 | 0.884 | 1.155 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 5092022546.01 | 25.54 | 27.00 | 1.400 | 50 | 1.000 | 0.06  | 0.782 | 1.094 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 528000 2640   | 25.83 | 27.00 | 1.309 | 50 | 1.000 | 0.01  | 0.823 | 1.077 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 8 | Full power | 5185982592.99 | 25.84 | 27.00 | 1.306 | 50 | 1.000 | -0.06 | 0.096 | 0.125 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 8 | Full power | 5185982592.99 | 25.84 | 27.00 | 1.306 | 50 | 1.000 | -0.15 | 0.131 | 0.171 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 8 | Full power | 5185982592.99 | 25.84 | 27.00 | 1.306 | 50 | 1.000 | 0.03  | 0.001 | 0.001 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 23.01 | 23.50 | 1.119 | 50 | 1.000 | 0.18  | 0.657 | 0.735 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.96 | 23.50 | 1.132 | 50 | 1.000 | 0.14  | 0.591 | 0.669 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 23.01 | 23.50 | 1.119 | 50 | 1.000 | 0.09  | 0.516 | 0.578 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.96 | 23.50 | 1.132 | 50 | 1.000 | -0.13 | 0.317 | 0.359 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 23.01 | 23.50 | 1.119 | 50 | 1.000 | 0.02  | 0.922 | 1.032 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.96 | 23.50 | 1.132 | 50 | 1.000 | -0.18 | 0.872 | 0.987 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.94 | 23.50 | 1.138 | 50 | 1.000 | 0.12  | 0.836 | 0.951 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 23.01 | 23.50 | 1.119 | 50 | 1.000 | 0.11  | 0.054 | 0.060 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.96 | 23.50 | 1.132 | 50 | 1.000 | 0.11  | 0.028 | 0.032 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 23.01 | 23.50 | 1.119 | 50 | 1.000 | -0.06 | 0.282 | 0.316 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.96 | 23.50 | 1.132 | 50 | 1.000 | -0.02 | 0.160 | 0.181 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 23.01 | 23.50 | 1.119 | 50 | 1.000 | 0.12  | 0.098 | 0.110 |
|    | FR1 n41 HPUE SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 22.96 | 23.50 | 1.132 | 50 | 1.000 | 0.02  | 0.050 | 0.057 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.09 | 21.50 | 1.099 | 50 | 1.000 | 0.18  | 0.431 | 0.474 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.06 | 21.50 | 1.107 | 50 | 1.000 | 0.14  | 0.388 | 0.429 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.09 | 21.50 | 1.099 | 50 | 1.000 | 0.09  | 0.339 | 0.373 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.06 | 21.50 | 1.107 | 50 | 1.000 | -0.13 | 0.208 | 0.230 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.09 | 21.50 | 1.099 | 50 | 1.000 | 0.02  | 0.585 | 0.643 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.06 | 21.50 | 1.107 | 50 | 1.000 | -0.18 | 0.440 | 0.487 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.09 | 21.50 | 1.099 | 50 | 1.000 | 0.11  | 0.035 | 0.038 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.06 | 21.50 | 1.107 | 50 | 1.000 | 0.11  | 0.018 | 0.020 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.09 | 21.50 | 1.099 | 50 | 1.000 | -0.06 | 0.185 | 0.203 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.06 | 21.50 | 1.107 | 50 | 1.000 | -0.02 | 0.105 | 0.116 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.09 | 21.50 | 1.099 | 50 | 1.000 | 0.12  | 0.064 | 0.070 |
|    | FR1 n41 HPUE NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 1 | Sensor On  | 5185982592.99 | 21.06 | 21.50 | 1.107 | 50 | 1.000 | 0.02  | 0.033 | 0.037 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 1 | Full power | 5185982592.99 | 27.50 | 28.00 | 1.122 | 50 | 1.000 | 0.16  | 0.305 | 0.342 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 1 | Full power | 5185982592.99 | 27.50 | 28.00 | 1.122 | 50 | 1.000 | -0.15 | 0.237 | 0.266 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 1 | Full power | 5185982592.99 | 27.50 | 28.00 | 1.122 | 50 | 1.000 | -0.02 | 0.119 | 0.134 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 1 | Full power | 5185982592.99 | 27.50 | 28.00 | 1.122 | 50 | 1.000 | -0.09 | 0.206 | 0.231 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 1 | Full power | 5185982592.99 | 27.50 | 28.00 | 1.122 | 50 | 1.000 | 0.14  | 0.642 | 0.720 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 1 | Full power | 5185982592.99 | 27.50 | 28.00 | 1.122 | 50 | 1.000 | 0.1   | 0.001 | 0.001 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.60 | 20.00 | 1.380 | 50 | 1.000 | 0.03  | 0.486 | 0.671 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.57 | 20.00 | 1.390 | 50 | 1.000 | 0.06  | 0.545 | 0.758 |
|    | FR1 n41 HPUE     | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.53 | 20.00 | 1.403 | 50 | 1.000 | 0.01  | 0.521 | 0.731 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.60 | 20.00 | 1.380 | 50 | 1.000 | -0.17 | 0.425 | 0.587 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.57 | 20.00 | 1.390 | 50 | 1.000 | 0.02  | 0.464 | 0.645 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.60 | 20.00 | 1.380 | 50 | 1.000 | -0.11 | 0.034 | 0.047 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.57 | 20.00 | 1.390 | 50 | 1.000 | 0.18  | 0.038 | 0.053 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.60 | 20.00 | 1.380 | 50 | 1.000 | 0.16  | 0.439 | 0.606 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.57 | 20.00 | 1.390 | 50 | 1.000 | 0.19  | 0.437 | 0.607 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.60 | 20.00 | 1.380 | 50 | 1.000 | 0.13  | 0.128 | 0.177 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.57 | 20.00 | 1.390 | 50 | 1.000 | -0.03 | 0.190 | 0.264 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.60 | 20.00 | 1.380 | 50 | 1.000 | 0.12  | 0.058 | 0.080 |
|    | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 5185982592.99 | 18.57 | 20.00 | 1.390 | 50 | 1.000 | 0.19  | 0.059 | 0.082 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 9 | Full power | 5185982592.99 | 23.60 | 25.00 | 1.380 | 50 | 1.000 | -0.09 | 0.145 | 0.200 |
|    | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 9 | Full power | 5185982592.99 | 23.60 | 25.00 | 1.380 | 50 | 1.000 | 0.07  | 0.088 | 0.121 |





# FCC SAR Test Report

Report No. : FA250505

|              |                     |      |      |     |    |               |             |      |       |            |        |         |       |       |       |      |       |       |       |       |
|--------------|---------------------|------|------|-----|----|---------------|-------------|------|-------|------------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
|              | FR1 n41 HPUE        | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 9 | Full power | 518598 | 2592.99 | 23.60 | 25.00 | 1.380 | 50   | 1.000 | -0.09 | 0.001 | 0.001 |
|              | FR1 n41 HPUE        | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 9 | Full power | 518598 | 2592.99 | 23.60 | 25.00 | 1.380 | 50   | 1.000 | -0.16 | 0.211 | 0.291 |
|              | FR1 n41 HPUE        | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 9 | Full power | 518598 | 2592.99 | 23.60 | 25.00 | 1.380 | 50   | 1.000 | -0.18 | 0.001 | 0.001 |
|              | FR1 n41 HPUE        | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 9 | Full power | 518598 | 2592.99 | 23.60 | 25.00 | 1.380 | 50   | 1.000 | -0.07 | 0.209 | 0.289 |
| 3500-3900MHz |                     |      |      |     |    |               |             |      |       |            |        |         |       |       |       |      |       |       |       |       |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Front       | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | -0.13 | 0.100 | 0.106 |
|              | LTE Band 48         | 20M  | QPSK | 50  | 0  | -             | Front       | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.17  | 0.078 | 0.083 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Back        | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | 0.06  | 0.515 | 0.545 |
|              | LTE Band 48         | 20M  | QPSK | 50  | 0  | -             | Back        | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.11  | 0.434 | 0.461 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | -0.02 | 0.018 | 0.019 |
|              | LTE Band 48         | 20M  | QPSK | 50  | 0  | -             | Left Side   | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.1   | 0.019 | 0.020 |
| 54           | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | -0.01 | 0.574 | 0.607 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 55340  | 3560    | 21.72 | 22.00 | 1.067 | 62.9 | 1.006 | 0.04  | 0.534 | 0.573 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 56150  | 3641    | 21.63 | 22.00 | 1.089 | 62.9 | 1.006 | 0.13  | 0.516 | 0.565 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 56640  | 3690    | 21.73 | 22.00 | 1.064 | 62.9 | 1.006 | -0.18 | 0.496 | 0.531 |
|              | LTE Band 48         | 20M  | QPSK | 50  | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | -0.11 | 0.510 | 0.542 |
|              | LTE Band 48         | 20M  | QPSK | 100 | 0  | -             | Right Side  | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.75 | 22.00 | 1.059 | 62.9 | 1.006 | 0.05  | 0.488 | 0.520 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Top Side    | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | -0.14 | 0.057 | 0.060 |
|              | LTE Band 48         | 20M  | QPSK | 50  | 0  | -             | Top Side    | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | -0.19 | 0.039 | 0.041 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Bottom Side | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | 0.01  | 0.043 | 0.046 |
|              | LTE Band 48         | 20M  | QPSK | 50  | 0  | -             | Bottom Side | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.06  | 0.030 | 0.032 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Front       | 31mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | 0.02  | 0.031 | 0.033 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Back        | 30mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | 0.12  | 0.099 | 0.105 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Left Side   | 32mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | -0.16 | 0.032 | 0.034 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Right Side  | 20mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | -0.12 | 0.128 | 0.136 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Top Side    | 30mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | 0.07  | 0.036 | 0.038 |
|              | LTE Band 48         | 20M  | QPSK | 1   | 0  | -             | Bottom Side | 31mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | -0.02 | 0.038 | 0.040 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | 0.03  | 0.068 | 0.083 |
|              | FR1 n48             | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.18  | 0.063 | 0.078 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | 0.16  | 0.377 | 0.462 |
|              | FR1 n48             | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.18  | 0.369 | 0.455 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | -0.15 | 0.013 | 0.016 |
|              | FR1 n48             | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.19  | 0.010 | 0.012 |
| 55           | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | -0.05 | 0.509 | 0.623 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 638000 | 3570    | 18.99 | 20.00 | 1.262 | -    | -     | 0.06  | 0.489 | 0.617 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 645332 | 3679.98 | 19.05 | 20.00 | 1.245 | -    | -     | 0.02  | 0.478 | 0.595 |
|              | FR1 n48             | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.03  | 0.481 | 0.593 |
|              | FR1 n48             | 40M  | QPSK | 100 | 0  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.07 | 20.00 | 1.239 | -    | -     | 0.06  | 0.475 | 0.588 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | 0.11  | 0.038 | 0.047 |
|              | FR1 n48             | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | -0.08 | 0.035 | 0.043 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | -0.17 | 0.032 | 0.039 |
|              | FR1 n48             | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | -0.08 | 0.030 | 0.037 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | -0.04 | 0.059 | 0.073 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | -0.08 | 0.233 | 0.289 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | 0.17  | 0.031 | 0.038 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | 0.18  | 0.146 | 0.181 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | -0.04 | 0.033 | 0.041 |
|              | FR1 n48             | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | -0.08 | 0.039 | 0.048 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | 0.16  | 0.297 | 0.370 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | -0.15 | 0.207 | 0.259 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | -0.02 | 0.118 | 0.147 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | -0.09 | 0.103 | 0.129 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | 0.14  | 0.821 | 1.022 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | 0.1   | 0.775 | 0.971 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.51 | 14.50 | 1.256 | 50   | 1.000 | -0.09 | 0.738 | 0.927 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | 0.07  | 0.004 | 0.005 |
|              | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | -0.09 | 0.003 | 0.004 |



# FCC SAR Test Report

Report No. : FA250505

|  |                      |      |      |     |    |               |             |      |       |            |        |         |       |       |       |    |       |       |              |       |
|--|----------------------|------|------|-----|----|---------------|-------------|------|-------|------------|--------|---------|-------|-------|-------|----|-------|-------|--------------|-------|
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50 | 1.000 | -0.16 | 0.007        | 0.009 |
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50 | 1.000 | -0.18 | 0.008        | 0.010 |
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50 | 1.000 | -0.07 | 0.007        | 0.009 |
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50 | 1.000 | 0.11  | 0.006        | 0.008 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50 | 1.000 | -0.03 | 0.191        | 0.238 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50 | 1.000 | 0.09  | 0.133        | 0.167 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50 | 1.000 | -0.17 | 0.076        | 0.095 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50 | 1.000 | -0.1  | 0.066        | 0.083 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50 | 1.000 | -0.02 | 0.527        | 0.656 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50 | 1.000 | 0.17  | 0.433        | 0.543 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50 | 1.000 | 0.07  | 0.003        | 0.004 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50 | 1.000 | 0.11  | 0.002        | 0.003 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50 | 1.000 | -0.18 | 0.004        | 0.005 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50 | 1.000 | 0.11  | 0.005        | 0.006 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50 | 1.000 | -0.01 | 0.004        | 0.005 |
|  | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50 | 1.000 | -0.11 | 0.004        | 0.005 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50 | 1.000 | 0.16  | 0.313        | 0.393 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50 | 1.000 | -0.06 | 0.400        | 0.502 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50 | 1.000 | 0.02  | <b>0.879</b> | 1.104 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 650000 | 3750    | 25.99 | 27.00 | 1.262 | 50 | 1.000 | 0.08  | 0.845        | 1.066 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 662000 | 3930    | 25.71 | 27.00 | 1.346 | 50 | 1.000 | 0.01  | 0.785        | 1.057 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50 | 1.000 | -0.16 | 0.034        | 0.043 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50 | 1.000 | 0.05  | 0.060        | 0.075 |
|  | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50 | 1.000 | -0.03 | 0.071        | 0.089 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50 | 1.000 | -0.08 | 0.136        | 0.172 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | -0.1  | 0.146        | 0.187 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50 | 1.000 | -0.01 | 0.090        | 0.114 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | -0.09 | 0.088        | 0.113 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50 | 1.000 | -0.06 | 0.685        | 0.866 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | -0.17 | <b>0.703</b> | 0.901 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.40 | 14.50 | 1.288 | 50 | 1.000 | -0.01 | 0.669        | 0.862 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50 | 1.000 | -0.11 | 0.003        | 0.004 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | 0.14  | 0.003        | 0.004 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50 | 1.000 | 0.03  | 0.005        | 0.006 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | 0.1   | 0.005        | 0.006 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50 | 1.000 | 0.16  | 0.007        | 0.009 |
|  | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | -0.06 | 0.008        | 0.010 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | 0.18  | 0.093        | 0.118 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | -0.19 | 0.100        | 0.128 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | -0.16 | 0.061        | 0.077 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | -0.08 | 0.060        | 0.077 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | 0.12  | 0.432        | 0.546 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | 0.04  | 0.478        | 0.613 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | -0.17 | 0.002        | 0.003 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | 0.02  | 0.002        | 0.003 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | -0.07 | 0.004        | 0.005 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | -0.03 | 0.004        | 0.005 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | 0.03  | 0.005        | 0.006 |
|  | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | 0.09  | 0.005        | 0.006 |
|  | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | 0.17  | 0.339        | 0.442 |
|  | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | -0.15 | 0.345        | 0.450 |
|  | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | 0.16  | 0.641        | 0.835 |
|  | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | 0.05  | 0.039        | 0.051 |
|  | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | -0.06 | 0.043        | 0.056 |
|  | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | -0.13 | 0.050        | 0.065 |
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | 0.11  | 0.281        | 0.294 |
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | -0.13 | 0.194        | 0.204 |
|  | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | 0.12  | 0.238        | 0.249 |



# FCC SAR Test Report

Report No. : FA250505

|  |                     |      |      |     |    |               |             |      |       |            |        |         |       |       |       |    |       |       |              |       |
|--|---------------------|------|------|-----|----|---------------|-------------|------|-------|------------|--------|---------|-------|-------|-------|----|-------|-------|--------------|-------|
|  | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | -0.11 | 0.188        | 0.197 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | 0.17  | 0.029        | 0.030 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | -0.16 | 0.018        | 0.019 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | -0.17 | 0.045        | 0.047 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | 0.11  | 0.029        | 0.030 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | -0.05 | 0.854        | 0.892 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | -0.01 | 0.798        | 0.838 |
|  | FR1 n77 Part 270 SA | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.78 | 18.00 | 1.052 | 50 | 1.000 | -0.14 | 0.765        | 0.805 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | 0.07  | 0.368        | 0.391 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | 0.08  | 0.467        | 0.496 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | 0.19  | 0.082        | 0.087 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | -0.06 | 0.222        | 0.236 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | -0.03 | 0.735        | 0.780 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | -0.15 | 0.126        | 0.159 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | -0.12 | 0.100        | 0.127 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | -0.17 | 0.075        | 0.095 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | 0.08  | 0.075        | 0.096 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | 0.01  | 0.011        | 0.014 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | 0.02  | 0.011        | 0.014 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | -0.11 | 0.016        | 0.020 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | -0.01 | 0.014        | 0.018 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | 0.09  | 0.315        | 0.397 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | 0.1   | 0.319        | 0.406 |
|  | FR1 n77 Part 27Q SA | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Top Side    | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.83 | 18.00 | 1.309 | 50 | 1.000 | -0.04 | 0.267        | 0.350 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | 0.07  | 0.162        | 0.209 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | -0.12 | 0.189        | 0.244 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | -0.03 | 0.046        | 0.059 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | 0.02  | 0.090        | 0.116 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Top Side    | 30mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | 0.12  | <b>0.417</b> | 0.538 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | 0.16  | 0.074        | 0.082 |
|  | FR1 n77 Part 270    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | -0.1  | 0.075        | 0.085 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | 0.07  | 0.305        | 0.338 |
|  | FR1 n77 Part 270    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | 0.18  | 0.309        | 0.348 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | 0.01  | 0.012        | 0.013 |
|  | FR1 n77 Part 270    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | -0.15 | 0.006        | 0.007 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | -0.02 | <b>0.341</b> | 0.378 |
|  | FR1 n77 Part 270    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | 0.19  | 0.286        | 0.322 |
|  | FR1 n77 Part 270    | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.46 | 19.00 | 1.132 | 50 | 1.000 | 0.07  | 0.297        | 0.336 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | -0.18 | 0.045        | 0.050 |
|  | FR1 n77 Part 270    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | 0.03  | 0.049        | 0.055 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | 0.01  | 0.131        | 0.150 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | -0.11 | 0.269        | 0.309 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | 0.03  | 0.088        | 0.101 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | -0.05 | 0.309        | 0.355 |
|  | FR1 n77 Part 270    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | 0.14  | 0.054        | 0.062 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.08 | 0.220        | 0.307 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | -0.04 | 0.172        | 0.241 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | 0.17  | 0.391        | 0.546 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | 0.18  | 0.388        | 0.544 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.08 | 0.017        | 0.024 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | -0.13 | 0.015        | 0.021 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | 0.01  | 0.539        | 0.753 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | -0.13 | 0.419        | 0.588 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | 0.06  | 0.329        | 0.464 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.03 | 0.058        | 0.081 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | -0.03 | 0.061        | 0.086 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | -0.01 | 0.384        | 0.546 |
|  | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | -0.12 | 0.287        | 0.408 |



# FCC SAR Test Report

Report No. : FA250505

|    |                     |      |      |     |    |               |             |      |       |            |        |         |       |       |       |    |       |       |       |       |
|----|---------------------|------|------|-----|----|---------------|-------------|------|-------|------------|--------|---------|-------|-------|-------|----|-------|-------|-------|-------|
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | 0.07  | 0.071 | 0.101 |
| 56 | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | 0.09  | 0.779 | 1.108 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | 0.04  | 0.103 | 0.146 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | 0.16  | 0.222 | 0.270 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | -0.1  | 0.204 | 0.254 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | 0.07  | 0.219 | 0.266 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | 0.18  | 0.207 | 0.258 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | -0.1  | 0.042 | 0.051 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | 0.01  | 0.039 | 0.049 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | -0.15 | 0.079 | 0.096 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | 0.19  | 0.067 | 0.083 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | 0.07  | 0.552 | 0.671 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | -0.18 | 0.536 | 0.667 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.03 | 19.00 | 1.250 | 50 | 1.000 | 0.03  | 0.493 | 0.616 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | -0.14 | 0.695 | 0.861 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 2 | Full power | 650000 | 3750    | 26.42 | 27.50 | 1.282 | 50 | 1.000 | 0.12  | 0.644 | 0.826 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 2 | Full power | 662000 | 3930    | 26.41 | 27.50 | 1.285 | 50 | 1.000 | 0.08  | 0.639 | 0.821 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | -0.15 | 0.519 | 0.643 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | -0.12 | 0.163 | 0.202 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | -0.17 | 0.317 | 0.393 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | 0.08  | 0.539 | 0.668 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.15 | 0.258 | 0.360 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front       | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | -0.15 | 0.255 | 0.359 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | 0.11  | 0.292 | 0.408 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back        | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | -0.08 | 0.274 | 0.386 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.17 | 0.033 | 0.046 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Left Side   | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | -0.08 | 0.035 | 0.049 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.04 | 0.124 | 0.173 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Right Side  | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | -0.08 | 0.124 | 0.175 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | 0.17  | 0.562 | 0.785 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | 0.18  | 0.574 | 0.809 |
|    | FR1 n77 Part 27Q SA | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Bottom Side | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.48 | 19.00 | 1.419 | 50 | 1.000 | -0.04 | 0.551 | 0.782 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front       | 31mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | 0.01  | 0.459 | 0.651 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back        | 30mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | 0.02  | 0.278 | 0.394 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Left Side   | 32mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | -0.11 | 0.094 | 0.133 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Right Side  | 20mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | -0.01 | 0.322 | 0.457 |
|    | FR1 n77 Part 27Q    | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Bottom Side | 31mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | 0.09  | 0.441 | 0.626 |





# FCC SAR Test Report

Report No. : FA250505

| Plot No.      | Band       | Mode                | Test Position | Gap (mm) | Antenna    | Power Reduction | 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) |
|---------------|------------|---------------------|---------------|----------|------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| WLAN/BT/ LORA |            |                     |               |          |            |                 |     |             |                     |                     |                        |              |                           |                  |                        |                        |
| 57            | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.07            | 0.252                  | 0.392                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(4) | Full power      | 6   | 2437        | 13.21               | 15.00               | 1.510                  | 100          | 1.000                     | 0.12             | 0.245                  | 0.370                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(4) | Full power      | 11  | 2462        | 13.17               | 15.00               | 1.524                  | 100          | 1.000                     | 0.03             | 0.227                  | 0.346                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Back          | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.17            | 0.135                  | 0.210                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Left Side     | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.03            | 0.175                  | 0.272                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.14             | 0.091                  | 0.142                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.11             | 0.055                  | 0.086                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Bottom Side   | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.05            | 0.110                  | 0.171                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 31mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.09            | 0.001                  | 0.002                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Back          | 30mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.18             | 0.022                  | 0.034                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Left Side     | 32mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.11             | 0.001                  | 0.002                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Right Side    | 20mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.07             | 0.018                  | 0.028                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Top Side      | 30mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.03            | 0.018                  | 0.028                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Bottom Side   | 31mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.09             | 0.029                  | 0.045                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | -0.05            | 0.042                  | 0.046                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 39  | 2441        | 8.15                | 8.50                | 1.084                  | 76.64        | 1.087                     | 0.02             | 0.036                  | 0.042                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 78  | 2480        | 7.72                | 8.00                | 1.067                  | 76.64        | 1.087                     | 0.03             | 0.033                  | 0.038                  |
|               | Bluetooth  | 1Mbps               | Back          | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | 0.01             | 0.022                  | 0.024                  |
|               | Bluetooth  | 1Mbps               | Left Side     | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | 0.18             | 0.004                  | 0.004                  |
|               | Bluetooth  | 1Mbps               | Right Side    | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | 0.14             | 0.038                  | 0.041                  |
|               | Bluetooth  | 1Mbps               | Top Side      | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | -0.17            | 0.009                  | 0.010                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | -0.01            | 0.036                  | 0.041                  |
|               | Bluetooth  | 1Mbps               | Back          | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | -0.08            | 0.036                  | 0.041                  |
| 58            | Bluetooth  | 1Mbps               | Left Side     | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | 0.02             | 0.051                  | 0.058                  |
|               | Bluetooth  | 1Mbps               | Left Side     | 5mm      | Ant 3      | Full power      | 39  | 2441        | 7.18                | 7.50                | 1.076                  | 76.79        | 1.085                     | 0.05             | 0.046                  | 0.054                  |
|               | Bluetooth  | 1Mbps               | Left Side     | 5mm      | Ant 3      | Full power      | 78  | 2480        | 6.92                | 7.00                | 1.019                  | 76.79        | 1.085                     | 0.01             | 0.045                  | 0.050                  |
|               | Bluetooth  | 1Mbps               | Right Side    | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | 0.06             | 0.001                  | 0.001                  |
|               | Bluetooth  | 1Mbps               | Bottom Side   | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | -0.09            | 0.020                  | 0.023                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Front         | 5mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.17             | 0.092                  | 0.138                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Back          | 5mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | -0.05            | 0.152                  | 0.228                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Left Side     | 5mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.1              | 0.189                  | 0.284                  |
| 59            | WLAN5.2GHz | 802.11n-HT40 MCS0   | Right Side    | 5mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.01             | 0.422                  | 0.634                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Right Side    | 5mm      | Ant 3+4(3) | Full power      | 38  | 5190        | 13.13               | 15.00               | 1.538                  | 98.54        | 1.015                     | 0.06             | 0.385                  | 0.601                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Top Side      | 5mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.04             | 0.114                  | 0.171                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Bottom Side   | 5mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | -0.01            | 0.025                  | 0.038                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Front         | 31mm     | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | -0.08            | 0.001                  | 0.002                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Back          | 30mm     | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | -0.05            | 0.012                  | 0.018                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Left Side     | 32mm     | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | -0.03            | 0.001                  | 0.002                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Right Side    | 20mm     | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.17             | 0.011                  | 0.017                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Top Side      | 30mm     | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | -0.14            | 0.008                  | 0.012                  |
|               | WLAN5.2GHz | 802.11n-HT40 MCS0   | Bottom Side   | 31mm     | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.06             | 0.012                  | 0.018                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Front         | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.08             | 0.054                  | 0.085                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.01             | 0.145                  | 0.229                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Left Side     | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.03             | 0.103                  | 0.163                  |
| 60            | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Right Side    | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.01             | 0.416                  | 0.658                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Top Side      | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | -0.08            | 0.056                  | 0.089                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Bottom Side   | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | -0.08            | 0.019                  | 0.030                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Front         | 31mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | -0.03            | 0.054                  | 0.085                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 30mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.17             | 0.001                  | 0.002                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Left Side     | 32mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.02             | 0.016                  | 0.025                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Right Side    | 20mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | -0.05            | 0.001                  | 0.002                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Top Side      | 30mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.18             | 0.009                  | 0.014                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Bottom Side   | 31mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | -0.11            | 0.011                  | 0.017                  |



## 15.3 Body Worn Accessory SAR

| Plot No. | Band            | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-----------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-----------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 750MHz   |                 |          |            |         |           |               |               |          |         |                 |        |             |                     |                     |                        |              |                           |                  |                        |                        |
|          | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.08             | 0.692                  | 0.793                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | 0.01             | 0.659                  | 0.753                  |
| 62       | LTE Band 12 SA  | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.03             | 0.725                  | 0.830                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 25      | 0         | -             | Back          | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 22.42               | 23.00               | 1.143                  | -            | -                         | -0.08            | 0.620                  | 0.709                  |
|          | LTE Band 12 SA  | 10M      | QPSK       | 50      | 0         | -             | Back          | 5mm      | Ant 1   | Full Power      | 23095  | 707.5       | 22.46               | 23.00               | 1.132                  | -            | -                         | 0.05             | 0.611                  | 0.692                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23095  | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | 0.08             | 0.420                  | 0.472                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23095  | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | 0.01             | 0.382                  | 0.434                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23095  | 707.5       | 20.99               | 21.50               | 1.125                  | -            | -                         | -0.08            | 0.482                  | 0.542                  |
|          | LTE Band 12 NSA | 10M      | QPSK       | 25      | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23095  | 707.5       | 20.95               | 21.50               | 1.135                  | -            | -                         | -0.08            | 0.359                  | 0.407                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -             | Front         | 31mm     | Ant 1   | Full power      | 23095  | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.08             | 0.138                  | 0.158                  |
|          | LTE Band 12     | 10M      | QPSK       | 1       | 0         | -             | Back          | 30mm     | Ant 1   | Full power      | 23095  | 707.5       | 23.41               | 24.00               | 1.146                  | -            | -                         | 0.01             | 0.135                  | 0.155                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 23230  | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.11             | 0.764                  | 0.904                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 23230  | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | -0.05            | 0.666                  | 0.793                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 23230  | 782         | 23.34               | 24.00               | 1.164                  | -            | -                         | 0.05             | 0.651                  | 0.758                  |
| 63       | LTE Band 13 SA  | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Full power      | 23230  | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.18             | 0.966                  | 1.143                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 25      | 0         | -             | Back          | 5mm      | Ant 1   | Full power      | 23230  | 782         | 23.24               | 24.00               | 1.191                  | -            | -                         | 0.14             | 0.766                  | 0.912                  |
|          | LTE Band 13 SA  | 10M      | QPSK       | 50      | 0         | -             | Back          | 5mm      | Ant 1   | Full power      | 23230  | 782         | 23.34               | 24.00               | 1.164                  | -            | -                         | -0.17            | 0.751                  | 0.874                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23230  | 782         | 21.36               | 22.00               | 1.159                  | -            | -                         | -0.05            | 0.429                  | 0.497                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23230  | 782         | 21.35               | 22.00               | 1.161                  | -            | -                         | 0.18             | 0.374                  | 0.434                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23230  | 782         | 21.36               | 22.00               | 1.159                  | -            | -                         | 0.07             | 0.542                  | 0.628                  |
|          | LTE Band 13 NSA | 10M      | QPSK       | 25      | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23230  | 782         | 21.35               | 22.00               | 1.161                  | -            | -                         | -0.17            | 0.435                  | 0.505                  |
|          | LTE Band 13     | 10M      | QPSK       | 1       | 0         | -             | Front         | 31mm     | Ant 1   | Full power      | 23230  | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.08             | 0.144                  | 0.170                  |
|          | LTE Band 13     | 10M      | QPSK       | 1       | 0         | -             | Back          | 30mm     | Ant 1   | Full power      | 23230  | 782         | 24.27               | 25.00               | 1.183                  | -            | -                         | 0.01             | 0.140                  | 0.166                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 24.21               | 24.50               | 1.069                  | -            | -                         | 0.05             | 0.865                  | 0.925                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 23.68               | 24.00               | 1.076                  | -            | -                         | 0.06             | 0.667                  | 0.718                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 23.58               | 24.00               | 1.102                  | -            | -                         | 0.01             | 0.648                  | 0.714                  |
| 64       | LTE Band 14 SA  | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 24.21               | 24.50               | 1.069                  | -            | -                         | -0.09            | 1.010                  | 1.080                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 25      | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 23.68               | 24.00               | 1.076                  | -            | -                         | -0.08            | 0.875                  | 0.942                  |
|          | LTE Band 14 SA  | 10M      | QPSK       | 50      | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 23.58               | 24.00               | 1.102                  | -            | -                         | 0.13             | 0.873                  | 0.962                  |
|          | LTE Band 14 NSA | 10M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 21.25               | 21.50               | 1.059                  | -            | -                         | 0.06             | 0.455                  | 0.482                  |
|          | LTE Band 14 NSA | 10M      | QPSK       | 25      | 0         | -             | Front         | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 21.19               | 21.50               | 1.074                  | -            | -                         | -0.09            | 0.412                  | 0.442                  |
|          | LTE Band 14 NSA | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 21.25               | 21.50               | 1.059                  | -            | -                         | -0.01            | 0.565                  | 0.598                  |
|          | LTE Band 14 NSA | 10M      | QPSK       | 25      | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On       | 23330  | 793         | 21.19               | 21.50               | 1.074                  | -            | -                         | 0.13             | 0.461                  | 0.495                  |
|          | LTE Band 14     | 10M      | QPSK       | 1       | 0         | -             | Front         | 31mm     | Ant 1   | Full power      | 23330  | 793         | 24.63               | 25.00               | 1.089                  | -            | -                         | -0.18            | 0.115                  | 0.125                  |
|          | LTE Band 14     | 10M      | QPSK       | 1       | 0         | -             | Back          | 30mm     | Ant 1   | Full power      | 23330  | 793         | 24.63               | 25.00               | 1.089                  | -            | -                         | 0.1              | 0.132                  | 0.144                  |
| 65       | LTE Band 71     | 20M      | QPSK       | 1       | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 133322 | 683         | 23.94               | 25.00               | 1.276                  | -            | -                         | 0.08             | 0.715                  | 0.913                  |
|          | LTE Band 71     | 20M      | QPSK       | 50      | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 133322 | 683         | 22.88               | 24.00               | 1.294                  | -            | -                         | 0.01             | 0.558                  | 0.722                  |
|          | LTE Band 71     | 20M      | QPSK       | 100     | 0         | -             | Front         | 5mm      | Ant 1   | Full power      | 133322 | 683         | 22.91               | 24.00               | 1.285                  | -            | -                         | 0.05             | 0.523                  | 0.672                  |
|          | LTE Band 71     | 20M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Full power      | 133322 | 683         | 23.94               | 25.00               | 1.276                  | -            | -                         | 0.03             | 0.710                  | 0.906                  |
|          | LTE Band 71     | 20M      | QPSK       | 50      | 0         | -             | Back          | 5mm      | Ant 1   | Full power      | 133322 | 683         | 22.88               | 24.00               | 1.294                  | -            | -                         | -0.08            | 0.579                  | 0.749                  |
|          | LTE Band 71     | 20M      | QPSK       | 100     | 0         | -             | Back          | 5mm      | Ant 1   | Full power      | 133322 | 683         | 22.91               | 24.00               | 1.285                  | -            | -                         | 0.01             | 0.559                  | 0.718                  |
|          | FR1 n12         | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 23.18               | 24.00               | 1.208                  | -            | -                         | -0.18            | 0.636                  | 0.768                  |
|          | FR1 n12         | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 23.17               | 24.00               | 1.211                  | -            | -                         | -0.09            | 0.617                  | 0.747                  |
| 66       | FR1 n12         | 15M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 23.18               | 24.00               | 1.208                  | -            | -                         | -0.04            | 0.679                  | 0.820                  |
|          | FR1 n12         | 15M      | QPSK       | 36      | 22        | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 23.17               | 24.00               | 1.211                  | -            | -                         | -0.17            | 0.641                  | 0.776                  |
|          | FR1 n12         | 15M      | QPSK       | 75      | 0         | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Full power      | 141500 | 707.5       | 22.21               | 23.00               | 1.199                  | -            | -                         | 0.13             | 0.540                  | 0.648                  |
|          | FR1 n13         | 10M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.25               | 23.00               | 1.189                  | -            | -                         | -0.02            | 0.422                  | 0.502                  |
|          | FR1 n13         | 10M      | QPSK       | 25      | 14        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.23               | 23.00               | 1.194                  | -            | -                         | 0.13             | 0.522                  | 0.623                  |
|          | FR1 n13         | 10M      | QPSK       | 1       | 1         | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.25               | 23.00               | 1.189                  | -            | -                         | -0.16            | 0.552                  | 0.656                  |
| 67       | FR1 n13         | 10M      | QPSK       | 25      | 14        | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.23               | 23.00               | 1.194                  | -            | -                         | -0.05            | 0.592                  | 0.707                  |
|          | FR1 n13         | 10M      | QPSK       | 50      | 0         | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Sensor On       | 156400 | 782         | 22.21               | 23.00               | 1.199                  | -            | -                         | 0.03             | 0.534                  | 0.641                  |



# FCC SAR Test Report

Report No. : FA250505

|         |                 |     |      |     |    |               |       |      |       |            |        |       |       |       |       |   |   |       |       |       |
|---------|-----------------|-----|------|-----|----|---------------|-------|------|-------|------------|--------|-------|-------|-------|-------|---|---|-------|-------|-------|
|         | FR1 n13         | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | -0.01 | 0.139 | 0.166 |
|         | FR1 n13         | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 1 | Full power | 156400 | 782   | 24.22 | 25.00 | 1.197 | - | - | -0.08 | 0.138 | 0.165 |
|         | FR1 n14         | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | 0.11  | 0.756 | 0.961 |
|         | FR1 n14         | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | -0.05 | 0.711 | 0.908 |
|         | FR1 n14         | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.92 | 24.00 | 1.282 | - | - | 0.05  | 0.688 | 0.882 |
| 68      | FR1 n14         | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.96 | 24.00 | 1.271 | - | - | 0.18  | 0.923 | 1.173 |
|         | FR1 n14         | 10M | QPSK | 25  | 14 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.94 | 24.00 | 1.276 | - | - | 0.14  | 0.846 | 1.080 |
|         | FR1 n14         | 10M | QPSK | 50  | 0  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 158600 | 793   | 22.92 | 24.00 | 1.282 | - | - | -0.17 | 0.828 | 1.062 |
|         | FR1 n14         | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.13  | 0.131 | 0.167 |
|         | FR1 n14         | 10M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 1 | Full power | 158600 | 793   | 23.94 | 25.00 | 1.276 | - | - | 0.12  | 0.125 | 0.160 |
| 69      | FR1 n71         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | 0.03  | 0.539 | 0.613 |
|         | FR1 n71         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | 0.01  | 0.477 | 0.553 |
|         | FR1 n71         | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 23.54 | 24.00 | 1.112 | - | - | 0.06  | 0.419 | 0.466 |
|         | FR1 n71         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.44 | 25.00 | 1.138 | - | - | 0.13  | 0.509 | 0.579 |
|         | FR1 n71         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 136100 | 680.5 | 24.36 | 25.00 | 1.159 | - | - | 0.16  | 0.500 | 0.579 |
| 835MHz  |                 |     |      |     |    |               |       |      |       |            |        |       |       |       |       |   |   |       |       |       |
|         | LTE Band 26 SA  | 15M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | 0.05  | 0.778 | 0.929 |
|         | LTE Band 26 SA  | 15M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.80 | 24.00 | 1.318 | - | - | 0.05  | 0.681 | 0.898 |
|         | LTE Band 26 SA  | 15M | QPSK | 36  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | 0.06  | 0.695 | 0.837 |
|         | LTE Band 26 SA  | 15M | QPSK | 36  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.91 | 24.00 | 1.285 | - | - | 0.06  | 0.648 | 0.833 |
|         | LTE Band 26 SA  | 15M | QPSK | 75  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.10 | 24.00 | 1.230 | - | - | 0.02  | 0.645 | 0.794 |
| 70      | LTE Band 26 SA  | 15M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.23 | 24.00 | 1.194 | - | - | -0.09 | 0.910 | 1.087 |
|         | LTE Band 26 SA  | 15M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.80 | 24.00 | 1.318 | - | - | 0.05  | 0.801 | 1.056 |
|         | LTE Band 26 SA  | 15M | QPSK | 36  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.19 | 24.00 | 1.205 | - | - | 0.12  | 0.757 | 0.912 |
|         | LTE Band 26 SA  | 15M | QPSK | 36  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26765  | 821.5 | 22.91 | 24.00 | 1.285 | - | - | 0.05  | 0.678 | 0.871 |
|         | LTE Band 26 SA  | 15M | QPSK | 75  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26865  | 831.5 | 23.10 | 24.00 | 1.230 | - | - | 0.03  | 0.753 | 0.926 |
|         | LTE Band 5 NSA  | 10M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.13 | 0.487 | 0.601 |
|         | LTE Band 5 NSA  | 10M | QPSK | 25  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | 0.06  | 0.372 | 0.464 |
|         | LTE Band 5 NSA  | 10M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.09 | 22.00 | 1.233 | - | - | -0.04 | 0.569 | 0.702 |
|         | LTE Band 5 NSA  | 10M | QPSK | 25  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 20525  | 836.5 | 21.04 | 22.00 | 1.247 | - | - | -0.03 | 0.474 | 0.591 |
|         | LTE Band 26     | 15M | QPSK | 1   | 1  | -             | Front | 31mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | 0.07  | 0.172 | 0.233 |
|         | LTE Band 26     | 15M | QPSK | 1   | 1  | -             | Back  | 30mm | Ant 1 | Full power | 26865  | 831.5 | 23.69 | 25.00 | 1.352 | - | - | 0.18  | 0.180 | 0.243 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.65 | 23.00 | 1.084 | - | - | 0.19  | 0.716 | 0.776 |
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.60 | 23.00 | 1.096 | - | - | 0.07  | 0.682 | 0.748 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.65 | 23.00 | 1.084 | - | - | -0.18 | 0.859 | 0.931 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 164800 | 824   | 22.61 | 23.00 | 1.094 | - | - | 0.08  | 0.823 | 0.900 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 166300 | 831.5 | 22.58 | 23.00 | 1.102 | - | - | 0.01  | 0.818 | 0.901 |
| 71      | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.60 | 23.00 | 1.096 | - | - | 0.03  | 0.972 | 1.066 |
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 164800 | 824   | 22.52 | 23.00 | 1.117 | - | - | 0.06  | 0.935 | 1.044 |
|         | FR1 n26         | 20M | QPSK | 50  | 28 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 166300 | 831.5 | 22.50 | 23.00 | 1.122 | - | - | 0.02  | 0.928 | 1.041 |
|         | FR1 n26         | 20M | QPSK | 100 | 0  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 167800 | 839   | 22.59 | 23.00 | 1.099 | - | - | 0.11  | 0.767 | 0.843 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 1 | Full power | 167800 | 839   | 23.66 | 24.00 | 1.081 | - | - | 0.07  | 0.166 | 0.180 |
|         | FR1 n26         | 20M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 1 | Full power | 167800 | 839   | 23.66 | 24.00 | 1.081 | - | - | -0.18 | 0.173 | 0.187 |
| 1750MHz |                 |     |      |     |    |               |       |      |       |            |        |       |       |       |       |   |   |       |       |       |
| 72      | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 132322 | 1745  | 19.22 | 20.00 | 1.197 | - | - | -0.08 | 0.626 | 0.749 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 132322 | 1745  | 19.18 | 20.00 | 1.208 | - | - | -0.13 | 0.524 | 0.633 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 132322 | 1745  | 19.22 | 20.00 | 1.197 | - | - | -0.13 | 0.336 | 0.402 |
|         | LTE Band 66     | 20M | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 132322 | 1745  | 19.18 | 20.00 | 1.208 | - | - | 0.06  | 0.290 | 0.350 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Front | 31mm | Ant 1 | Full power | 132322 | 1745  | 24.12 | 25.00 | 1.225 | - | - | -0.08 | 0.094 | 0.115 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 1 | Full power | 132322 | 1745  | 24.12 | 25.00 | 1.225 | - | - | -0.17 | 0.118 | 0.145 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 132322 | 1745  | 18.79 | 19.00 | 1.050 | - | - | -0.09 | 0.318 | 0.334 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 132322 | 1745  | 18.76 | 19.00 | 1.057 | - | - | 0.11  | 0.294 | 0.311 |
|         | LTE Band 66 NSA | 20M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 2 | Sensor On  | 132322 | 1745  | 18.79 | 19.00 | 1.050 | - | - | -0.05 | 0.443 | 0.465 |
|         | LTE Band 66 NSA | 20M | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 2 | Sensor On  | 132322 | 1745  | 18.76 | 19.00 | 1.057 | - | - | -0.08 | 0.382 | 0.404 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Front | 31mm | Ant 2 | Full power | 132322 | 1745  | 23.70 | 24.00 | 1.072 | - | - | 0.18  | 0.206 | 0.221 |
|         | LTE Band 66     | 20M | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 2 | Full power | 132322 | 1745  | 23.70 | 24.00 | 1.072 | - | - | -0.04 | 0.066 | 0.071 |





# FCC SAR Test Report

Report No. : FA250505

|         |                 |     |      |     |    |               |       |      |       |            |        |        |       |       |       |   |   |       |       |       |
|---------|-----------------|-----|------|-----|----|---------------|-------|------|-------|------------|--------|--------|-------|-------|-------|---|---|-------|-------|-------|
| 73      | FR1 n66 SA      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | 0.16  | 0.605 | 0.783 |
|         | FR1 n66 SA      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | -0.03 | 0.555 | 0.722 |
|         | FR1 n66 SA      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.38 | 20.50 | 1.294 | - | - | 0.07  | 0.265 | 0.343 |
|         | FR1 n66 SA      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 19.36 | 20.50 | 1.300 | - | - | 0.18  | 0.289 | 0.376 |
|         | FR1 n66 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | 0.08  | 0.395 | 0.496 |
|         | FR1 n66 NSA     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | 0.01  | 0.493 | 0.622 |
|         | FR1 n66 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.51 | 18.50 | 1.256 | - | - | -0.08 | 0.173 | 0.217 |
|         | FR1 n66 NSA     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 349000 | 1745   | 17.49 | 18.50 | 1.262 | - | - | -0.08 | 0.189 | 0.238 |
|         | FR1 n66         | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | -0.03 | 0.088 | 0.113 |
|         | FR1 n66         | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 1 | Full power | 349000 | 1745   | 23.93 | 25.00 | 1.279 | - | - | -0.03 | 0.109 | 0.139 |
|         | FR1 n66 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.05 | 0.347 | 0.440 |
|         | FR1 n66 NSA     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | 0.18  | 0.355 | 0.452 |
|         | FR1 n66 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.97 | 20.00 | 1.268 | - | - | -0.17 | 0.438 | 0.555 |
|         | FR1 n66 NSA     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.95 | 20.00 | 1.274 | - | - | -0.04 | 0.443 | 0.564 |
|         | FR1 n66 NSA     | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 349000 | 1745   | 18.92 | 20.00 | 1.282 | - | - | 0.17  | 0.418 | 0.536 |
|         | FR1 n66 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | -0.12 | 0.216 | 0.274 |
|         | FR1 n66 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 2 | Full power | 349000 | 1745   | 23.97 | 25.00 | 1.268 | - | - | 0.03  | 0.087 | 0.110 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | 0.08  | 0.613 | 0.790 |
|         | FR1 n70         | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Front | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | 0.01  | 0.594 | 0.772 |
| 74      | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.40 | 19.50 | 1.288 | - | - | 0.03  | 0.617 | 0.795 |
|         | FR1 n70         | 15M | QPSK | 36  | 22 | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 340500 | 1702.5 | 18.36 | 19.50 | 1.300 | - | - | -0.08 | 0.597 | 0.776 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | 0.11  | 0.256 | 0.333 |
|         | FR1 n70         | 15M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 2 | Full power | 340500 | 1702.5 | 23.86 | 25.00 | 1.300 | - | - | -0.05 | 0.106 | 0.138 |
| 1900MHz |                 |     |      |     |    |               |       |      |       |            |        |        |       |       |       |   |   |       |       |       |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | 0.11  | 0.863 | 0.962 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26140  | 1860   | 17.22 | 18.00 | 1.197 | - | - | -0.05 | 0.852 | 1.020 |
| 75      | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26590  | 1905   | 17.23 | 18.00 | 1.194 | - | - | 0.18  | 0.870 | 1.039 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | 0.14  | 0.603 | 0.691 |
|         | LTE Band 25 SA  | 20M | QPSK | 100 | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.40 | 18.00 | 1.148 | - | - | -0.17 | 0.605 | 0.695 |
|         | LTE Band 25 SA  | 20M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.53 | 18.00 | 1.114 | - | - | 0.17  | 0.455 | 0.507 |
|         | LTE Band 25 SA  | 20M | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 26340  | 1880   | 17.41 | 18.00 | 1.146 | - | - | -0.05 | 0.372 | 0.426 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | -0.13 | 0.485 | 0.558 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | 0.06  | 0.398 | 0.462 |
|         | LTE Band 2 NSA  | 20M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.39 | 16.00 | 1.151 | - | - | -0.07 | 0.301 | 0.346 |
|         | LTE Band 2 NSA  | 20M | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 18900  | 1880   | 15.35 | 16.00 | 1.161 | - | - | -0.12 | 0.246 | 0.286 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Front | 31mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | -0.03 | 0.218 | 0.285 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 1 | Full power | 26340  | 1880   | 23.84 | 25.00 | 1.306 | - | - | -0.15 | 0.200 | 0.261 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | -0.09 | 0.412 | 0.430 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 26140  | 1860   | 17.47 | 18.00 | 1.130 | - | - | -0.08 | 0.429 | 0.485 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 26590  | 1905   | 17.76 | 18.00 | 1.057 | - | - | 0.13  | 0.399 | 0.422 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | 0.12  | 0.381 | 0.401 |
|         | LTE Band 25 NSA | 20M | QPSK | 100 | 0  | -             | Front | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.75 | 18.00 | 1.059 | - | - | 0.03  | 0.404 | 0.428 |
|         | LTE Band 25 NSA | 20M | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.81 | 18.00 | 1.045 | - | - | 0.18  | 0.288 | 0.301 |
|         | LTE Band 25 NSA | 20M | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 2 | Sensor On  | 26340  | 1880   | 17.78 | 18.00 | 1.052 | - | - | 0.16  | 0.253 | 0.266 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Front | 31mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | -0.18 | 0.321 | 0.350 |
|         | LTE Band 25     | 20M | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 2 | Full power | 26340  | 1880   | 23.62 | 24.00 | 1.091 | - | - | 0.02  | 0.114 | 0.124 |
|         | FR1 n25 SA      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.18 | 0.752 | 0.929 |
| 76      | FR1 n25 SA      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | 0.03  | 0.871 | 1.079 |
|         | FR1 n25 SA      | 40M | QPSK | 216 | 0  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.05 | 19.00 | 1.245 | - | - | -0.15 | 0.797 | 0.992 |
|         | FR1 n25 SA      | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.08 | 19.00 | 1.236 | - | - | -0.15 | 0.627 | 0.775 |
|         | FR1 n25 SA      | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 18.07 | 19.00 | 1.239 | - | - | 0.11  | 0.601 | 0.745 |
|         | FR1 n25 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | -0.13 | 0.464 | 0.525 |
|         | FR1 n25 NSA     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | 0.07  | 0.537 | 0.615 |
|         | FR1 n25 NSA     | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.46 | 17.00 | 1.132 | - | - | 0.16  | 0.399 | 0.452 |
|         | FR1 n25 NSA     | 40M | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 376500 | 1882.5 | 16.41 | 17.00 | 1.146 | - | - | 0.01  | 0.399 | 0.457 |
|         | FR1 n25         | 40M | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 1 | Full power | 376500 | 1882.5 | 24.11 | 25.00 | 1.227 | - | - | -0.01 | 0.189 | 0.232 |



# FCC SAR Test Report

Report No. : FA250505

|         |                  |      |      |     |    |               |       |      |       |            |        |         |       |       |       |      |       |       |       |       |
|---------|------------------|------|------|-----|----|---------------|-------|------|-------|------------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
|         | FR1 n25          | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 1 | Full power | 376500 | 1882.5  | 24.11 | 25.00 | 1.227 | -    | -     | -0.06 | 0.176 | 0.216 |
| 77      | FR1 n2 NSA       | 20M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 2 | Sensor On  | 376000 | 1880    | 18.24 | 19.00 | 1.191 | -    | -     | -0.08 | 0.414 | 0.493 |
|         | FR1 n2 NSA       | 20M  | QPSK | 50  | 28 | DFT-SCS-15KHz | Front | 5mm  | Ant 2 | Sensor On  | 376000 | 1880    | 18.21 | 19.00 | 1.199 | -    | -     | -0.13 | 0.408 | 0.489 |
|         | FR1 n2 NSA       | 20M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 376000 | 1880    | 18.24 | 19.00 | 1.191 | -    | -     | -0.13 | 0.258 | 0.307 |
|         | FR1 n2 NSA       | 20M  | QPSK | 50  | 28 | DFT-SCS-15KHz | Back  | 5mm  | Ant 2 | Sensor On  | 376000 | 1880    | 18.21 | 19.00 | 1.199 | -    | -     | 0.06  | 0.303 | 0.363 |
|         | FR1 n2           | 20M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 2 | Full power | 376000 | 1880    | 24.26 | 25.00 | 1.186 | -    | -     | 0.18  | 0.331 | 0.392 |
|         | FR1 n2           | 20M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 2 | Full power | 376000 | 1880    | 24.26 | 25.00 | 1.186 | -    | -     | -0.17 | 0.124 | 0.147 |
| 2300MHz |                  |      |      |     |    |               |       |      |       |            |        |         |       |       |       |      |       |       |       |       |
| 78      | LTE Band 30      | 10M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 9 | Sensor On  | 27710  | 2310    | 16.73 | 17.50 | 1.194 | -    | -     | -0.04 | 0.375 | 0.448 |
|         | LTE Band 30      | 10M  | QPSK | 25  | 0  | -             | Front | 5mm  | Ant 9 | Sensor On  | 27710  | 2310    | 16.69 | 17.50 | 1.205 | -    | -     | 0.13  | 0.257 | 0.310 |
|         | LTE Band 30      | 10M  | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 9 | Sensor On  | 27710  | 2310    | 16.73 | 17.50 | 1.194 | -    | -     | 0.07  | 0.366 | 0.437 |
|         | LTE Band 30      | 10M  | QPSK | 25  | 0  | -             | Back  | 5mm  | Ant 9 | Sensor On  | 27710  | 2310    | 16.69 | 17.50 | 1.205 | -    | -     | 0.08  | 0.298 | 0.359 |
|         | LTE Band 30      | 10M  | QPSK | 1   | 0  | -             | Front | 31mm | Ant 9 | Full power | 27710  | 2310    | 24.11 | 25.00 | 1.227 | -    | -     | -0.09 | 0.156 | 0.191 |
|         | LTE Band 30      | 10M  | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 9 | Full power | 27710  | 2310    | 24.11 | 25.00 | 1.227 | -    | -     | 0.05  | 0.096 | 0.118 |
| 79      | FR1 n30          | 10M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 9 | Sensor On  | 462000 | 2310    | 16.08 | 17.00 | 1.236 | -    | -     | -0.08 | 0.332 | 0.410 |
|         | FR1 n30          | 10M  | QPSK | 25  | 14 | DFT-SCS-15KHz | Front | 5mm  | Ant 9 | Sensor On  | 462000 | 2310    | 16.05 | 17.00 | 1.245 | -    | -     | -0.08 | 0.213 | 0.265 |
|         | FR1 n30          | 10M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 9 | Sensor On  | 462000 | 2310    | 16.08 | 17.00 | 1.236 | -    | -     | 0.01  | 0.327 | 0.404 |
|         | FR1 n30          | 10M  | QPSK | 25  | 14 | DFT-SCS-15KHz | Back  | 5mm  | Ant 9 | Sensor On  | 462000 | 2310    | 16.05 | 17.00 | 1.245 | -    | -     | -0.11 | 0.208 | 0.259 |
|         | FR1 n30          | 10M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 9 | Full power | 462000 | 2310    | 24.05 | 25.00 | 1.245 | -    | -     | 0.04  | 0.144 | 0.179 |
|         | FR1 n30          | 10M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 9 | Full power | 462000 | 2310    | 24.05 | 25.00 | 1.245 | -    | -     | -0.04 | 0.088 | 0.110 |
| 2600MHz |                  |      |      |     |    |               |       |      |       |            |        |         |       |       |       |      |       |       |       |       |
| 80      | LTE Band 7 SA    | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 13.65 | 14.50 | 1.216 | -    | -     | -0.18 | 0.436 | 0.530 |
|         | LTE Band 7 SA    | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 13.61 | 14.50 | 1.227 | -    | -     | 0.1   | 0.372 | 0.457 |
|         | LTE Band 7 SA    | 20M  | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 13.65 | 14.50 | 1.216 | -    | -     | 0.12  | 0.201 | 0.244 |
|         | LTE Band 7 SA    | 20M  | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 13.61 | 14.50 | 1.227 | -    | -     | 0.08  | 0.179 | 0.220 |
|         | LTE Band 7 NSA   | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 11.71 | 12.50 | 1.199 | -    | -     | -0.05 | 0.284 | 0.341 |
|         | LTE Band 7 NSA   | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 11.68 | 12.50 | 1.208 | -    | -     | -0.15 | 0.243 | 0.293 |
|         | LTE Band 7 NSA   | 20M  | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 11.71 | 12.50 | 1.199 | -    | -     | 0.01  | 0.131 | 0.157 |
|         | LTE Band 7 NSA   | 20M  | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 21100  | 2535    | 11.68 | 12.50 | 1.208 | -    | -     | 0.02  | 0.117 | 0.141 |
|         | LTE Band 7       | 20M  | QPSK | 1   | 0  | -             | Front | 31mm | Ant 1 | Full power | 21100  | 2535    | 24.06 | 25.00 | 1.242 | -    | -     | 0.13  | 0.253 | 0.314 |
|         | LTE Band 7       | 20M  | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 1 | Full power | 21100  | 2535    | 24.06 | 25.00 | 1.242 | -    | -     | -0.18 | 0.190 | 0.236 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 40620  | 2593    | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | -0.09 | 0.702 | 0.894 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 39750  | 2506    | 16.10 | 17.50 | 1.380 | 42.9 | 1.009 | -0.05 | 0.676 | 0.942 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 40185  | 2549.5  | 16.18 | 17.50 | 1.355 | 42.9 | 1.009 | -0.08 | 0.682 | 0.933 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 41055  | 2636.5  | 16.29 | 17.50 | 1.321 | 42.9 | 1.009 | 0.16  | 0.636 | 0.848 |
| 81      | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 41490  | 2680    | 16.17 | 17.50 | 1.358 | 42.9 | 1.009 | 0.05  | 0.774 | 1.061 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 40620  | 2593    | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | 0.05  | 0.577 | 0.741 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 39790  | 2510    | 16.14 | 17.50 | 1.368 | 42.9 | 1.009 | 0.1   | 0.545 | 0.752 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 39750  | 2506    | 16.06 | 17.50 | 1.393 | 42.9 | 1.009 | -0.17 | 0.512 | 0.720 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 40185  | 2549.5  | 16.24 | 17.50 | 1.337 | 42.9 | 1.009 | 0.04  | 0.533 | 0.719 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 41055  | 2636.5  | 16.28 | 17.50 | 1.324 | 42.9 | 1.009 | -0.01 | 0.518 | 0.692 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 41490  | 2680    | 16.15 | 17.50 | 1.365 | 42.9 | 1.009 | -0.08 | 0.520 | 0.716 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 100 | 0  | -             | Front | 5mm  | Ant 1 | Sensor On  | 40620  | 2593    | 16.33 | 17.50 | 1.309 | 42.9 | 1.009 | -0.03 | 0.576 | 0.761 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 40620  | 2593    | 16.49 | 17.50 | 1.262 | 42.9 | 1.009 | -0.15 | 0.463 | 0.589 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 1 | Sensor On  | 40620  | 2593    | 16.45 | 17.50 | 1.274 | 42.9 | 1.009 | 0.02  | 0.448 | 0.576 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Front | 31mm | Ant 1 | Full power | 40620  | 2593    | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | -0.14 | 0.271 | 0.356 |
|         | LTE Band 41 HPUE | 20M  | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 1 | Full power | 40620  | 2593    | 26.86 | 28.00 | 1.300 | 42.9 | 1.009 | -0.19 | 0.155 | 0.203 |
|         | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -    | -     | -0.17 | 0.441 | 0.482 |
| 82      | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Front | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -    | -     | -0.1  | 0.513 | 0.564 |
|         | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.61 | 15.00 | 1.094 | -    | -     | 0.18  | 0.215 | 0.235 |
|         | FR1 n7           | 40M  | QPSK | 108 | 54 | DFT-SCS-15KHz | Back  | 5mm  | Ant 1 | Sensor On  | 507000 | 2535    | 14.59 | 15.00 | 1.099 | -    | -     | -0.17 | 0.235 | 0.258 |
|         | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Front | 31mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -    | -     | -0.16 | 0.268 | 0.295 |
|         | FR1 n7           | 40M  | QPSK | 1   | 1  | DFT-SCS-15KHz | Back  | 30mm | Ant 1 | Full power | 507000 | 2535    | 24.59 | 25.00 | 1.099 | -    | -     | -0.12 | 0.184 | 0.202 |
|         | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50   | 1.000 | -0.06 | 0.421 | 0.582 |
|         | FR1 n41 HPUE     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50   | 1.000 | -0.14 | 0.303 | 0.423 |
|         | FR1 n41 HPUE     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.59 | 18.00 | 1.384 | 50   | 1.000 | -0.19 | 0.193 | 0.267 |



# FCC SAR Test Report

Report No. : FA250505

|              |                      |      |      |     |    |               |       |      |       |            |        |         |       |       |       |      |       |       |       |       |
|--------------|----------------------|------|------|-----|----|---------------|-------|------|-------|------------|--------|---------|-------|-------|-------|------|-------|-------|-------|-------|
|              | FR1 n41 HPUE         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 2 | Sensor On  | 518598 | 2592.99 | 16.55 | 18.00 | 1.396 | 50   | 1.000 | 0.01  | 0.146 | 0.204 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50   | 1.000 | 0.08  | 0.287 | 0.397 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 2 | Full power | 518598 | 2592.99 | 25.59 | 27.00 | 1.384 | 50   | 1.000 | 0.16  | 0.238 | 0.329 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50   | 1.000 | 0.08  | 0.454 | 0.592 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50   | 1.000 | 0.16  | 0.514 | 0.676 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.85 | 16.00 | 1.303 | 50   | 1.000 | 0.01  | 0.211 | 0.275 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 14.81 | 16.00 | 1.315 | 50   | 1.000 | -0.16 | 0.231 | 0.304 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50   | 1.000 | -0.13 | 0.311 | 0.392 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50   | 1.000 | 0.05  | 0.352 | 0.450 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.99 | 14.00 | 1.262 | 50   | 1.000 | -0.11 | 0.144 | 0.182 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 518598 | 2592.99 | 12.93 | 14.00 | 1.279 | 50   | 1.000 | 0.07  | 0.158 | 0.202 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 8 | Full power | 518598 | 2592.99 | 25.84 | 27.00 | 1.306 | 50   | 1.000 | -0.01 | 0.188 | 0.246 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 8 | Full power | 518598 | 2592.99 | 25.84 | 27.00 | 1.306 | 50   | 1.000 | -0.13 | 0.213 | 0.278 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 23.01 | 23.50 | 1.119 | 50   | 1.000 | 0.18  | 0.657 | 0.735 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 22.96 | 23.50 | 1.132 | 50   | 1.000 | 0.14  | 0.591 | 0.669 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 23.01 | 23.50 | 1.119 | 50   | 1.000 | 0.09  | 0.516 | 0.578 |
|              | FR1 n41 HPUE SA      | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 22.96 | 23.50 | 1.132 | 50   | 1.000 | -0.13 | 0.317 | 0.359 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 21.09 | 21.50 | 1.099 | 50   | 1.000 | 0.18  | 0.431 | 0.474 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 21.06 | 21.50 | 1.107 | 50   | 1.000 | 0.14  | 0.388 | 0.429 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 21.09 | 21.50 | 1.099 | 50   | 1.000 | 0.09  | 0.339 | 0.373 |
|              | FR1 n41 HPUE NSA     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 518598 | 2592.99 | 21.06 | 21.50 | 1.107 | 50   | 1.000 | -0.13 | 0.208 | 0.230 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 1 | Full power | 518598 | 2592.99 | 27.50 | 28.00 | 1.122 | 50   | 1.000 | 0.16  | 0.305 | 0.342 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 1 | Full power | 518598 | 2592.99 | 27.50 | 28.00 | 1.122 | 50   | 1.000 | -0.15 | 0.237 | 0.266 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 518598 | 2592.99 | 18.60 | 20.00 | 1.380 | 50   | 1.000 | 0.03  | 0.486 | 0.671 |
| 83           | FR1 n41 HPUE         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 518598 | 2592.99 | 18.57 | 20.00 | 1.390 | 50   | 1.000 | 0.06  | 0.545 | 0.758 |
|              | FR1 n41 HPUE         | 100M | QPSK | 270 | 0  | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 518598 | 2592.99 | 18.53 | 20.00 | 1.403 | 50   | 1.000 | 0.01  | 0.521 | 0.731 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 518598 | 2592.99 | 18.60 | 20.00 | 1.380 | 50   | 1.000 | -0.17 | 0.425 | 0.587 |
|              | FR1 n41 HPUE         | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 518598 | 2592.99 | 18.57 | 20.00 | 1.390 | 50   | 1.000 | 0.02  | 0.464 | 0.645 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 9 | Full power | 518598 | 2592.99 | 23.60 | 25.00 | 1.380 | 50   | 1.000 | -0.09 | 0.145 | 0.200 |
|              | FR1 n41 HPUE         | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 9 | Full power | 518598 | 2592.99 | 23.60 | 25.00 | 1.380 | 50   | 1.000 | 0.07  | 0.088 | 0.121 |
| 3500-3900MHz |                      |      |      |     |    |               |       |      |       |            |        |         |       |       |       |      |       |       |       |       |
|              | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Front | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | -0.13 | 0.100 | 0.106 |
|              | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Front | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.17  | 0.078 | 0.083 |
| 84           | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Back  | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.78 | 22.00 | 1.052 | 62.9 | 1.006 | 0.06  | 0.515 | 0.545 |
|              | LTE Band 48          | 20M  | QPSK | 50  | 0  | -             | Back  | 5mm  | Ant 9 | Sensor On  | 55830  | 3609    | 21.76 | 22.00 | 1.057 | 62.9 | 1.006 | 0.11  | 0.434 | 0.461 |
|              | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Front | 31mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | 0.02  | 0.031 | 0.033 |
|              | LTE Band 48          | 20M  | QPSK | 1   | 0  | -             | Back  | 30mm | Ant 9 | Full power | 55830  | 3609    | 24.75 | 25.00 | 1.059 | 62.9 | 1.006 | 0.12  | 0.099 | 0.105 |
|              | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | 0.03  | 0.068 | 0.083 |
|              | FR1 n48              | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.18  | 0.063 | 0.078 |
| 85           | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.12 | 20.00 | 1.225 | -    | -     | 0.16  | 0.377 | 0.462 |
|              | FR1 n48              | 40M  | QPSK | 50  | 28 | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 641666 | 3624.99 | 19.09 | 20.00 | 1.233 | -    | -     | 0.18  | 0.369 | 0.455 |
|              | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | -0.04 | 0.059 | 0.073 |
|              | FR1 n48              | 40M  | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 9 | Full power | 641666 | 3624.99 | 24.06 | 25.00 | 1.242 | -    | -     | -0.08 | 0.233 | 0.289 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | 0.16  | 0.297 | 0.370 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | -0.15 | 0.207 | 0.259 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.55 | 14.50 | 1.245 | 50   | 1.000 | -0.02 | 0.118 | 0.147 |
|              | FR1 n77 Part 270 SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 13.52 | 14.50 | 1.253 | 50   | 1.000 | -0.09 | 0.103 | 0.129 |
|              | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50   | 1.000 | -0.03 | 0.191 | 0.238 |
|              | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50   | 1.000 | 0.09  | 0.133 | 0.167 |
|              | FR1 n77 Part 270 NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.55 | 12.50 | 1.245 | 50   | 1.000 | -0.17 | 0.076 | 0.095 |
|              | FR1 n77 Part 270 NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 656000 | 3840    | 11.52 | 12.50 | 1.253 | 50   | 1.000 | -0.1  | 0.066 | 0.083 |
|              | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50   | 1.000 | 0.16  | 0.313 | 0.393 |
|              | FR1 n77 Part 270     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 8 | Full power | 656000 | 3840    | 26.01 | 27.00 | 1.256 | 50   | 1.000 | -0.06 | 0.400 | 0.502 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50   | 1.000 | -0.08 | 0.136 | 0.172 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50   | 1.000 | -0.1  | 0.146 | 0.187 |
|              | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.48 | 14.50 | 1.265 | 50   | 1.000 | -0.01 | 0.090 | 0.114 |



# FCC SAR Test Report

Report No. : FA250505

|    |                      |      |      |     |    |               |       |      |       |            |        |         |       |       |       |    |       |       |       |       |
|----|----------------------|------|------|-----|----|---------------|-------|------|-------|------------|--------|---------|-------|-------|-------|----|-------|-------|-------|-------|
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 13.42 | 14.50 | 1.282 | 50 | 1.000 | -0.09 | 0.088 | 0.113 |
|    | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | 0.18  | 0.093 | 0.118 |
|    | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | -0.19 | 0.100 | 0.128 |
|    | FR1 n77 Part 27Q NSA | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.48 | 12.50 | 1.265 | 50 | 1.000 | -0.16 | 0.061 | 0.077 |
|    | FR1 n77 Part 27Q NSA | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 8 | Sensor On  | 633334 | 3500.01 | 11.42 | 12.50 | 1.282 | 50 | 1.000 | -0.08 | 0.060 | 0.077 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | 0.17  | 0.339 | 0.442 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 8 | Full power | 633334 | 3500.01 | 25.85 | 27.00 | 1.303 | 50 | 1.000 | -0.15 | 0.345 | 0.450 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | 0.11  | 0.281 | 0.294 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | -0.13 | 0.194 | 0.204 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.81 | 18.00 | 1.045 | 50 | 1.000 | 0.12  | 0.238 | 0.249 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 656000 | 3840    | 17.79 | 18.00 | 1.050 | 50 | 1.000 | -0.11 | 0.188 | 0.197 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | 0.07  | 0.368 | 0.391 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 1 | Full power | 656000 | 3840    | 26.74 | 27.00 | 1.062 | 50 | 1.000 | 0.08  | 0.467 | 0.496 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | -0.15 | 0.126 | 0.159 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | -0.12 | 0.100 | 0.127 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.99 | 18.00 | 1.262 | 50 | 1.000 | -0.17 | 0.075 | 0.095 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 1 | Sensor On  | 633334 | 3500.01 | 16.95 | 18.00 | 1.274 | 50 | 1.000 | 0.08  | 0.075 | 0.096 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | 0.07  | 0.162 | 0.209 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 1 | Full power | 633334 | 3500.01 | 25.89 | 27.00 | 1.291 | 50 | 1.000 | -0.12 | 0.189 | 0.244 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | 0.16  | 0.074 | 0.082 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | -0.1  | 0.075 | 0.085 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.55 | 19.00 | 1.109 | 50 | 1.000 | 0.07  | 0.305 | 0.338 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 656000 | 3840    | 18.48 | 19.00 | 1.127 | 50 | 1.000 | 0.18  | 0.309 | 0.348 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | 0.01  | 0.131 | 0.150 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 9 | Full power | 656000 | 3840    | 26.40 | 27.00 | 1.148 | 50 | 1.000 | -0.11 | 0.269 | 0.309 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.08 | 0.220 | 0.307 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | -0.04 | 0.172 | 0.241 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | 0.17  | 0.391 | 0.546 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 9 | Sensor On  | 633334 | 3500.01 | 17.53 | 19.00 | 1.403 | 50 | 1.000 | 0.18  | 0.388 | 0.544 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | -0.01 | 0.384 | 0.546 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 9 | Full power | 633334 | 3500.01 | 25.47 | 27.00 | 1.422 | 50 | 1.000 | -0.12 | 0.287 | 0.408 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | 0.16  | 0.222 | 0.270 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | -0.1  | 0.204 | 0.254 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.15 | 19.00 | 1.216 | 50 | 1.000 | 0.07  | 0.219 | 0.266 |
|    | FR1 n77 Part 27O SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 2 | Sensor On  | 656000 | 3840    | 18.05 | 19.00 | 1.245 | 50 | 1.000 | 0.18  | 0.207 | 0.258 |
| 86 | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | -0.14 | 0.695 | 0.861 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 2 | Full power | 650000 | 3750    | 26.42 | 27.50 | 1.282 | 50 | 1.000 | 0.12  | 0.644 | 0.826 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 2 | Full power | 662000 | 3930    | 26.41 | 27.50 | 1.285 | 50 | 1.000 | 0.08  | 0.639 | 0.821 |
|    | FR1 n77 Part 27O     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 2 | Full power | 656000 | 3840    | 26.57 | 27.50 | 1.239 | 50 | 1.000 | -0.15 | 0.519 | 0.643 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | -0.15 | 0.258 | 0.360 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Front | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | -0.15 | 0.255 | 0.359 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.55 | 19.00 | 1.396 | 50 | 1.000 | 0.11  | 0.292 | 0.408 |
|    | FR1 n77 Part 27Q SA  | 100M | QPSK | 135 | 69 | DFT-SCS-30KHz | Back  | 5mm  | Ant 2 | Sensor On  | 633334 | 3500.01 | 17.51 | 19.00 | 1.409 | 50 | 1.000 | -0.08 | 0.274 | 0.386 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Front | 31mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | 0.01  | 0.459 | 0.651 |
|    | FR1 n77 Part 27Q     | 100M | QPSK | 1   | 1  | DFT-SCS-30KHz | Back  | 30mm | Ant 2 | Full power | 633334 | 3500.01 | 25.98 | 27.50 | 1.419 | 50 | 1.000 | 0.02  | 0.278 | 0.394 |



# FCC SAR Test Report

Report No. : FA250505

| Plot No.      | Band       | Mode                | Test Position | Gap (mm) | Antenna    | Power Reduction | 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) |
|---------------|------------|---------------------|---------------|----------|------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| WLAN/BT/ LORA |            |                     |               |          |            |                 |     |             |                     |                     |                        |              |                           |                  |                        |                        |
| 87            | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.07            | 0.252                  | 0.392                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(4) | Full power      | 6   | 2437        | 13.21               | 15.00               | 1.510                  | 100          | 1.000                     | 0.12             | 0.245                  | 0.370                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 5mm      | Ant 3+4(4) | Full power      | 11  | 2462        | 13.17               | 15.00               | 1.524                  | 100          | 1.000                     | 0.03             | 0.227                  | 0.346                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Back          | 5mm      | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.17            | 0.135                  | 0.210                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Front         | 31mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | -0.09            | 0.001                  | 0.002                  |
|               | WLAN2.4GHz | 802.11b 1Mbps       | Back          | 30mm     | Ant 3+4(3) | Full power      | 1   | 2412        | 12.58               | 14.50               | 1.556                  | 100          | 1.000                     | 0.18             | 0.022                  | 0.034                  |
| 88            | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | -0.05            | 0.042                  | 0.046                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 39  | 2441        | 8.15                | 8.50                | 1.084                  | 76.64        | 1.087                     | 0.02             | 0.036                  | 0.042                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 4      | Full power      | 78  | 2480        | 7.72                | 8.00                | 1.067                  | 76.64        | 1.087                     | 0.03             | 0.033                  | 0.038                  |
|               | Bluetooth  | 1Mbps               | Back          | 5mm      | Ant 4      | Full power      | 0   | 2402        | 8.48                | 8.50                | 1.005                  | 76.64        | 1.087                     | 0.01             | 0.022                  | 0.024                  |
|               | Bluetooth  | 1Mbps               | Front         | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | -0.01            | 0.036                  | 0.041                  |
|               | Bluetooth  | 1Mbps               | Back          | 5mm      | Ant 3      | Full power      | 0   | 2402        | 7.81                | 8.00                | 1.045                  | 76.79        | 1.085                     | -0.08            | 0.036                  | 0.041                  |
|               | WLAN5.3GHz | 802.11n-HT40 MCS0   | Front         | 5mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | 0.01             | 0.070                  | 0.105                  |
| 89            | WLAN5.3GHz | 802.11n-HT40 MCS0   | Back          | 5mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | 0.03             | 0.139                  | 0.208                  |
|               | WLAN5.3GHz | 802.11n-HT40 MCS0   | Back          | 5mm      | Ant 3+4(3) | Full power      | 62  | 5310        | 13.72               | 15.50               | 1.507                  | 98.54        | 1.015                     | 0.02             | 0.121                  | 0.185                  |
|               | WLAN5.3GHz | 802.11n-HT40 MCS0   | Front         | 31mm     | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | -0.06            | 0.001                  | 0.001                  |
|               | WLAN5.3GHz | 802.11n-HT40 MCS0   | Back          | 30mm     | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | -0.15            | 0.007                  | 0.010                  |
|               | WLAN5.5GHz | 802.11n-HT40 MCS0   | Front         | 5mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.08            | 0.062                  | 0.094                  |
| 90            | WLAN5.5GHz | 802.11n-HT40 MCS0   | Back          | 5mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.01            | 0.135                  | 0.205                  |
|               | WLAN5.5GHz | 802.11n-HT40 MCS0   | Back          | 5mm      | Ant 3+4(4) | Full power      | 102 | 5510        | 9.79                | 11.50               | 1.483                  | 98.54        | 1.015                     | 0.08             | 0.110                  | 0.166                  |
|               | WLAN5.5GHz | 802.11n-HT40 MCS0   | Back          | 5mm      | Ant 3+4(3) | Full power      | 134 | 5670        | 13.85               | 15.50               | 1.462                  | 98.54        | 1.015                     | 0.01             | 0.121                  | 0.180                  |
|               | WLAN5.5GHz | 802.11n-HT40 MCS0   | Front         | 31mm     | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.12            | 0.001                  | 0.002                  |
|               | WLAN5.5GHz | 802.11n-HT40 MCS0   | Back          | 30mm     | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.16            | 0.004                  | 0.006                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Front         | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.08             | 0.054                  | 0.085                  |
| 91            | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 5mm      | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.01             | 0.145                  | 0.229                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Front         | 31mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | -0.03            | 0.054                  | 0.085                  |
|               | WLAN5.8GHz | 802.11ac-VHT80 MCS0 | Back          | 30mm     | Ant 3+4(3) | Full power      | 155 | 5775        | 9.01                | 11.00               | 1.581                  | 100          | 1.000                     | 0.17             | 0.001                  | 0.002                  |
| 92            | LORA       | DTS-500K            | Front         | 5mm      | Ant 8      | Sensor On       | 1   | 904         | 26.48               | 27.00               | 1.127                  | 100          | 0.500                     | 0.18             | 1.830                  | 1.031                  |
|               | LORA       | DTS-500K            | Front         | 5mm      | Ant 8      | Sensor On       | 12  | 915         | 25.96               | 27.00               | 1.271                  | 100          | 0.500                     | 0.16             | 1.350                  | 0.858                  |
|               | LORA       | DTS-500K            | Front         | 5mm      | Ant 8      | Sensor On       | 23  | 926         | 25.25               | 27.00               | 1.496                  | 100          | 0.500                     | -0.1             | 0.922                  | 0.690                  |
|               | LORA       | DTS-500K            | Back          | 5mm      | Ant 8      | Sensor On       | 1   | 904         | 26.48               | 27.00               | 1.127                  | 100          | 0.500                     | 0.07             | 1.370                  | 0.772                  |
|               | LORA       | DTS-500K            | Front         | 31mm     | Ant 8      | Full power      | 1   | 904         | 27.95               | 28.50               | 1.135                  | 100          | 1.000                     | 0.06             | 0.308                  | 0.350                  |
|               | LORA       | DTS-500K            | Back          | 30mm     | Ant 8      | Full power      | 1   | 904         | 27.95               | 28.50               | 1.135                  | 100          | 1.000                     | 0.01             | 0.385                  | 0.437                  |



## 15.4 Extremity SAR

| Plot No. | Band       | Mode              | Test Position | Gap (mm) | Antenna    | Power Reduction | Ch. | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|------------|-------------------|---------------|----------|------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
| WLAN     |            |                   |               |          |            |                 |     |             |                     |                     |                        |              |                           |                  |                         |                         |
| 93       | WLAN5.2GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(3) | Full power      | 46  | 5230        | 13.30               | 15.00               | 1.479                  | 98.54        | 1.015                     | 0.03             | 0.698                   | 1.048                   |
|          | WLAN5.2GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(3) | Full power      | 38  | 5190        | 13.13               | 15.00               | 1.538                  | 98.54        | 1.015                     | 0.01             | 0.611                   | 0.954                   |
|          | WLAN5.3GHz | 802.11n-HT40 MCS0 | Front         | 0mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | 0.05             | 0.214                   | 0.321                   |
|          | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 0mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | 0.06             | 0.633                   | 0.948                   |
|          | WLAN5.3GHz | 802.11n-HT40 MCS0 | Left Side     | 0mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | -0.09            | 0.470                   | 0.704                   |
| 94       | WLAN5.3GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | -0.02            | 0.975                   | 1.460                   |
|          | WLAN5.3GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(3) | Full power      | 62  | 5310        | 13.72               | 15.50               | 1.507                  | 98.54        | 1.015                     | 0.01             | 0.879                   | 1.344                   |
|          | WLAN5.3GHz | 802.11n-HT40 MCS0 | Top Side      | 0mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | -0.08            | 0.121                   | 0.181                   |
|          | WLAN5.3GHz | 802.11n-HT40 MCS0 | Bottom Side   | 0mm      | Ant 3+4(4) | Full power      | 54  | 5270        | 13.31               | 15.00               | 1.476                  | 98.54        | 1.015                     | 0.13             | 0.043                   | 0.064                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Front         | 0mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | 0.12             | 0.159                   | 0.242                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | 0.03             | 0.635                   | 0.967                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Side     | 0mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | 0.18             | 0.589                   | 0.897                   |
| 95       | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.08            | 0.775                   | 1.180                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(4) | Full power      | 102 | 5510        | 9.79                | 11.50               | 1.483                  | 98.54        | 1.015                     | -0.08            | 0.642                   | 0.966                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(3) | Full power      | 134 | 5670        | 13.85               | 15.50               | 1.462                  | 98.54        | 1.015                     | -0.08            | 0.618                   | 0.917                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Side    | 0mm      | Ant 3+4(3) | Full power      | 142 | 5710        | 13.61               | 15.50               | 1.545                  | 98.54        | 1.015                     | -0.08            | 0.622                   | 0.976                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Top Side      | 0mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | 0.16             | 0.123                   | 0.187                   |
|          | WLAN5.5GHz | 802.11n-HT40 MCS0 | Bottom Side   | 0mm      | Ant 3+4(3) | Full power      | 110 | 5550        | 14.24               | 16.00               | 1.500                  | 98.54        | 1.015                     | -0.1             | 0.045                   | 0.068                   |



**15.5 Repeated SAR Measurement**

| Plot No. | Band            | BW (MHz) | Modulation | RB Size | RB offset | Mode          | Test Position | Gap (mm) | Antenna | Power State | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Ratio | Reported 1g SAR (W/kg) |
|----------|-----------------|----------|------------|---------|-----------|---------------|---------------|----------|---------|-------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|-------|------------------------|
| 1st      | LTE Band 14 SA  | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On   | 23330  | 793         | 24.21               | 24.50               | 1.069                  | -            | -                         | -0.09            | 1.010                  | 1     | 1.080                  |
| 2nd      | LTE Band 14 SA  | 10M      | QPSK       | 1       | 0         | -             | Back          | 5mm      | Ant 1   | Sensor On   | 23330  | 793         | 24.21               | 24.50               | 1.069                  | -            | -                         | 0.01             | 0.995                  | 1.015 | 1.064                  |
| 1st      | LTE Band 66     | 20M      | QPSK       | 1       | 0         | -             | Top Side      | 5mm      | Ant 1   | Sensor On   | 132572 | 1770        | 18.96               | 20.00               | 1.271                  | -            | -                         | -0.12            | 0.916                  | 1     | 1.164                  |
| 2nd      | LTE Band 66     | 20M      | QPSK       | 1       | 0         | -             | Top Side      | 5mm      | Ant 1   | Sensor On   | 132572 | 1770        | 18.96               | 20.00               | 1.271                  | -            | -                         | 0.05             | 0.908                  | 1.009 | 1.154                  |
| 1st      | FR1 n25 SA      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On   | 376500 | 1882.5      | 18.07               | 19.00               | 1.239                  | -            | -                         | 0.03             | 0.871                  | 1     | 1.079                  |
| 2nd      | FR1 n25 SA      | 40M      | QPSK       | 108     | 54        | DFT-SCS-15KHz | Front         | 5mm      | Ant 1   | Sensor On   | 376500 | 1882.5      | 18.07               | 19.00               | 1.239                  | -            | -                         | 0.05             | 0.855                  | 1.019 | 1.059                  |
| 1st      | LORA            | -        | -          | -       | -         | DTS-500K      | Front         | 5mm      | Ant 8   | Sensor On   | 1      | 904         | 26.48               | 27.00               | 1.127                  | 100          | 0.500                     | 0.18             | 1.830                  | 1     | 1.031                  |
| 2nd      | LORA            | -        | -          | -       | -         | DTS-500K      | Front         | 5mm      | Ant 8   | Sensor On   | 1      | 904         | 26.48               | 27.00               | 1.127                  | 100          | 0.500                     | 0.05             | 1.750                  | 1.046 | 0.986                  |
| 1st      | FR1 n26         | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Sensor On   | 167800 | 839         | 22.60               | 23.00               | 1.096                  | -            | -                         | 0.03             | 0.972                  | 1     | 1.066                  |
| 2nd      | FR1 n26         | 20M      | QPSK       | 50      | 28        | DFT-SCS-15KHz | Back          | 5mm      | Ant 1   | Sensor On   | 167800 | 839         | 22.60               | 23.00               | 1.096                  | -            | -                         | 0.01             | 0.966                  | 1.006 | 1.059                  |
| 1st      | FR1 n41 HPUE SA | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz | Left Side     | 5mm      | Ant 1   | Sensor On   | 518598 | 2592.99     | 23.01               | 23.50               | 1.119                  | 50           | 1.000                     | 0.02             | 0.922                  | 1     | 1.032                  |
| 2nd      | FR1 n41 HPUE SA | 100M     | QPSK       | 1       | 1         | DFT-SCS-30KHz | Left Side     | 5mm      | Ant 1   | Sensor On   | 518598 | 2592.99     | 23.01               | 23.50               | 1.119                  | 50           | 1.000                     | 0.08             | 0.915                  | 1.008 | 1.024                  |

**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  $\leq 1.2$  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.

## 16. Simultaneous Transmission Analysis

| No. | Simultaneous Transmission Configurations | Relay |           |         |           |
|-----|------------------------------------------|-------|-----------|---------|-----------|
|     |                                          | Face  | Body-worn | Hotspot | Extremity |
| 1.  | WWAN + WLAN2.4GHz                        | Yes   | Yes       | Yes     | Yes       |
| 2.  | WWAN + WLAN5GHz                          | Yes   | Yes       | Yes     | Yes       |
| 3.  | WWAN + WLAN6GHz                          | Yes   | Yes       |         | Yes       |
| 4.  | WWAN + WLAN2.4GHz+ Bluetooth             | Yes   | Yes       | Yes     | Yes       |
| 5.  | WWAN + WLAN5GHz+ Bluetooth               | Yes   | Yes       | Yes     | Yes       |
| 6.  | WWAN + WLAN6GHz+ Bluetooth               | Yes   | Yes       |         | Yes       |
| 7.  | WWAN + WLAN2.4GHz+ NFC                   |       |           |         | Yes       |
| 8.  | WWAN + WLAN5GHz+ NFC                     |       |           |         | Yes       |
| 9.  | WWAN + WLAN6GHz+ NFC                     |       |           |         | Yes       |
| 10. | WWAN + WLAN2.4GHz+ Bluetooth+ NFC        |       |           |         | Yes       |
| 11. | WWAN + WLAN5GHz+ Bluetooth+ NFC          |       |           |         | Yes       |
| 12. | WWAN + WLAN6GHz+ Bluetooth+ NFC          |       |           |         | Yes       |

**General Note:**

- EUT will choose each LTE and NR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- WWAN above includes 5G NR bands and EN-DC combination.
- 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). LoRa and WLAN6GHz have no hotspot function.
- The 2.4GHz/5GHz/6GHz WLAN can transmit in SISO/MIMO antenna mode and MIMO SAR can represent SISO SAR
- EUT will choose either WLAN 2.4GHz or WLAN 5GHz according to the network signal condition; therefore, 2.4GHz WLAN and 5GHz WLAN will not operate simultaneously at any moment though they have independent antenna.
- According to the EUT characteristic, WLAN 5GHz/6GHz and Bluetooth can transmit simultaneously.
- LoRa only has standalone and cannot transmit simultaneously with any other frequency bands.
- According to the EUT characteristic, WLAN 5GHz/6GHz and WLAN 2.4GHz can't transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 6GHz can't transmit simultaneously.
- According to the EUT characteristic, WLAN 2.4GHz and Bluetooth can transmit simultaneously.
- According to the EUT characteristic, Bluetooth only supports SISO mode and BT standalone SAR summed together do co-located analysis more conservatively.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
- For standalone WWAN, always choose the highest SAR among the selected WWAN bands within the selected antenna for each exposure position to perform simultaneous transmission analysis with WLAN. This is the worst co-located analysis and can represent each band.
- 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.
- All licensed modes share the same antenna part and cannot transmit simultaneously.
- The reported SAR summation is calculated based on the same configuration and test position
- For standalone WWAN, always choose the highest SAR among all WWAN bands within the selected antenna to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each band.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
  - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - If  $SPLSR \leq 0.04$  for 1g SAR and  $SPLSR \leq 0.10$  for 10g SAR, simultaneously transmission SAR measurement is not necessary.
  - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
- The WLAN6GHz Sim-Tx analysis guidance with other transmitters was based on SAR test results. The simultaneous transmission and test exemption analysis were compliant with KDB 447498 D01. For the device does not support



FR2 or other MPE field measurement, therefore section 16 in the SAR report has no TER analysis according to KDB 987594 requirement.

21. The simultaneous transmission analysis, considering UWB power is very smaller and no risk, the contribution of UWB to the total TER can be neglected.

### 16.1 In Front of Face Exposure Conditions

| WWAN Band | Exposure Position | 1             | 3                  | 4                | 5               | 6               | 7                | 1+4+5+6       | 1+3+5+6       | 1+5+6+7       |
|-----------|-------------------|---------------|--------------------|------------------|-----------------|-----------------|------------------|---------------|---------------|---------------|
|           |                   | WWAN          | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | WLAN6GHz Ant 3+4 | Summed        | Summed        | Summed        |
|           |                   | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg)    | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands | Front             | 1.079         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.30          | 1.56          | 1.20          |

<ENDC>

| WWAN Band                          | FR1 Band                       | Exposure Position | 1             | 2             | 3                  | 4                | 5               | 6               | 7                | 1+4+5+6+2     | 1+3+5+6+2     | 1+5+6+7+2     |
|------------------------------------|--------------------------------|-------------------|---------------|---------------|--------------------|------------------|-----------------|-----------------|------------------|---------------|---------------|---------------|
|                                    |                                |                   | WWAN          | FR1           | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | WLAN6GHz Ant 3+4 | Summed        | Summed        | Summed        |
|                                    |                                |                   | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg)    | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands Ant 1(B2,B5,B12,B13,B14) | All Bands Ant 2(N66,N2)        | Front             | 0.601         | 0.493         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.32          | 1.57          | 1.21          |
| All Bands Ant 1(B2,5,B12,13,B14,7) | All Bands Ant 9(N30,N77,N78)   | Front             | 0.601         | 0.410         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.24          | 1.49          | 1.13          |
| All Bands Ant 2(B2,B66)            | All Bands Ant 1(N5,71,2,25,41) | Front             | 0.485         | 0.615         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.33          | 1.58          | 1.22          |
| All Bands Ant 2(B66)               | All Bands Ant 9(N30)           | Front             | 0.334         | 0.410         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 0.97          | 1.22          | 0.86          |
| All Bands Ant 2(B25,B66)           | All Bands Ant 8(N41,N77,N78)   | Front             | 0.598         | 0.450         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.27          | 1.53          | 1.17          |
| All Bands Ant 9(B30)               | All Bands Ant 1(N2,5,66)       | Front             | 0.448         | 0.622         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.30          | 1.55          | 1.19          |

**16.2 Hotspot Exposure Conditions**

| WWAN Band | Exposure Position | 1             | 3                  | 4                | 5               | 6               | 1+4+5+6       | 1+3+5+6       |
|-----------|-------------------|---------------|--------------------|------------------|-----------------|-----------------|---------------|---------------|
|           |                   | WWAN          | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | Summed        | Summed        |
|           |                   | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands | Front             | 1.079         | 0.392              | 0.138            | 0.041           | 0.046           | 1.30          | 1.56          |
|           | Back              | 1.173         | 0.210              | 0.229            | 0.041           | 0.024           | 1.47          | 1.45          |
|           | Left side         | 1.068         | 0.272              | 0.284            | 0.058           | 0.004           | 1.41          | 1.40          |
|           | Right side        | 0.753         | 0.142              | 0.658            | 0.001           | 0.041           | 1.45          | 0.94          |
|           | Top side          | 1.164         | 0.086              | 0.171            |                 | 0.010           | 1.35          | 1.26          |
|           | Bottom side       | 1.168         | 0.171              | 0.038            | 0.023           |                 | 1.23          | 1.36          |

**Sensor Off**

| WWAN Band       | Exposure Position | 1             | 3                  | 4                | 5               | 6               | 1+4+5+6       | 1+3+5+6       |
|-----------------|-------------------|---------------|--------------------|------------------|-----------------|-----------------|---------------|---------------|
|                 |                   | WWAN          | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | Summed        | Summed        |
|                 |                   | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands Ant 1 | Front             | 0.468         | 0.002              | 0.085            | 0.041           | 0.046           | 0.64          | 0.56          |
|                 | Back              | 0.617         | 0.034              | 0.018            | 0.041           | 0.024           | 0.70          | 0.72          |
|                 | Left side         | 0.206         | 0.002              | 0.025            | 0.058           | 0.004           | 0.29          | 0.27          |
|                 | Right side        | 0.397         | 0.028              | 0.017            | 0.001           | 0.041           | 0.46          | 0.47          |
|                 | Top side          | 1.147         | 0.028              | 0.014            |                 | 0.010           | 1.17          | 1.19          |
|                 | Bottom side       | 0.061         | 0.045              | 0.018            | 0.023           |                 | 0.10          | 0.13          |
| All Bands Ant 2 | Front             | 0.957         | 0.002              | 0.085            | 0.041           | 0.046           | 1.13          | 1.05          |
|                 | Back              | 0.692         | 0.034              | 0.018            | 0.041           | 0.024           | 0.78          | 0.79          |
|                 | Left side         | 0.202         | 0.002              | 0.025            | 0.058           | 0.004           | 0.29          | 0.27          |
|                 | Right side        | 0.457         | 0.028              | 0.017            | 0.001           | 0.041           | 0.52          | 0.53          |
|                 | Top side          | 0.080         | 0.028              | 0.014            |                 | 0.010           | 0.10          | 0.12          |
|                 | Bottom side       | 0.715         | 0.045              | 0.018            | 0.023           |                 | 0.76          | 0.78          |
| All Bands Ant 8 | Front             | 0.852         | 0.002              | 0.085            | 0.041           | 0.046           | 1.02          | 0.94          |
|                 | Back              | 0.625         | 0.034              | 0.018            | 0.041           | 0.024           | 0.71          | 0.72          |
|                 | Left side         | 1.160         | 0.002              | 0.025            | 0.058           | 0.004           | 1.25          | 1.22          |
|                 | Right side        | 0.125         | 0.028              | 0.017            | 0.001           | 0.041           | 0.18          | 0.20          |
|                 | Top side          | 0.171         | 0.028              | 0.014            |                 | 0.010           | 0.20          | 0.21          |
|                 | Bottom side       | 0.143         | 0.045              | 0.018            | 0.023           |                 | 0.18          | 0.21          |
| All Bands Ant 9 | Front             | 0.546         | 0.002              | 0.085            | 0.041           | 0.046           | 0.72          | 0.64          |
|                 | Back              | 0.408         | 0.034              | 0.018            | 0.041           | 0.024           | 0.49          | 0.51          |
|                 | Left side         | 0.101         | 0.002              | 0.025            | 0.058           | 0.004           | 0.19          | 0.17          |
|                 | Right side        | 1.108         | 0.028              | 0.017            | 0.001           | 0.041           | 1.17          | 1.18          |
|                 | Top side          | 0.041         | 0.028              | 0.014            |                 | 0.010           | 0.07          | 0.08          |
|                 | Bottom side       | 0.289         | 0.045              | 0.018            | 0.023           |                 | 0.33          | 0.36          |



&lt;ENDC&gt;

| WWAN Band                             | FR1 Band                          | Exposure Position | 1                   | 2                   | 3                     | 4                   | 5                  | 6                  | 1+4+5+6+2<br>Summed<br>1g SAR<br>(W/kg) | 1+3+5+6+2<br>Summed<br>1g SAR<br>(W/kg) |
|---------------------------------------|-----------------------------------|-------------------|---------------------|---------------------|-----------------------|---------------------|--------------------|--------------------|-----------------------------------------|-----------------------------------------|
|                                       |                                   |                   | WWAN                | FR1                 | WLAN2.4GHz<br>Ant 3+4 | WLAN5GHz<br>Ant 3+4 | Bluetooth<br>Ant 3 | Bluetooth<br>Ant 4 |                                         |                                         |
|                                       |                                   |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg) | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)    | 1g SAR<br>(W/kg)   | 1g SAR<br>(W/kg)   |                                         |                                         |
| All Bands Ant<br>1(B2,B5,B12,B13,B14) | All Bands Ant<br>2(N66,N2)        | Front             | 0.601               | 0.493               | 0.392                 | 0.138               | 0.041              | 0.046              | 1.32                                    | 1.57                                    |
|                                       |                                   | Back              | 0.702               | 0.564               | 0.210                 | 0.229               | 0.041              | 0.024              | 1.56                                    | 1.54                                    |
|                                       |                                   | Left side         | 0.265               | 0.391               | 0.272                 | 0.284               | 0.058              | 0.004              | 1.00                                    | 0.99                                    |
|                                       |                                   | Right side        | 0.141               | 0.322               | 0.142                 | 0.658               | 0.001              | 0.041              | 1.16                                    | 0.65                                    |
|                                       |                                   | Top side          | 0.639               | 0.129               | 0.086                 | 0.171               |                    | 0.010              | 0.95                                    | 0.86                                    |
|                                       |                                   | Bottom side       | 0.104               | 0.683               | 0.171                 | 0.038               | 0.023              |                    | 0.85                                    | 0.98                                    |
| All Bands Ant<br>1(B2,5,B12,13,B14,7) | All Bands Ant<br>9(N30,N77,N78)   | Front             | 0.601               | 0.410               | 0.392                 | 0.138               | 0.041              | 0.046              | 1.24                                    | 1.49                                    |
|                                       |                                   | Back              | 0.702               | 0.546               | 0.210                 | 0.229               | 0.041              | 0.024              | 1.54                                    | 1.52                                    |
|                                       |                                   | Left side         | 0.265               | 0.030               | 0.272                 | 0.284               | 0.058              | 0.004              | 0.64                                    | 0.63                                    |
|                                       |                                   | Right side        | 0.141               | 0.753               | 0.142                 | 0.658               | 0.001              | 0.041              | 1.59                                    | 1.08                                    |
|                                       |                                   | Top side          | 0.639               | 0.021               | 0.086                 | 0.171               |                    | 0.010              | 0.84                                    | 0.76                                    |
|                                       |                                   | Bottom side       | 0.104               | 0.282               | 0.171                 | 0.038               | 0.023              |                    | 0.45                                    | 0.58                                    |
| All Bands Ant<br>2(B2,B66)            | All Bands Ant<br>1(N5,71,2,25,41) | Front             | 0.485               | 0.615               | 0.392                 | 0.138               | 0.041              | 0.046              | 1.33                                    | 1.58                                    |
|                                       |                                   | Back              | 0.465               | 0.457               | 0.210                 | 0.229               | 0.041              | 0.024              | 1.22                                    | 1.20                                    |
|                                       |                                   | Left side         | 0.195               | 0.643               | 0.272                 | 0.284               | 0.058              | 0.004              | 1.18                                    | 1.17                                    |
|                                       |                                   | Right side        | 0.196               | 0.296               | 0.142                 | 0.658               | 0.001              | 0.041              | 1.19                                    | 0.68                                    |
|                                       |                                   | Top side          | 0.083               | 0.418               | 0.086                 | 0.171               |                    | 0.010              | 0.68                                    | 0.60                                    |
|                                       |                                   | Bottom side       | 0.543               | 0.070               | 0.171                 | 0.038               | 0.023              |                    | 0.67                                    | 0.81                                    |
| All Bands Ant 2(B66)                  | All Bands Ant<br>9(N30)           | Front             | 0.334               | 0.410               | 0.392                 | 0.138               | 0.041              | 0.046              | 0.97                                    | 1.22                                    |
|                                       |                                   | Back              | 0.465               | 0.404               | 0.210                 | 0.229               | 0.041              | 0.024              | 1.16                                    | 1.14                                    |
|                                       |                                   | Left side         | 0.195               | 0.030               | 0.272                 | 0.284               | 0.058              | 0.004              | 0.57                                    | 0.56                                    |
|                                       |                                   | Right side        | 0.196               | 0.680               | 0.142                 | 0.658               | 0.001              | 0.041              | 1.58                                    | 1.06                                    |
|                                       |                                   | Top side          | 0.083               | 0.021               | 0.086                 | 0.171               |                    | 0.010              | 0.29                                    | 0.20                                    |
|                                       |                                   | Bottom side       | 0.543               | 0.282               | 0.171                 | 0.038               | 0.023              |                    | 0.89                                    | 1.02                                    |
| All Bands Ant<br>2(B25,B66)           | All Bands Ant<br>8(N41,N77,N78)   | Front             | 0.598               | 0.450               | 0.392                 | 0.138               | 0.041              | 0.046              | 1.27                                    | 1.53                                    |
|                                       |                                   | Back              | 0.465               | 0.202               | 0.210                 | 0.229               | 0.041              | 0.024              | 0.96                                    | 0.94                                    |
|                                       |                                   | Left side         | 0.195               | 0.761               | 0.272                 | 0.284               | 0.058              | 0.004              | 1.30                                    | 1.29                                    |
|                                       |                                   | Right side        | 0.196               | 0.024               | 0.142                 | 0.658               | 0.001              | 0.041              | 0.92                                    | 0.40                                    |
|                                       |                                   | Top side          | 0.083               | 0.690               | 0.086                 | 0.171               |                    | 0.010              | 0.95                                    | 0.87                                    |
|                                       |                                   | Bottom side       | 0.543               | 0.013               | 0.171                 | 0.038               | 0.023              |                    | 0.62                                    | 0.75                                    |
| All Bands Ant 9(B30)                  | All Bands Ant<br>1(N2,5,66)       | Front             | 0.448               | 0.622               | 0.392                 | 0.138               | 0.041              | 0.046              | 1.30                                    | 1.55                                    |
|                                       |                                   | Back              | 0.437               | 0.457               | 0.210                 | 0.229               | 0.041              | 0.024              | 1.19                                    | 1.17                                    |
|                                       |                                   | Left side         | 0.014               | 0.125               | 0.272                 | 0.284               | 0.058              | 0.004              | 0.49                                    | 0.47                                    |
|                                       |                                   | Right side        | 0.567               | 0.296               | 0.142                 | 0.658               | 0.001              | 0.041              | 1.56                                    | 1.05                                    |
|                                       |                                   | Top side          | 0.006               | 0.675               | 0.086                 | 0.171               |                    | 0.010              | 0.86                                    | 0.78                                    |
|                                       |                                   | Bottom side       | 0.258               | 0.033               | 0.171                 | 0.038               | 0.023              |                    | 0.35                                    | 0.49                                    |



## Sensor Off

| WWAN Band                                | FR1 Band                          | Exposure Position | 1                | 2                | 3                     | 4                   | 5                  | 6                  | 1+4+5+6+2        | 1+3+5+6+2        |
|------------------------------------------|-----------------------------------|-------------------|------------------|------------------|-----------------------|---------------------|--------------------|--------------------|------------------|------------------|
|                                          |                                   |                   | WWAN             | FR1              | WLAN2.4GHz<br>Ant 3+4 | WLAN5GHz<br>Ant 3+4 | Bluetooth<br>Ant 3 | Bluetooth<br>Ant 4 | Summed           | Summed           |
|                                          |                                   |                   | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)    | 1g SAR<br>(W/kg)   | 1g SAR<br>(W/kg)   | 1g SAR<br>(W/kg) | 1g SAR<br>(W/kg) |
| All Bands Ant<br>1(B2,B5,B12,B13,B14)    | All Bands Ant<br>2(N66,N2)        | Front             | 0.285            | 0.392            | 0.002                 | 0.085               | 0.041              | 0.046              | 0.85             | 0.77             |
|                                          |                                   | Back              | 0.261            | 0.147            | 0.034                 | 0.018               | 0.041              | 0.024              | 0.49             | 0.51             |
|                                          |                                   | Left side         | 0.093            | 0.104            | 0.002                 | 0.025               | 0.058              | 0.004              | 0.28             | 0.26             |
|                                          |                                   | Right side        | 0.475            | 0.279            | 0.028                 | 0.017               | 0.001              | 0.041              | 0.81             | 0.82             |
|                                          |                                   | Top side          | 0.187            | 0.080            | 0.028                 | 0.014               |                    | 0.010              | 0.29             | 0.31             |
|                                          |                                   | Bottom side       | 0.061            | 0.671            | 0.045                 | 0.018               | 0.023              |                    | 0.77             | 0.80             |
| All Bands Ant<br>1(B2,B5,B12,B13,B14,B7) | All Bands Ant<br>9(N30,N77,N78)   | Front             | 0.314            | 0.546            | 0.002                 | 0.085               | 0.041              | 0.046              | 1.03             | 0.95             |
|                                          |                                   | Back              | 0.261            | 0.408            | 0.034                 | 0.018               | 0.041              | 0.024              | 0.75             | 0.77             |
|                                          |                                   | Left side         | 0.185            | 0.101            | 0.002                 | 0.025               | 0.058              | 0.004              | 0.37             | 0.35             |
|                                          |                                   | Right side        | 0.397            | 1.108            | 0.028                 | 0.017               | 0.001              | 0.041              | 1.56             | 1.58             |
|                                          |                                   | Top side          | 0.959            | 0.001            | 0.028                 | 0.014               |                    | 0.010              | 0.98             | 1.00             |
|                                          |                                   | Bottom side       | 0.061            | 0.229            | 0.045                 | 0.018               | 0.023              |                    | 0.33             | 0.36             |
| All Bands Ant 2(B2,B66)                  | All Bands Ant<br>1(N5,71,2,25,41) | Front             | 0.350            | 0.342            | 0.002                 | 0.085               | 0.041              | 0.046              | 0.86             | 0.78             |
|                                          |                                   | Back              | 0.124            | 0.266            | 0.034                 | 0.018               | 0.041              | 0.024              | 0.47             | 0.49             |
|                                          |                                   | Left side         | 0.079            | 0.134            | 0.002                 | 0.025               | 0.058              | 0.004              | 0.30             | 0.28             |
|                                          |                                   | Right side        | 0.235            | 0.369            | 0.028                 | 0.017               | 0.001              | 0.041              | 0.66             | 0.67             |
|                                          |                                   | Top side          | 0.058            | 0.720            | 0.028                 | 0.014               |                    | 0.010              | 0.80             | 0.82             |
|                                          |                                   | Bottom side       | 0.581            | 0.041            | 0.045                 | 0.018               | 0.023              |                    | 0.66             | 0.69             |
| All Bands Ant 2(B66)                     | All Bands Ant<br>9(N30)           | Front             | 0.221            | 0.179            | 0.002                 | 0.085               | 0.041              | 0.046              | 0.57             | 0.49             |
|                                          |                                   | Back              | 0.071            | 0.110            | 0.034                 | 0.018               | 0.041              | 0.024              | 0.26             | 0.28             |
|                                          |                                   | Left side         | 0.077            | 0.001            | 0.002                 | 0.025               | 0.058              | 0.004              | 0.17             | 0.14             |
|                                          |                                   | Right side        | 0.189            | 0.223            | 0.028                 | 0.017               | 0.001              | 0.041              | 0.47             | 0.48             |
|                                          |                                   | Top side          | 0.058            | 0.001            | 0.028                 | 0.014               |                    | 0.010              | 0.08             | 0.10             |
|                                          |                                   | Bottom side       | 0.581            | 0.229            | 0.045                 | 0.018               | 0.023              |                    | 0.85             | 0.88             |
| All Bands Ant 2(B25,B66)                 | All Bands Ant<br>8(N41,N77,N78)   | Front             | 0.350            | 0.852            | 0.002                 | 0.085               | 0.041              | 0.046              | 1.37             | 1.29             |
|                                          |                                   | Back              | 0.124            | 0.625            | 0.034                 | 0.018               | 0.041              | 0.024              | 0.83             | 0.85             |
|                                          |                                   | Left side         | 0.079            | 1.160            | 0.002                 | 0.025               | 0.058              | 0.004              | 1.33             | 1.30             |
|                                          |                                   | Right side        | 0.235            | 0.125            | 0.028                 | 0.017               | 0.001              | 0.041              | 0.42             | 0.43             |
|                                          |                                   | Top side          | 0.058            | 0.171            | 0.028                 | 0.014               |                    | 0.010              | 0.25             | 0.27             |
|                                          |                                   | Bottom side       | 0.581            | 0.143            | 0.045                 | 0.018               | 0.023              |                    | 0.77             | 0.79             |
| All Bands Ant 9(B30)                     | All Bands Ant<br>1(N2,5,66)       | Front             | 0.191            | 0.232            | 0.002                 | 0.085               | 0.041              | 0.046              | 0.60             | 0.51             |
|                                          |                                   | Back              | 0.118            | 0.216            | 0.034                 | 0.018               | 0.041              | 0.024              | 0.42             | 0.43             |
|                                          |                                   | Left side         | 0.001            | 0.068            | 0.002                 | 0.025               | 0.058              | 0.004              | 0.16             | 0.13             |
|                                          |                                   | Right side        | 0.236            | 0.369            | 0.028                 | 0.017               | 0.001              | 0.041              | 0.66             | 0.68             |
|                                          |                                   | Top side          | 0.001            | 0.149            | 0.028                 | 0.014               |                    | 0.010              | 0.17             | 0.19             |
|                                          |                                   | Bottom side       | 0.263            | 0.041            | 0.045                 | 0.018               | 0.023              |                    | 0.35             | 0.37             |



**16.3 Body-Worn Exposure Conditions**

| WWAN Band | Exposure Position | 1             | 3                  | 4                | 5               | 6               | 7                | 1+4+5+6       | 1+3+5+6       | 1+5+6+7       |
|-----------|-------------------|---------------|--------------------|------------------|-----------------|-----------------|------------------|---------------|---------------|---------------|
|           |                   | WWAN          | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | WLAN6GHz Ant 3+4 | Summed        | Summed        | Summed        |
|           |                   | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg)    | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands | Front             | 1.079         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.30          | 1.56          | 1.20          |
|           | Back              | 1.173         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 1.47          | 1.45          | 1.49          |

**Sensor Off**

| WWAN Band       | Exposure Position | 1             | 3                  | 4                | 5               | 6               | 7                | 1+4+5+6       | 1+3+5+6       | 1+5+6+7       |
|-----------------|-------------------|---------------|--------------------|------------------|-----------------|-----------------|------------------|---------------|---------------|---------------|
|                 |                   | WWAN          | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | WLAN6GHz Ant 3+4 | Summed        | Summed        | Summed        |
|                 |                   | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg)    | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands Ant 1 | Front             | 0.468         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 0.64          | 0.56          | 0.59          |
|                 | Back              | 0.617         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.70          | 0.72          | 0.94          |
| All Bands Ant 2 | Front             | 0.957         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 1.13          | 1.05          | 1.07          |
|                 | Back              | 0.692         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.78          | 0.79          | 1.01          |
| All Bands Ant 8 | Front             | 0.852         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 1.02          | 0.94          | 0.97          |
|                 | Back              | 0.625         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.71          | 0.72          | 0.95          |
| All Bands Ant 9 | Front             | 0.546         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 0.72          | 0.64          | 0.66          |
|                 | Back              | 0.408         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.49          | 0.51          | 0.73          |

**<ENDC>**

| WWAN Band                          | FR1 Band                       | Exposure Position | 1             | 2             | 3                  | 4                | 5               | 6               | 7                | 1+4+5+6+2     | 1+3+5+6+2     | 1+5+6+7+2     |
|------------------------------------|--------------------------------|-------------------|---------------|---------------|--------------------|------------------|-----------------|-----------------|------------------|---------------|---------------|---------------|
|                                    |                                |                   | WWAN          | FR1           | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | WLAN6GHz Ant 3+4 | Summed        | Summed        | Summed        |
|                                    |                                |                   | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg)    | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands Ant 1(B2,B5,B12,B13,B14) | All Bands Ant 2(N66,N2)        | Front             | 0.601         | 0.493         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.32          | 1.57          | 1.21          |
|                                    |                                | Back              | 0.702         | 0.564         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 1.56          | 1.54          | 1.59          |
| All Bands Ant 1(B2,5,B12,13,B14,7) | All Bands Ant 9(N30,N77,N78)   | Front             | 0.601         | 0.410         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.24          | 1.49          | 1.13          |
|                                    |                                | Back              | 0.702         | 0.546         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 1.54          | 1.52          | 1.57          |
| All Bands Ant 2(B2,B66)            | All Bands Ant 1(N5,71,2,25,41) | Front             | 0.485         | 0.615         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.33          | 1.58          | 1.22          |
|                                    |                                | Back              | 0.465         | 0.457         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 1.22          | 1.20          | 1.24          |
| All Bands Ant 2(B66)               | All Bands Ant 9(N30)           | Front             | 0.334         | 0.410         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 0.97          | 1.22          | 0.86          |
|                                    |                                | Back              | 0.465         | 0.404         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 1.16          | 1.14          | 1.19          |
| All Bands Ant 2(B25,B66)           | All Bands Ant 8(N41,N77,N78)   | Front             | 0.598         | 0.450         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.27          | 1.53          | 1.17          |
|                                    |                                | Back              | 0.465         | 0.202         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 0.96          | 0.94          | 0.99          |
| All Bands Ant 9(B30)               | All Bands Ant 1(N2,5,66)       | Front             | 0.448         | 0.622         | 0.392              | 0.138            | 0.041           | 0.046           | 0.030            | 1.30          | 1.55          | 1.19          |
|                                    |                                | Back              | 0.437         | 0.457         | 0.210              | 0.229            | 0.041           | 0.024           | 0.256            | 1.19          | 1.17          | 1.22          |



**Sensor Off**

| WWAN Band                             | FR1 Band                       | Exposure Position | 1             | 2             | 3                  | 4                | 5               | 6               | 7                | 1+4+5+6+2     | 1+3+5+6+2     | 1+5+6+7+2     |
|---------------------------------------|--------------------------------|-------------------|---------------|---------------|--------------------|------------------|-----------------|-----------------|------------------|---------------|---------------|---------------|
|                                       |                                |                   | WWAN          | FR1           | WLAN2.4GHz Ant 3+4 | WLAN5GHz Ant 3+4 | Bluetooth Ant 3 | Bluetooth Ant 4 | WLAN6GHz Ant 3+4 | Summed        | Summed        | Summed        |
|                                       |                                |                   | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg)      | 1g SAR (W/kg)    | 1g SAR (W/kg)   | 1g SAR (W/kg)   | 1g SAR (W/kg)    | 1g SAR (W/kg) | 1g SAR (W/kg) | 1g SAR (W/kg) |
| All Bands Ant 1(B2,B5,B12,B13,B14)    | All Bands Ant 2(N66,N2)        | Front             | 0.285         | 0.392         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 0.85          | 0.77          | 0.79          |
|                                       |                                | Back              | 0.261         | 0.147         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.49          | 0.51          | 0.73          |
| All Bands Ant 1(B2,B5,B12,B13,B14,B7) | All Bands Ant 9(N30,N77,N78)   | Front             | 0.314         | 0.546         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 1.03          | 0.95          | 0.98          |
|                                       |                                | Back              | 0.261         | 0.408         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.75          | 0.77          | 0.99          |
| All Bands Ant 2(B2,B66)               | All Bands Ant 1(N5,71,2,25,41) | Front             | 0.350         | 0.342         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 0.86          | 0.78          | 0.81          |
|                                       |                                | Back              | 0.124         | 0.266         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.47          | 0.49          | 0.71          |
| All Bands Ant 2(B66)                  | All Bands Ant 9(N30)           | Front             | 0.221         | 0.179         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 0.57          | 0.49          | 0.52          |
|                                       |                                | Back              | 0.071         | 0.110         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.26          | 0.28          | 0.50          |
| All Bands Ant 2(B25,B66)              | All Bands Ant 8(N41,N77,N78)   | Front             | 0.350         | 0.852         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 1.37          | 1.29          | 1.32          |
|                                       |                                | Back              | 0.124         | 0.625         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.83          | 0.85          | 1.07          |
| All Bands Ant 9(B30)                  | All Bands Ant 1(N2,5,66)       | Front             | 0.191         | 0.232         | 0.002              | 0.085            | 0.041           | 0.046           | 0.030            | 0.60          | 0.51          | 0.54          |
|                                       |                                | Back              | 0.118         | 0.216         | 0.034              | 0.018            | 0.041           | 0.024           | 0.256            | 0.42          | 0.43          | 0.66          |

**16.4 Extremity SAR Exposure Conditions**

| WWAN Band | Exposure Position | 1                | 2                | 3              | 1+3            | 2+3            |
|-----------|-------------------|------------------|------------------|----------------|----------------|----------------|
|           |                   | WLAN5GHz Ant 3+4 | WLAN6GHz Ant 3+4 | NFC            | Summed         | Summed         |
|           |                   | 10g SAR (W/kg)   | 10g SAR (W/kg)   | 10g SAR (W/kg) | 10g SAR (W/kg) | 10g SAR (W/kg) |
| All Bands | Front             | 0.321            | 0.019            | 0.001          | 0.32           | 0.02           |
|           | Back              | 0.967            | 0.130            | 0.005          | 0.97           | 0.14           |
|           | Left side         | 0.897            | 0.085            | 0.001          | 0.90           | 0.09           |
|           | Right side        | 1.460            | 0.407            | 0.001          | 1.46           | 0.41           |
|           | Top side          | 0.187            | 0.007            | 0.001          | 0.19           | 0.01           |
|           | Bottom side       | 0.068            | 0.004            | 0.001          | 0.07           | 0.01           |

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## **17. Uncertainty Assessment**

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

## **18. References**

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [7] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [8] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [9] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [12] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", 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 reduction mechanism verification**

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