



FCC SAR TEST REPORT

FCC ID : A4RG025E
Equipment : Phone
Model Name : G025E
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)
ANSI/IEEE C95.1-1992
IEEE 1528-2013

The product was received on May 05, 2020 and testing was started from May 07, 2020 and completed on Aug. 01, 2020. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

1. Statement of Compliance	4
2. Guidance Applied.....	5
3. Equipment Under Test (EUT) Information	6
3.1 General Information	6
3.2 Maximum Tune-up Limit.....	7
3.3 General 5G NR and LTE SAR Test and Reporting Considerations	19
4. Smart Transmit feature for RF Exposure compliance.....	23
5. RF Exposure Limits.....	26
5.1 Uncontrolled Environment.....	26
5.2 Controlled Environment.....	26
6. Specific Absorption Rate (SAR).....	27
6.1 Introduction	27
6.2 SAR Definition.....	27
7. System Description and Setup	28
7.1 Test Side Location.....	28
7.2 E-Field Probe	29
7.3 Data Acquisition Electronics (DAE)	29
7.4 Phantom.....	30
7.5 Device Holder.....	31
8. Measurement Procedures	32
8.1 Spatial Peak SAR Evaluation.....	32
8.2 Power Reference Measurement.....	33
8.3 Area Scan	33
8.4 Zoom Scan.....	34
8.5 Volume Scan Procedures.....	34
8.6 Power Drift Monitoring.....	34
9. Test Equipment List.....	35
10. System Verification	36
10.1 Tissue Simulating Liquids.....	36
10.2 Tissue Verification	37
10.3 System Performance Check Results.....	39
11. RF Exposure Positions	41
11.1 Ear and handset reference point	41
11.2 Definition of the cheek position.....	42
11.3 Definition of the tilt position.....	43
11.4 Body Worn Accessory	44
11.5 Product Specific Exposure	44
11.6 Wireless Router.....	45
12. DL/UL carrier aggregation	46
13. RF Exposure position consideration.....	58
14. SAR Test Results	59
14.1 Head SAR	62
14.2 Hotspot SAR	76
14.3 Body Worn Accessory SAR.....	92
14.4 Product Specific SAR.....	107
14.5 Repeated SAR Measurement	108
14.6 LTE Band 41 Power Class 2 and Power Class 3 Linearity	109
15. Simultaneous Transmission Analysis	111
15.1 5G NR + LTE + WLAN + BT Sim-Tx analysis.....	112
15.2 Head Exposure Conditions	113
15.3 Hotspot Exposure Conditions.....	119
15.4 Body-Worn Accessory Exposure Conditions	132
16. Supplemental Antenna tuner tests results	138
16.1 Supplemental Head SAR results.....	138
16.2 Supplemental Body SAR results	139
17. Uncertainty Assessment	140
18. References.....	140
Appendix A. Plots of System Performance Check	
Appendix B. Plots of High SAR Measurement	
Appendix C. DASY Calibration Certificate	
Appendix D. Output Power Measurement	
Appendix E. Test Setup Photos	

History of this test report

Report No.	Version	Description	Issued Date
FA022521-02A	01	Initial issue of report	Jun. 30, 2020
FA022521-02A	02	Update section 14.4 and 14.5	Aug. 03, 2020
FA022521-02A	03	Update section 1	Aug. 04, 2020
FA022521-02A	04	Update section 4	Aug. 31, 2020



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, G025E, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 10mm)	Hotspot (Separation 10mm)	Product Specific (Separation 0mm)	
		1g SAR (W/kg)			10g SAR (W/kg)	
Licensed	GSM850	1.19	0.67	0.67		1.57
	GSM1900	0.47	1.09	0.88		
	WCDMA II	0.86	1.15	0.98		
	WCDMA IV	0.58	1.16	0.95		
	WCDMA V	1.20	0.65	0.65		
	CDMA BC0	1.18	0.81	0.81		
	CDMA BC1	0.85	1.20	0.99		
	CDMA BC10	1.01	0.68	0.67		
	LTE Band 7	0.64	1.16	0.97		
	LTE Band 12 / 17	0.95	0.57	0.57		
	LTE Band 13	0.56	0.70	0.70		
	LTE Band 14	1.06	0.67	0.67		
	LTE Band 2 / 25	0.82	1.14	0.93		
	LTE Band 5 / 26	1.05	0.66	0.66		
	LTE Band 30	0.17	1.00	0.95		
	LTE Band 38 / 41	0.39	1.06	1.00		
	LTE Band 48	0.19	1.13	0.95		
	LTE Band 4 / 66	0.54	1.20	1.00	2.99	
	LTE Band 71	0.75	0.62	0.62		
	n5	1.19	0.66	0.66		
	n12	0.79	0.56	0.56		
	n2 / n25	0.88	1.20	1.00		
	n41	0.99	0.74	0.74		
	n66	0.61	1.19	1.00		
	n71	1.15	0.71	0.71		
DTS	2.4GHz WLAN	0.53	0.76	0.47		1.54
NII	5GHz WLAN	0.42	1.13	0.47	2.19	1.57
DSS	Bluetooth	0.28	0.32	0.32		1.57
Date of Testing:		2020/5/7 ~ 2020/6/16				

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1g SAR 1.6 W/kg for partial-body, 10g SAR 4.0W/kg for extremity) 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.

Reviewed by: Jason Wang

Report Producer: Ching Chen



2. 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)<<for FCC
- ANSI/IEEE C95.1-1992<<for FCC
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- FCC KDB 941225 D07 UMPC Mini Tablet v01r02



3. Equipment Under Test (EUT) Information

3.1 General Information

Product Feature & Specification	
Equipment Name	Phone
Model Name	G025E
FCC ID	A4RG025E
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz CDMA2000 BC0: 824.7 MHz ~ 848.31 MHz CDMA 2000 BC1: 1851.25 MHz ~ 1908.75 MHz CDMA 2000 BC10: 817.9 MHz ~ 823.1 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784.5 MHz LTE Band 14: 790.5 MHz ~ 795.5 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 821.5 MHz ~ 841.5 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Mode	GSM/GPRS/EDGE AMR / RMC 12.2Kbps HSDPA HSUPA DC-HSDPA CDMA2000 : 1xRTT/1xEv-Do(Rev.0)/1xEv-Do(Rev.A) LTE: QPSK, 16QAM, 64QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/ BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac HT20 / HT40 / VHT20 / VHT40 / VHT80 Bluetooth BR/EDR/LE NFC: ASK
GSM / (E)GPRS Dual Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
Remark: - This device implements open loop antenna tuning techniques for several WWAN (cellular) operating modes. Specifically, this technique is employed in the GSM, WCDMA, CDMA and LTE modes. The detail descriptions of the antenna tuner are included in the operational description. - The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) and the Qualcomm smart transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. - This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications	

3.2 Maximum Tune-up Limit

General Note:

1. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
2. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) by DSI and the Qualcomm Smart Transmit will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description.
3. Below table shows maximum tune up output power configured for this EUT for various transmit conditions (Device State Index DSI) by manufacturer, and the detail power measurement and tune-up limit refer to appendix D
4. In the table below which the DSI may have difference output power level. If some DSI output power measurement was not include in the appendix D, because the same output power level has been presented within the other DSI and use the same level to do SAR tested.
5. The DSI 0 was not use for SAR testing, the other DSI may same powr levels but DSI 0 is covered for all modes under the mobile RF exposure evaluation, please refer to Sporton's test report FA022521-02B

Antenna configuration	
Config*	Support transmit antenna and band
Config 0	ANT 0: GSM850, UMTS B5, CDMA BC0/BC10, LTE B5/B12/B13/B14/B17/B26/B71, NR n5/n12/n71 ANT 2: GSM1900, UMTS B2/B4, CDMA BC1, LTE B2/B4/B7/B25/B30/B66/B38/B41, NR n2/n25/n41/n66 ANT 5: NR n41 ANT 7: LTE B48
Config 1	ANT 0: GSM1900, UMTS B2/B4, BC1, LTE B2/B4/B7/B25/B30/B66/B38/B41, NR n2/n25/n41/n66 ANT 1: GSM850, UMTS B5, CDMA BC0/BC10, LTE B5/B12/B13/B14/B17/B26/B71, NR n5/n12/n71 ANT 2: LTE B48

*Config 0 and 1 means output ports of power measurement for different antennas and bands.



Config0			Maximum Transmit Power Level (dBm)					
Radio Tech	Band Number	Antenna name	DSI_0	DSI_2	DSI_4	DSI_6	DSI_7	DSI_8
			Default	Head Standalone	Body Standalone	Hotspot Simultaneous Transmit	Head Simultaneous Transmit	Body Simultaneous Transmit
GSM1Tx	850	ANT0	33.5	33.5	33.5	33.5	33.5	33.5
GSM2Tx	850	ANT0	32.5	32.5	32.5	32.5	32.5	32.5
GSM3Tx	850	ANT0	30.5	30.5	30.5	30.5	30.5	30.5
GSM4Tx	850	ANT0	29.5	29.5	29.5	29.5	29.5	29.5
GSM1Tx	1900	ANT2	30.5	30.5	30.5	30.5	30.5	30.5
GSM2Tx	1900	ANT2	29.7	29.7	29.7	29.7	29.7	29.7
GSM3Tx	1900	ANT2	28.0	28.0	28.0	28.0	28.0	28.0
GSM4Tx	1900	ANT2	27.0	27.0	27.0	27.0	27.0	27.0
WCDMA	B2	ANT2	25.7	25.7	25.1	24.3	25.7	24.3
WCDMA	B4	ANT2	25.7	25.7	25.3	24.5	25.7	24.5
WCDMA	B5	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
CDMA	BC0	ANT0	25.5	25.5	25.5	25.5	25.5	25.5
CDMA	BC1	ANT2	25.5	25.5	24.8	24.0	25.5	24.0
CDMA	BC10	ANT0	25.5	25.5	25.5	25.5	25.5	25.5
LTE	B2	ANT2	25.7	25.7	25.2	24.4	25.7	24.4
LTE	B4	ANT2	25.7	25.7	25.7	25.1	25.7	25.1
LTE	B5	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B7	ANT2	25.7	25.7	25.0	24.2	25.7	24.2
LTE	B12	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B13	ANT0	25.2	25.2	25.2	25.2	25.2	25.2
LTE	B14	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B17	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B25	ANT2	25.7	25.7	25.2	24.4	25.7	24.4
LTE	B26	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B30	ANT2	23.7	23.7	23.7	23.7	23.7	23.7
LTE	B38	ANT2	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B41	ANT2	25.7	25.7	25.7	25.7	25.7	25.7
LTE	B41_HPUE	ANT2	27.0	27.0	27.0	27.0	27.0	27.0
LTE	B48	ANT7	24.2	24.2	24.2	23.4	24.2	23.4
LTE	B66	ANT2	25.7	25.7	25.7	25.1	25.7	25.1
LTE	B71	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
5G FR1	n2	ANT2	25.7	25.7	25.3	24.5	25.7	24.5
5G FR1	n5	ANT0	25.0	25.0	25.0	25.0	25.0	25.0
5G FR1	n12	ANT0	24.7	24.7	24.7	24.7	24.7	24.7
5G FR1	n25	ANT2	25.7	25.7	25.3	24.5	25.7	24.5
5G FR1	n41	ANT2	25.7	25.7	25.7	25.7	25.7	25.7
5G FR1	n41	ANT5	25.7	25.7	25.7	25.7	25.7	25.7
5G FR1	n41_HPUE	ANT5	27.5	27.5	27.5	27.5	26.8	27.5
5G FR1	n66	ANT2	25.7	25.7	25.7	25.0	25.7	25.0
5G FR1	n71	ANT0	25.7	25.7	25.7	25.7	25.7	25.7

Config1			Secondary Transmitter Maximum Transmit Power Level (dBm)					
Radio Tech	Band Number	Antenna name	DSI_0	DSI_2	DSI_4	DSI_6	DSI_7	DSI_8
			Default	Head Standalone	Body Standalone	Hotspot Simultaneous Transmit	Head Simultaneous Transmit	Body Simultaneous Transmit
GSM1Tx	850	ANT1	33.5	33.5	33.5	33.5	33.5	33.5
GSM2Tx	850	ANT1	32.5	31.7	32.5	32.5	30.9	32.5
GSM3Tx	850	ANT1	30.5	29.9	30.5	30.5	29.1	30.5
GSM4Tx	850	ANT1	29.5	28.7	29.5	29.5	27.9	29.5
GSM1Tx	1900	ANT0	30.0	30.0	29.4	28.6	30.0	28.6
GSM2Tx	1900	ANT0	29.2	29.2	26.4	25.6	29.2	25.6
GSM3Tx	1900	ANT0	27.5	27.5	24.6	23.8	27.5	23.8
GSM4Tx	1900	ANT0	26.5	26.5	23.4	22.6	26.5	22.6
WCDMA	B2	ANT0	25.7	25.7	22.1	21.3	25.7	21.3
WCDMA	B4	ANT0	25.7	25.7	21.7	20.9	25.7	20.9
WCDMA	B5	ANT1	25.0	24.3	25.0	25.0	23.5	25.0
CDMA	BC0	ANT1	25.5	24.6	25.5	25.5	23.8	25.5
CDMA	BC1	ANT0	25.5	25.5	21.4	20.6	25.5	20.6
CDMA	BC10	ANT1	25.5	24.7	25.5	25.5	23.9	25.5
LTE	B2	ANT0	25.7	25.7	19.7	18.9	25.7	18.9
LTE	B4	ANT0	25.7	25.7	21.6	20.8	25.7	20.8
LTE	B5	ANT1	25.7	25.0	25.7	25.7	24.2	25.7
LTE	B7	ANT0	25.7	25.7	23.1	22.3	25.7	22.3
LTE	B12	ANT1	25.7	25.7	25.7	25.7	25.5	25.7
LTE	B13	ANT1	25.2	25.2	25.2	25.2	25.2	25.2
LTE	B14	ANT1	25.7	25.7	25.7	25.7	25.4	25.7
LTE	B17	ANT1	25.7	25.7	25.7	25.7	25.5	25.7
LTE	B25	ANT0	25.7	25.7	19.7	18.9	25.7	18.9
LTE	B26	ANT1	25.7	25.0	25.7	25.7	24.2	25.7
LTE	B30	ANT0	23.7	23.7	23.3	22.5	23.7	22.5
LTE	B38	ANT0	25.7	25.7	23.6	22.8	25.7	22.8
LTE	B41	ANT0	25.7	25.7	23.6	22.8	25.7	22.8
LTE	B41HPUE	ANT0	27.5	27.5	25.4	24.6	27.5	24.6
LTE	B48	ANT2	22.6	22.6	22.1	21.3	22.6	21.3
LTE	B66	ANT0	25.7	25.7	21.6	20.8	25.7	20.8
LTE	B71	ANT1	25.7	25.7	25.7	25.7	25.7	25.7
5G FR1	n2	ANT0	25.7	25.7	20.5	19.7	25.7	19.7
5G FR1	n5	ANT1	25.0	24.3	25.0	25.0	23.5	25.0
5G FR1	n12	ANT1	24.7	24.7	24.7	24.7	24.7	24.7
5G FR1	n25	ANT0	25.7	25.7	20.5	19.7	25.7	19.7
5G FR1	n41	ANT0	25.7	25.7	25.7	25.7	25.7	25.7
5G FR1	n66	ANT0	25.7	25.7	21.2	20.4	25.7	20.4
5G FR1	n71	ANT1	25.7	25.7	25.7	25.7	25.1	25.7

<WLAN Maximum Power>
General Note:

1. The device implements the power management for WLAN SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The control logic about the power management decision is provided in the operational description.
2. The WLAN power table relate to each exposure condition is description below:
 - a. Default Power Table: when operate at mobile condition.
 - b. Power Table 1: when operate at body or extremity condition in standalone or transmit simultaneous with Bluetooth when WWAN off.
 - c. Power Table 2: when operate at head exposure condition.
 - d. Power Table 3: when operate at hotspot or body exposure condition when transmit simultaneously with WWAN on.

<Default Power Table>
<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.50	19.50	19.50	19.50	22.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	19.50	19.50	19.50	19.50	22.5
	802.11g 6Mbps	1	2412	17.50	17.50	17.50	17.50	20.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	18.00	18.00	18.00	18.00	21.0
	802.11n-HT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	48	5240	17.50	17.50	17.50	17.50	20.5
		38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	13.00	13.00	16.0

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.50	17.50	17.50	17.50	20.5
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	52	5260	17.50	17.50	17.50	17.50	20.5
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	52	5260	17.50	17.50	17.50	17.50	20.5
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.0

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.50	17.50	17.50	17.50	20.5
		116	5580	17.50	17.50	17.50	17.50	20.5
		124	5620	17.50	17.50	17.50	17.50	20.5
		132	5660	17.50	17.50	17.50	17.50	20.5
		140	5700	17.50	17.50	17.50	17.50	20.5
		144	5720	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	100	5500	17.50	17.50	17.50	17.50	20.5
		116	5580	17.50	17.50	17.50	17.50	20.5
		124	5620	17.50	17.50	17.50	17.50	20.5
		132	5660	18.00	18.00	18.00	18.00	21.0
		140	5700	18.00	18.00	18.00	18.00	21.0
		144	5720	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	102	5510	16.00	16.00	16.00	16.00	19.0
		110	5550	17.50	17.50	17.50	17.50	20.5
		126	5630	17.50	17.50	17.50	17.50	20.5
		134	5670	17.50	17.50	17.50	17.50	20.5
		142	5710	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	100	5500	17.50	17.50	17.50	17.50	20.5
		116	5580	17.50	17.50	17.50	17.50	20.5
		124	5620	17.50	17.50	17.50	17.50	20.5
		132	5660	18.00	18.00	18.00	18.00	21.0
		140	5700	18.00	18.00	18.00	18.00	21.0
		144	5720	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	102	5510	16.00	16.00	16.00	16.00	19.0
		110	5550	17.50	17.50	17.50	17.50	20.5
		126	5630	17.50	17.50	17.50	17.50	20.5
		134	5670	17.50	17.50	17.50	17.50	20.5
		142	5710	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	106	5530	12.50	12.50	12.50	12.50	15.5
		122	5610	17.00	17.00	17.00	17.00	20.0
		138	5690	17.00	17.00	17.00	17.00	20.0

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
	802.11n-HT20 MCS0	149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
	802.11n-HT40 MCS0	151	5755	17.50	17.50	17.50	17.50	20.5
		159	5795	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	149	5745	18.50	18.50	18.50	18.50	21.5
		157	5785	18.50	18.50	18.50	18.50	21.5
		165	5825	18.50	18.50	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	151	5755	17.50	17.50	17.50	17.50	20.5
		159	5795	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	155	5775	17.00	17.00	17.00	17.00	20.0

<Power Table 1>
<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.50	19.50	19.50	19.50	22.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	19.50	19.50	19.50	19.50	22.5
	802.11g 6Mbps	1	2412	17.50	17.50	17.50	17.50	20.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	18.00	18.00	18.00	18.00	21.0
	802.11n-HT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	16.50	16.50	16.50	16.50	19.5
		6	2437	19.50	19.50	19.50	19.50	22.5
		11	2462	16.50	16.50	16.50	16.50	19.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	17.50	17.50	20.5
		40	5200	17.50	17.50	17.50	17.50	20.5
		44	5220	17.50	17.50	17.50	17.50	20.5
		48	5240	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	13.00	13.00	16.0

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.50	17.50	17.50	17.50	20.5
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11n-HT20 MCS0	52	5260	17.50	17.50	17.50	17.50	20.5
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11n-HT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	52	5260	17.50	17.50	17.50	17.50	20.5
		56	5280	17.50	17.50	17.50	17.50	20.5
		60	5300	17.50	17.50	17.50	17.50	20.5
		64	5320	17.50	17.50	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	54	5270	17.50	17.50	17.50	17.50	20.5
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.0

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.50	13.50	17.50	16.00	19.8
		116	5580	17.50	13.50	17.50	16.00	19.8
		124	5620	17.50	13.50	17.50	16.00	19.8
		132	5660	17.50	13.50	17.50	16.00	19.8
		140	5700	17.50	13.50	17.50	16.00	19.8
		144	5720	17.50	13.50	17.50	16.00	19.8
	802.11n-HT20 MCS0	100	5500	17.50	13.50	17.50	16.00	19.8
		116	5580	17.50	13.50	17.50	16.00	19.8
		124	5620	17.50	13.50	17.50	16.00	19.8
		132	5660	18.00	13.50	18.00	16.00	20.1
		140	5700	18.00	13.50	18.00	16.00	20.1
		144	5720	17.50	13.50	17.50	16.00	19.8
	802.11n-HT40 MCS0	102	5510	16.00	13.50	16.00	16.00	19.0
		110	5550	17.50	13.50	17.50	16.00	19.8
		126	5630	17.50	13.50	17.50	16.00	19.8
		134	5670	17.50	13.50	17.50	16.00	19.8
		142	5710	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT20 MCS0	100	5500	17.50	13.50	17.50	16.00	19.8
		116	5580	17.50	13.50	17.50	16.00	19.8
		124	5620	17.50	13.50	17.50	16.00	19.8
		132	5660	18.00	13.50	18.00	16.00	20.1
		140	5700	18.00	13.50	18.00	16.00	20.1
		144	5720	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT40 MCS0	102	5510	16.00	13.50	16.00	16.00	19.0
		110	5550	17.50	13.50	17.50	16.00	19.8
		126	5630	17.50	13.50	17.50	16.00	19.8
		134	5670	17.50	13.50	17.50	16.00	19.8
		142	5710	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT80 MCS0	106	5530	12.50	12.50	12.50	12.50	15.5
		122	5610	17.00	13.50	17.00	16.00	19.5
		138	5690	17.00	13.50	17.00	16.00	19.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.50	13.50	18.50	16.00	20.4
		157	5785	18.50	13.50	18.50	16.00	20.4
		165	5825	18.50	13.50	18.50	16.00	20.4
	802.11n-HT20 MCS0	149	5745	18.50	13.50	18.50	16.00	20.4
		157	5785	18.50	13.50	18.50	16.00	20.4
		165	5825	18.50	13.50	18.50	16.00	20.4
	802.11n-HT40 MCS0	151	5755	17.50	13.50	17.50	16.00	19.8
		159	5795	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT20 MCS0	149	5745	18.50	13.50	18.50	16.00	20.4
		157	5785	18.50	13.50	18.50	16.00	20.4
		165	5825	18.50	13.50	18.50	16.00	20.4
	802.11ac-VHT40 MCS0	151	5755	17.50	13.50	17.50	16.00	19.8
		159	5795	17.50	13.50	17.50	16.00	19.8
	802.11ac-VHT80 MCS0	155	5775	17.00	13.50	17.00	16.00	19.5

<Power Tabele 2>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5
	802.11g 6Mbps	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5
	802.11n-HT20 MCS0	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5
	802.11ac-VHT20 MCS0	1	2412	12.00	15.00	14.00	15.00	17.5
		6	2437	12.00	15.00	14.00	15.00	17.5
		11	2462	12.00	15.00	14.00	15.00	17.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	11.00	15.50	11.00	15.50	16.8
		40	5200	11.00	15.50	11.00	15.50	16.8
		44	5220	11.00	15.50	11.00	15.50	16.8
		48	5240	11.00	15.50	11.00	15.50	16.8
	802.11n-HT20 MCS0	36	5180	11.00	15.50	11.00	15.50	16.8
		40	5200	11.00	15.50	11.00	15.50	16.8
		44	5220	11.00	15.50	11.00	15.50	16.8
		48	5240	11.00	15.50	11.00	15.50	16.8
	802.11n-HT40 MCS0	38	5190	11.00	13.50	11.00	13.50	15.4
		46	5230	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT20 MCS0	36	5180	11.00	15.50	11.00	15.50	16.8
		40	5200	11.00	15.50	11.00	15.50	16.8
		44	5220	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT40 MCS0	48	5240	11.00	15.50	11.00	15.50	16.8
		38	5190	11.00	13.50	11.00	13.50	15.4
		46	5230	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT80 MCS0	42	5210	11.00	13.00	11.00	13.00	15.1

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	11.00	15.50	11.00	15.50	16.8
		56	5280	11.00	15.50	11.00	15.50	16.8
		60	5300	11.00	15.50	11.00	15.50	16.8
		64	5320	11.00	15.50	11.00	15.50	16.8
	802.11n-HT20 MCS0	52	5260	11.00	15.50	11.00	15.50	16.8
		56	5280	11.00	15.50	11.00	15.50	16.8
		60	5300	11.00	15.50	11.00	15.50	16.8
		64	5320	11.00	15.50	11.00	15.50	16.8
	802.11n-HT40 MCS0	54	5270	11.00	15.50	11.00	15.50	16.8
		62	5310	11.00	14.00	11.00	14.00	15.8
	802.11ac-VHT20 MCS0	52	5260	11.00	15.50	11.00	15.50	16.8
		56	5280	11.00	15.50	11.00	15.50	16.8
		60	5300	11.00	15.50	11.00	15.50	16.8
		64	5320	11.00	15.50	11.00	15.50	16.8
	802.11ac-VHT40 MCS0	54	5270	11.00	15.50	11.00	15.50	16.8
		62	5310	11.00	14.00	11.00	14.00	15.8
	802.11ac-VHT80 MCS0	58	5290	11.00	12.00	11.00	12.00	14.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.00	12.00	13.00	12.00	15.5
		116	5580	13.00	12.00	13.00	12.00	15.5
		124	5620	13.00	12.00	13.00	12.00	15.5
		132	5660	13.00	12.00	13.00	12.00	15.5
		140	5700	13.00	12.00	13.00	12.00	15.5
		144	5720	13.00	12.00	13.00	12.00	15.5
	802.11n-HT20 MCS0	100	5500	13.00	12.00	13.00	12.00	15.5
		116	5580	13.00	12.00	13.00	12.00	15.5
		124	5620	13.00	12.00	13.00	12.00	15.5
		132	5660	13.00	12.00	13.00	12.00	15.5
		140	5700	13.00	12.00	13.00	12.00	15.5
		144	5720	13.00	12.00	13.00	12.00	15.5
	802.11n-HT40 MCS0	102	5510	13.00	12.00	13.00	12.00	15.5
		110	5550	13.00	12.00	13.00	12.00	15.5
		126	5630	13.00	12.00	13.00	12.00	15.5
		134	5670	13.00	12.00	13.00	12.00	15.5
		142	5710	13.00	12.00	13.00	12.00	15.5
	802.11ac-VHT20 MCS0	100	5500	13.00	12.00	13.00	12.00	15.5
		116	5580	13.00	12.00	13.00	12.00	15.5
		124	5620	13.00	12.00	13.00	12.00	15.5
		132	5660	13.00	12.00	13.00	12.00	15.5
		140	5700	13.00	12.00	13.00	12.00	15.5
		144	5720	13.00	12.00	13.00	12.00	15.5
	802.11ac-VHT40 MCS0	102	5510	13.00	12.00	13.00	12.00	15.5
		110	5550	13.00	12.00	13.00	12.00	15.5
		126	5630	13.00	12.00	13.00	12.00	15.5
		134	5670	13.00	12.00	13.00	12.00	15.5
		142	5710	13.00	12.00	13.00	12.00	15.5
	802.11ac-VHT80 MCS0	106	5530	12.50	12.00	12.50	12.00	15.3
		122	5610	13.00	12.00	13.00	12.00	15.5
		138	5690	13.00	12.00	13.00	12.00	15.5

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	14.50	12.50	14.50	12.50	16.6
		157	5785	14.50	12.50	14.50	12.50	16.6
		165	5825	14.50	12.50	14.50	12.50	16.6
	802.11n-HT20 MCS0	149	5745	14.50	12.50	14.50	12.50	16.6
		157	5785	14.50	12.50	14.50	12.50	16.6
		165	5825	14.50	12.50	14.50	12.50	16.6
	802.11n-HT40 MCS0	151	5755	14.50	12.50	14.50	12.50	16.6
		159	5795	14.50	12.50	14.50	12.50	16.6
	802.11ac-VHT20 MCS0	149	5745	14.50	12.50	14.50	12.50	16.6
		157	5785	14.50	12.50	14.50	12.50	16.6
		165	5825	14.50	12.50	14.50	12.50	16.6
	802.11ac-VHT40 MCS0	151	5755	14.50	12.50	14.50	12.50	16.6
		159	5795	14.50	12.50	14.50	12.50	16.6
	802.11ac-VHT80 MCS0	155	5775	14.50	12.50	14.50	12.50	16.6

<Power Table 3>

<2.4GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	14.50	19.00	17.00	19.00	21.1
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	19.00	17.00	19.00	21.1
	802.11g 6Mbps	1	2412	14.50	17.50	17.00	17.50	20.3
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	19.00	17.00	19.00	21.1
	802.11n-HT20 MCS0	1	2412	14.50	16.50	16.50	16.50	19.5
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	16.50	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	14.50	16.50	16.50	16.50	19.5
		6	2437	14.50	19.00	17.00	19.00	21.1
		11	2462	14.50	16.50	16.50	16.50	19.5

<5GHz WLAN>

Transmit Antenna				SISO	SISO	MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.50	14.00	16.50	14.50	18.6
		40	5200	16.50	14.00	16.50	14.50	18.6
		44	5220	16.50	14.00	16.50	14.50	18.6
		48	5240	16.50	14.00	16.50	14.50	18.6
	802.11n-HT20 MCS0	36	5180	16.50	14.00	16.50	14.50	18.6
		40	5200	16.50	14.00	16.50	14.50	18.6
		44	5220	16.50	14.00	16.50	14.50	18.6
		48	5240	16.50	14.00	16.50	14.50	18.6
	802.11n-HT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	16.50	14.00	16.50	14.50	18.6
	802.11ac-VHT20 MCS0	36	5180	16.50	14.00	16.50	14.50	18.6
		40	5200	16.50	14.00	16.50	14.50	18.6
		44	5220	16.50	14.00	16.50	14.50	18.6
		48	5240	16.50	14.00	16.50	14.50	18.6
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	13.50	13.50	16.5
		46	5230	16.50	14.00	16.50	14.50	18.6
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	13.00	13.00	16.0

Transmit Antenna				SISO	SISO	MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	52	5260	17.50	14.00	17.50	15.00	19.4
		56	5280	17.50	14.00	17.50	15.00	19.4
		60	5300	17.50	14.00	17.50	15.00	19.4
		64	5320	17.50	14.00	17.50	15.00	19.4
	802.11n-HT20 MCS0	52	5260	17.50	14.00	17.50	15.00	19.4
		56	5280	17.50	14.00	17.50	15.00	19.4
		60	5300	17.50	14.00	17.50	15.00	19.4
		64	5320	17.50	14.00	17.50	15.00	19.4
	802.11n-HT40 MCS0	54	5270	17.50	14.00	17.50	15.00	19.4
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	52	5260	17.50	14.00	17.50	15.00	19.4
		56	5280	17.50	14.00	17.50	15.00	19.4
		60	5300	17.50	14.00	17.50	15.00	19.4
		64	5320	17.50	14.00	17.50	15.00	19.4
	802.11ac-VHT40 MCS0	54	5270	17.50	14.00	17.50	15.00	19.4
		62	5310	14.00	14.00	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	58	5290	12.00	12.00	12.00	12.00	15.0

Transmit Antenna				SISO	SISO	MIMO		
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	100	5500	17.50	10.50	17.50	11.50	18.47
		116	5580	17.50	10.50	17.50	11.50	18.47
		124	5620	17.50	10.50	17.50	11.50	18.47
		132	5660	17.50	10.50	17.50	11.50	18.47
		140	5700	17.50	10.50	17.50	11.50	18.47
		144	5720	17.50	10.50	17.50	11.50	18.47
	802.11n-HT20 MCS0	100	5500	17.50	10.50	17.50	11.50	18.47
		116	5580	17.50	10.50	17.50	11.50	18.47
		124	5620	17.50	10.50	17.50	11.50	18.47
		132	5660	18.00	10.50	18.00	11.50	18.88
		140	5700	18.00	10.50	18.00	11.50	18.88
		144	5720	17.50	10.50	17.50	11.50	18.47
	802.11n-HT40 MCS0	102	5510	16.00	10.50	16.00	11.50	17.32
		110	5550	17.50	10.50	17.50	11.50	18.47
		126	5630	17.50	10.50	17.50	11.50	18.47
		134	5670	17.50	10.50	17.50	11.50	18.47
		142	5710	17.50	10.50	17.50	11.50	18.47
		100	5500	17.50	10.50	17.50	11.50	18.47
	802.11ac-VHT20 MCS0	116	5580	17.50	10.50	17.50	11.50	18.47
		124	5620	17.50	10.50	17.50	11.50	18.47
		132	5660	18.00	10.50	18.00	11.50	18.88
		140	5700	18.00	10.50	18.00	11.50	18.88
		144	5720	17.50	10.50	17.50	11.50	18.47
		102	5510	16.00	10.50	16.00	11.50	17.32
	802.11ac-VHT40 MCS0	110	5550	17.50	10.50	17.50	11.50	18.47
		126	5630	17.50	10.50	17.50	11.50	18.47
		134	5670	17.50	10.50	17.50	11.50	18.47
		142	5710	17.50	10.50	17.50	11.50	18.47
		106	5530	12.50	10.50	12.50	11.50	15.04
		122	5610	17.00	10.50	17.00	11.50	18.08
	802.11ac-VHT80 MCS0	138	5690	17.00	10.50	17.00	11.50	18.08

Transmit Antenna				SISO	SISO	MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4 Tune-Up Limit	Ant 3 Tune-Up Limit	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	149	5745	18.50	10.00	18.50	10.50	19.1
		157	5785	18.50	10.00	18.50	10.50	19.1
		165	5825	18.50	10.00	18.50	10.50	19.1
	802.11n-HT20 MCS0	149	5745	18.50	10.00	18.50	10.50	19.1
		157	5785	18.50	10.00	18.50	10.50	19.1
		165	5825	18.50	10.00	18.50	10.50	19.1
	802.11n-HT40 MCS0	151	5755	17.50	10.00	17.50	10.50	18.3
		159	5795	17.50	10.00	17.50	10.50	18.3
	802.11ac-VHT20 MCS0	149	5745	18.50	10.00	18.50	10.50	19.1
		157	5785	18.50	10.00	18.50	10.50	19.1
		165	5825	18.50	10.00	18.50	10.50	19.1
	802.11ac-VHT40 MCS0	151	5755	17.50	10.00	17.50	10.50	18.3
		159	5795	17.50	10.00	17.50	10.50	18.3
	802.11ac-VHT80 MCS0	155	5775	17.00	10.00	17.00	10.50	17.9

<Bluetooth Maximum Power>

General Note:

- The device implements the power management for Bluetooth SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The control logic about the power management decision is provided in the operational description.
- The Bluetooth power table relate to each exposure condition is description below:
 - Default Power Table: when operate at mobile condition.
 - Power Table 1: when operate at body or extremity condition in standalone or transmit simultaneous with WLAN when WWAN off or transmit simultaneous with WWAN when WLAN off.
 - Power Table 2: when operate at head exposure condition.
 - Power Table 3: when operate at hotspot or body exposure condition and transmit simultaneously with WWAN/WLAN on.

<Default Power Table>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18	18	18	12.5	12.5

<Power Table1>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18	18	18	12.5	12.5

<Power Table 2>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	12	12	12	12	12

<Power Table 3>

Mode	Average power (dBm)				
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	15.5	15.5	15.5	12.5	12.5



3.3 General 5G NR and LTE SAR Test and Reporting Considerations

LTE information								
FCC ID	A4RG025E							
Equipment Name	Phone							
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784.5 MHz LTE Band 14: 790.5 MHz ~ 795.5 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 821.5 MHz ~ 841.5 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz							
Channel Bandwidth	LTE Band 02:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 04:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 05:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 07: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz							
UE Rel and Cat.	Rel15, UL cat. 13, DL cat. 18							
uplink modulations used	QPSK / 16QAM / 64QAM							
LTE Voice / Data requirements	Voice and Data							
LTE MPR permanently built-in by design	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
	Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)
		1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
	256 QAM	≥ 1						≤ 5
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)							
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							
Power reduction applied to satisfy SAR compliance	The device has several different power modes for head / hotspot conditions SAR compliance; power selection is determined by the device's positioning and usage scenarios.							
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section13							
LTE Carrier Aggregation Additional Information	This device supports maximum of 4 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.							

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 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5		
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		

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

5G NR Information														
FCC ID	A4RG025E													
Equipment Name	Phone													
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz													
	5G NR n5 : 824 MHz ~ 849 MHz													
	5G NR n12 : 699 MHz ~ 716 MHz													
	5G NR n25 : 1850 MHz ~ 1915 MHz													
	5G NR n41 : 2496 MHz ~ 2690 MHz													
	5G NR n66 : 1710 MHz ~ 1780 MHz													
	5G NR n71 : 663 MHz ~ 698 MHz													
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz													
	5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz													
	5G NR n12: 5MHz, 10MHz, 15MHz													
	5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz													
	5G NR n41: 20MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz													
	5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz													
SCS	5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz													
	FDD: SCS15KHz, TDD: SCS30KHz													
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM													
A-MPR (Additional MPR) disabled for SAR Testing?	Yes													
LTE Anchor Bands for n2	LTE B5/12/13/14													
LTE Anchor Bands for n5	LTE B2/7/30/48/66													
LTE Anchor Bands for n12	LTE B2/66													
LTE Anchor Bands for n25	LTE B12													
LTE Anchor Bands for n41	LTE B2/4/25/26/66													
LTE Anchor Bands for n66	LTE B5/12/13/14/48/71													
LTE Anchor Bands for n71	LTE B2/7/66													
Transmission (H, M, L) channel numbers and frequencies in each 5G NR band														
NR Band 2														
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz				
	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 12														
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz				
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)			
L	140300	701.5		140800	704		141300	704		141300	706.5			
M	141500	707.5		141500	707.5		141500	707.5		141500	707.5			
H	142700	713.5		142200	711		141700	711		141700	708.5			
NR Band 25														
	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	382500	1912.5		382000	1910		381500	1907.5		381000	1905			
NR Band 41														
	Bandwidth 20MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		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)
L	501204	2506.02	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
H	535998	2679.99	534000	2670	532998	2664.99	531996	2659.98	529998	2649.99	528996	2644.98	528000	2640
NR Band 66														
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz				
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)			
L	342500	1712.5		343000	1715		343500	1717.5		344000	1720			
M	349000	1745		349000	1745		349000	1745		349000	1745			
H	355500	1777.5		355000	1775		354500	1772.5		354000	1770			
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			

4. Smart Transmit feature for RF Exposure compliance

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

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

<Terminologies in this report>

P_{limit}	The time-averaged RF power which corresponds to SAR_design_target.
P_{max}	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory power density limit to account for all device design related uncertainties.
SAR char	P_{limit} for all the technologies/bands for all applicable DSI

<SAR Characterization>

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

<SAR design target and uncertainty>

Exposure conditions	Device State Index (DSI)	SAR design target	W/kg
Head Standalone (Head)	2	1g SAR design target	0.95
Head Simultaneous (Head_WiFi)	7	1g SAR design target	0.79
Hotspot	6	1g SAR design target	0.79
Body Standalone (Body)	4	1g SAR design target	0.95
Body Simultaneous (Body_WiFi)	8	1g SAR design target	0.79

Item	Uncertainty dB (k=2)
Total uncertainty	1.0

To account for total uncertainty, SAR_design_target should be determined as:

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

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

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

<Plimit for supported technologies and bands (Plimit in EFS file)>

Config0							
Band	Antenna	Head		Hotspot	Body-Worn/Extremity		Pmax*
		Standalone DSI 2	Simultaneous DSI 7	Simultaneous DSI 6	Standalone DSI 4	Simultaneous DSI 8	
GSM850(GPRS 4 Tx slots)**	0	29.3	28.5	27.6	28.4	27.6	25.5
GSM1900(GPRS 4 Tx slots) **	2	28.2	27.4	24.1	24.9	24.1	23.0
WCDMA II	2	26.5	25.7	23.3	24.1	23.3	24.7
WCDMA IV	2	29.1	28.3	23.5	24.3	23.5	24.7
WCDMA V	0	28.8	28.0	27.2	28.0	27.2	24.0
CDMA BC0	0	27.9	27.1	26.2	27.0	26.2	24.5
CDMA BC1	2	25.3	24.5	23.0	23.8	23.0	24.5
CDMA BC10	0	29.2	28.4	26.6	27.4	26.6	24.5
LTE Band 7	2	31.9	31.1	23.2	24.0	23.2	24.7
LTE Band 12/17	0	29.5	28.7	27.7	28.5	27.7	24.7
LTE Band 13	0	28.7	27.9	26.8	27.6	26.8	24.2
LTE Band 14	0	28.8	28.0	25.6	26.4	25.6	24.7
LTE Band 25/2	2	27.9	27.1	23.4	24.2	23.4	24.7
LTE Band 26/5	0	29.4	28.6	28.0	28.8	28.0	24.7
LTE Band 30	2	29.8	29.0	24.2	25.0	24.2	22.7
LTE Band 41/38**	2	31.5	30.7	24.3	25.1	24.3	22.7
LTE Band 41(HPUE) **	2	31.5	30.7	24.3	25.1	24.3	22.4
LTE Band 48**	7	30.1	29.3	20.4	21.2	20.4	21.2
LTE Band 66/4	2	31.8	31.0	24.1	24.9	24.1	24.7
LTE Band 71	0	29.6	28.8	27.0	27.8	27.0	24.7
5G FR1 n2/25	2	26.3	25.5	23.5	24.3	23.5	24.7
5G FR1 n5	0	30.3	29.5	28.6	29.4	28.6	24.0
5G FR1 n12	0	30.2	29.4	27.9	28.7	27.9	23.7
5G FR1 n41**	2	32.9	32.1	23.3	24.1	23.3	19.9
5G FR1 n41 **	5	21.8	21.0	22.6	23.4	22.6	19.9
5G FR1 n41 HPUE**	5	21.8	21.0	22.6	23.4	22.6	21.7
5G FR1 n66	2	27.9	27.1	24.0	24.8	24.0	24.7
5G FR1 n71	0	30.5	29.7	27.0	27.8	27.0	24.7

Config1							
Band	Antenna	Head		Hotspot	Body-Worn/Extremity		Pmax*
		Standalone DSI 2	Simultaneous DSI 7	Simultaneous DSI 6	Standalone DSI 4	Simultaneous DSI 8	
GSM850(GPRS 4 Tx slots) **	1	24.7	23.9	27.7	28.5	27.7	25.5
GSM1900(GPRS 4 Tx slots) **	0	30.3	29.5	18.6	19.4	18.6	22.5
WCDMA II	0	28.5	27.7	20.3	21.1	20.3	24.7
WCDMA IV	0	31.1	30.3	19.9	20.7	19.9	24.7
WCDMA V	1	23.3	22.5	26.0	26.8	26.0	24.0
CDMA BC0	1	23.6	22.8	25.3	26.1	25.3	24.5
CDMA BC1	0	29.8	29.0	19.6	20.4	19.6	24.5
CDMA BC10	1	23.7	22.9	26.5	27.3	26.5	24.5
LTE Band 7	0	30.5	29.7	21.3	22.1	21.3	24.7
LTE Band 12/17	1	25.3	24.5	26.4	27.2	26.4	24.7
LTE Band 13	1	27.5	26.7	26.4	27.2	26.4	24.2
LTE Band 14	1	25.2	24.4	26.5	27.3	26.5	24.7
LTE Band 25/2	0	37.0	36.2	17.9	18.7	17.9	24.7
LTE Band 26/5	1	24.0	23.2	26.2	27.0	26.2	24.7
LTE Band 30	0	32.0	31.2	21.5	22.3	21.5	22.7
LTE Band 41/38 **	0	27.9	27.1	19.8	20.6	19.8	22.7
LTE Band 41(HPUE) **	0	27.9	27.1	19.8	20.6	19.8	22.9
LTE Band 48 **	2	28.4	27.6	18.3	19.1	18.3	19.6
LTE Band 66/4	0	28.3	27.5	19.8	20.6	19.8	24.7
LTE Band 71	1	26.3	25.5	26.3	27.1	26.3	24.7
5G FR1 n2/25	0	33.9	33.1	18.7	19.5	18.7	24.7
5G FR1 n5	1	23.3	22.5	26.0	26.8	26.0	24.0
5G FR1 n12	1	25.7	24.9	26.5	27.3	26.5	23.7
5G FR1 n41 **	0	28.3	27.5	21.9	22.7	21.9	19.9
5G FR1 n66	0	27.9	27.1	19.4	20.2	19.4	24.7
5G FR1 n71	1	24.9	24.1	26.4	27.2	26.4	24.7

*P_{max} is used for RF tune up procedure. The maximum allowed output power is equal to P_{max} + 1dB uncertainty.

**All P_{limit} power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).

The max allowed output power is the P_{limit} + 1dB device uncertainty, and if P_{limit} is higher than P_{max}, the device output power will be P_{max} instead

5. RF Exposure Limits

5.1 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.

5.2 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

1. 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.

6. Specific Absorption Rate (SAR)

6.1 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.

6.2 SAR Definition

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

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

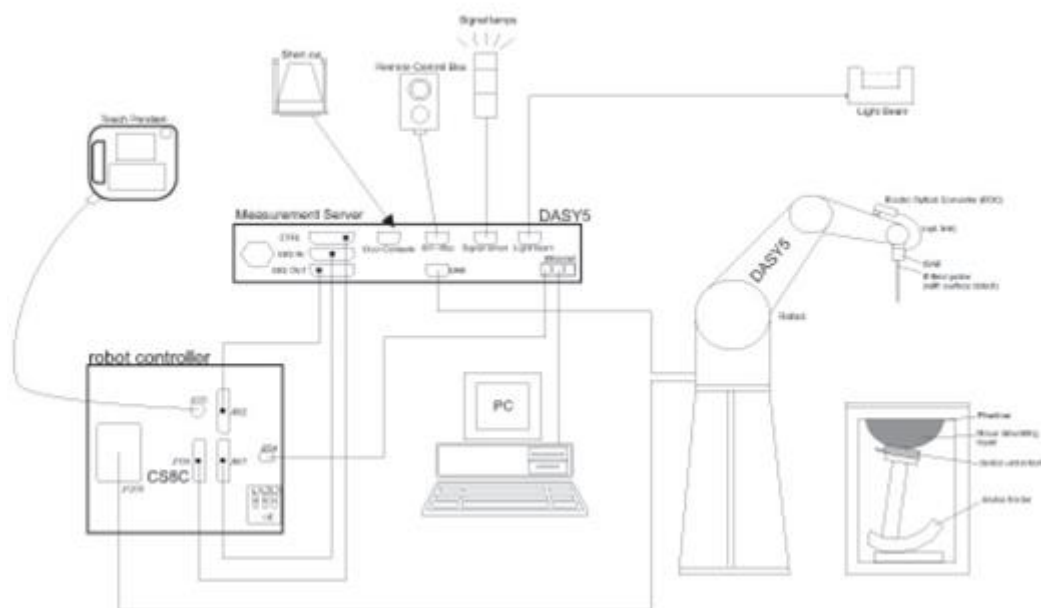
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. 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 WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

7.1 Test Side Location

Sporton Lab and below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 0007) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Test Side	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory			
Test Site Location	TW1190 No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, CHINESE TAIPEI		TW0007 No. 58, Aly. 75, Ln. 564, Wehnuia 3rd, Rd., Guishan Dist., Taoyuan City, CHINESE TAIPEI	
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY
	SAR06-HY	SAR10-HY		

7.2 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.

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – 4 GHz; Linearity: ± 0.2 dB (30 MHz – 4 GHz)	
Directivity	± 0.2 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 μ W/g – >100 mW/g; Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ± 0.2 dB (30 MHz – 6 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

7.3 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.



Fig 5.1 Photo of DAE

7.4 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

7.5 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

8. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

8.1 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

8.2 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.

8.3 Area Scan

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

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

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

8.4 Zoom Scan

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

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

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

8.5 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 remains in the same test position for all measurements and all volume scans use the same spatial resolution and grid spacing. When all volume scans were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.6 Power Drift Monitoring

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

9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1107	Mar. 08, 2019	Mar. 06, 2021
SPEAG	835MHz System Validation Kit	D835V2	4d167	Nov. 25, 2019	Nov. 24, 2020
SPEAG	1750MHz System Validation Kit	D1750V2	1112	Mar. 07, 2019	Mar. 05, 2021
SPEAG	1900MHz System Validation Kit	D1900V2	5d041	Sep. 11, 2018	Sep. 09, 2020
SPEAG	1900MHz System Validation Kit	D1900V2	5d185	Mar. 07, 2019	Mar. 05, 2021
SPEAG	2300MHz System Validation Kit	D2300V2	1006	Jan. 28, 2019	Jan. 26, 2021
SPEAG	2450MHz System Validation Kit	D2450V2	929	Nov. 21, 2019	Nov. 20, 2020
SPEAG	2600MHz System Validation Kit	D2600V2	1078	Mar. 06, 2019	Mar. 04, 2021
SPEAG	3500MHz System Validation Kit	D3500V2	1014	Jan. 29, 2019	Jan. 27, 2021
SPEAG	3700MHz System Validation Kit	D3700V2	1006	Mar. 05, 2019	Mar. 03, 2021
SPEAG	5GHz System Validation Kit	D5GHzV2	1006	Sep. 27, 2018	Sep. 25, 2020
SPEAG	5GHz System Validation Kit	D5GHzV2	1128	Dec. 16, 2019	Dec. 15, 2020
SPEAG	Data Acquisition Electronics	DAE4	376	Dec. 06, 2019	Dec. 05, 2020
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 26, 2020	Feb. 25, 2021
SPEAG	Data Acquisition Electronics	DAE4	853	Jul. 18, 2019	Jul. 17, 2020
SPEAG	Data Acquisition Electronics	DAE4	916	Dec. 17, 2019	Dec. 16, 2020
SPEAG	Dosimetric E-Field Probe	ES3DV3	3169	May. 24, 2019	May. 23, 2020
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 25, 2019	Sep. 24, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 29, 2020	Apr. 28, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Feb. 04, 2020	Feb. 03, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7515	Oct. 22, 2019	Oct. 21, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Sep. 20, 2019	Sep. 19, 2020
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Sep. 26, 2019	Sep. 25, 2020
RCPTWN	Thermometer	HTC-1	TM685-1	Nov. 12, 2019	Nov. 11, 2020
RCPTWN	Thermometer	HTC-1	TM560-2	Nov. 12, 2019	Nov. 11, 2020
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Oct. 31, 2019	Oct. 30, 2020
Agilent	Wireless Communication Test Set	E5515C	MY50267236	Mar. 18, 2020	Mar. 17, 2021
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Nov. 20, 2019	Nov. 19, 2020
Agilent	ENA Network Analyzer	E5071C	MY46104758	Sep. 06, 2019	Sep. 05, 2020
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 18, 2019	Sep. 17, 2020
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3169	Sep. 10, 2019	Sep. 09, 2020
Anritsu	Power Meter	ML2495A	1036004	Aug. 08, 2019	Aug. 07, 2020
Anritsu	Power Sensor	MA2411B	1027253	Aug. 08, 2019	Aug. 07, 2020
Anritsu	Power Meter	ML2495A	1218006	Oct. 14, 2019	Oct. 13, 2020
Anritsu	Power Sensor	MA2411B	1207363	Oct. 14, 2019	Oct. 13, 2020
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 27, 2019	Aug. 26, 2020
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jun. 27, 2019	Jun. 26, 2020
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 16, 2019	Oct. 15, 2020
Mini-Circuits	Power Amplifier	ZVE-8G+	6382	Aug. 12, 2019	Aug. 11, 2020
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

- Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
- Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged, or repaired during the interval.
- The justification data of dipole D750V3, SN: 1107, D1750V2, SN: 1112, D1900V2, SN: 5d041, D1900V2, SN: 5d185, D2300V2, SN: 1006, D2600V2, SN: 1078, D3500V2, SN: 1014, D3700V2, SN: 1006, D5GHzV2, SN: 1006, can be found in appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.
- The ES3DV3-SN3169 was tested within calibration date.

10. System Verification

10.1 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.

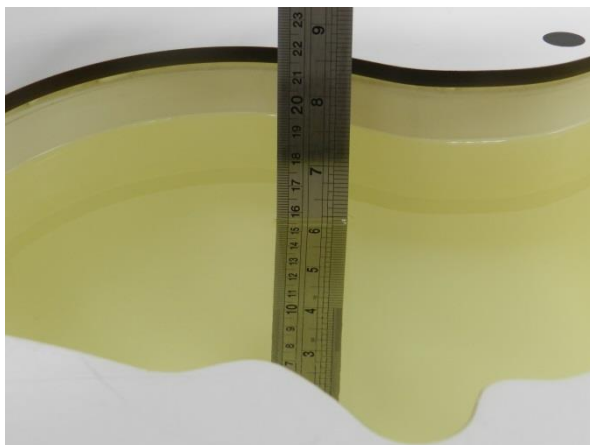


Fig 10.1Photo of Liquid Height for Head SAR



Fig 10.2 Photo of Liquid Height for Body SAR

**10.2 Tissue Verification**

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

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity (σ)	Permittivity (ϵ_r)
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)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	22.3	0.905	40.878	0.89	41.90	1.69	-2.44	±5	2020/5/11
750	22.5	0.890	40.696	0.89	41.90	0.00	-2.87	±5	2020/5/12
750	22.2	0.902	41.754	0.89	41.90	1.35	-0.35	±5	2020/5/13
750	22.3	0.917	43.723	0.89	41.90	3.03	4.35	±5	2020/5/24
750	22.5	0.893	42.411	0.89	41.90	0.34	1.22	±5	2020/6/7
750	22.5	0.891	41.321	0.89	41.90	0.11	-1.38	±5	2020/6/7
750	22.6	0.888	41.268	0.89	41.90	-0.22	-1.51	±5	2020/6/8
835	22.3	0.893	41.953	0.90	41.50	-0.78	1.09	±5	2020/5/12
835	22.5	0.899	41.843	0.90	41.50	-0.11	0.83	±5	2020/5/13
835	22.6	0.935	42.555	0.90	41.50	3.89	2.54	±5	2020/5/27
835	22.3	0.890	40.682	0.90	41.50	-1.11	-1.97	±5	2020/5/29
835	22.3	0.878	42.681	0.90	41.50	-2.44	2.85	±5	2020/6/5
835	22.7	0.883	40.886	0.90	41.50	-1.89	-1.48	±5	2020/6/6
1750	22.5	1.366	39.715	1.37	40.10	-0.29	-0.96	±5	2020/5/7
1750	22.6	1.347	39.102	1.37	40.10	-1.68	-2.49	±5	2020/5/14
1750	22.7	1.357	39.743	1.37	40.10	-0.95	-0.89	±5	2020/5/15
1750	22.2	1.388	40.306	1.37	40.10	1.31	0.51	±5	2020/5/25
1750	22.6	1.350	39.208	1.37	40.10	-1.46	-2.22	±5	2020/5/28
1750	22.6	1.378	41.929	1.37	40.10	0.58	4.56	±5	2020/6/8
1750	22.7	1.379	39.757	1.37	40.10	0.66	-0.86	±5	2020/6/9
1750	22.3	1.369	41.387	1.37	40.10	-0.07	3.21	±5	2020/8/1
1900	22.5	1.415	40.419	1.40	40.00	1.07	1.05	±5	2020/5/7
1900	22.6	1.410	39.371	1.40	40.00	0.71	-1.57	±5	2020/5/14
1900	22.7	1.446	41.126	1.40	40.00	3.29	2.81	±5	2020/5/15
1900	22.4	1.392	40.416	1.40	40.00	-0.57	1.04	±5	2020/5/16
1900	22.3	1.430	40.283	1.40	40.00	2.14	0.71	±5	2020/5/18
1900	22.6	1.380	39.575	1.40	40.00	-1.43	-1.06	±5	2020/5/24
1900	22.4	1.369	39.675	1.40	40.00	-2.21	-0.81	±5	2020/5/26
1900	22.6	1.402	40.656	1.40	40.00	0.14	1.64	±5	2020/5/28
1900	22.3	1.416	39.472	1.40	40.00	1.14	-1.32	±5	2020/6/1
1900	22.7	1.426	39.592	1.40	40.00	1.86	-1.02	±5	2020/6/9
1900	22.2	1.409	40.379	1.40	40.00	0.64	0.95	±5	2020/6/10
2300	22.7	1.648	39.502	1.67	39.50	-1.32	0.01	±5	2020/5/28
2300	22.3	1.665	40.375	1.67	39.50	-0.30	2.22	±5	2020/6/5
2450	22.2	1.838	39.464	1.80	39.20	2.11	0.67	±5	2020/5/22
2450	22.2	1.815	39.227	1.80	39.20	0.83	0.07	±5	2020/6/10
2600	22.2	2.043	38.700	1.96	39.00	4.23	-0.77	±5	2020/5/10
2600	22.3	2.026	38.973	1.96	39.00	3.37	-0.07	±5	2020/5/14
2600	22.5	2.017	39.109	1.96	39.00	2.91	0.28	±5	2020/5/23
2600	22.4	2.007	38.929	1.96	39.00	2.40	-0.18	±5	2020/5/26
2600	22.4	1.949	39.167	1.96	39.00	-0.56	0.43	±5	2020/5/27
2600	22.5	1.978	38.953	1.96	39.00	0.92	-0.12	±5	2020/6/16
3500	22.6	2.958	37.991	2.91	37.90	1.65	0.24	±5	2020/5/11
3500	22.6	2.958	37.991	2.91	37.90	1.65	0.24	±5	2020/5/11
3500	22.3	2.963	38.946	2.91	37.90	1.82	2.76	±5	2020/5/29
3500	22.4	2.963	38.954	2.91	37.90	1.82	2.78	±5	2020/6/8
3700	22.6	3.170	37.790	3.12	37.70	1.60	0.24	±5	2020/5/11
3700	22.3	3.121	38.729	3.12	37.70	0.03	2.73	±5	2020/5/29
3700	22.4	3.121	38.737	3.12	37.70	0.03	2.75	±5	2020/6/8
3700	22.3	3.156	38.513	3.12	37.70	1.15	2.16	±5	2020/6/14
5250	22.6	4.634	36.648	4.71	35.95	-1.61	1.94	±5	2020/5/21
5250	22.5	4.653	37.498	4.71	35.95	-1.21	4.31	±5	2020/5/21
5250	22.3	4.631	37.570	4.71	35.95	-1.68	4.51	±5	2020/5/24
5250	22.6	4.582	36.877	4.71	35.95	-2.72	2.58	±5	2020/6/11
5600	22.5	5.015	36.922	5.07	35.50	-1.08	4.01	±5	2020/5/21
5600	22.6	4.994	36.072	5.07	35.50	-1.50	1.61	±5	2020/5/21
5600	22.3	5.024	36.428	5.07	35.50	-0.91	2.61	±5	2020/5/26
5600	22.6	4.934	36.337	5.07	35.50	-2.68	2.36	±5	2020/6/11
5750	22.5	5.167	36.786	5.22	35.35	-1.02	4.06	±5	2020/5/21
5750	22.6	5.146	35.936	5.22	35.35	-1.42	1.66	±5	2020/5/21
5750	22.3	5.132	36.851	5.22	35.35	-1.69	4.25	±5	2020/5/24
5750	22.3	5.185	36.235	5.22	35.35	-0.67	2.50	±5	2020/5/26
5750	22.6	5.132	36.417	5.22	35.35	-1.69	3.02	±5	2020/6/12

10.3 System Performance Check Results

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

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)
2020/5/11	750	250	D750V3-1107	ES3DV3 - SN3169	DAE4 Sn699	2.00	8.32	8	-3.85
2020/5/12	750	250	D750V3-1107	ES3DV3 - SN3184	DAE4 Sn916	1.99	8.32	7.96	-4.33
2020/5/13	750	250	D750V3-1107	EX3DV4 - SN7515	DAE4 Sn853	2.24	8.32	8.96	7.69
2020/5/24	750	250	D750V3-1107	EX3DV4 - SN7515	DAE4 Sn853	2.28	8.32	9.12	9.62
2020/6/7	750	250	D750V3-1107	EX3DV4 - SN7515	DAE4 Sn853	2.22	8.32	8.88	6.73
2020/6/7	750	250	D750V3-1107	EX3DV4 - SN7515	DAE4 Sn853	2.01	8.32	8.04	-3.37
2020/6/8	750	250	D750V3-1107	EX3DV4 - SN7515	DAE4 Sn853	2.00	8.32	8	-3.85
2020/5/12	835	250	D835V2-4d167	ES3DV3 - SN3169	DAE4 Sn699	2.23	9.55	8.92	-6.60
2020/5/13	835	250	D835V2-4d167	ES3DV3 - SN3169	DAE4 Sn699	2.24	9.55	8.96	-6.18
2020/5/27	835	250	D835V2-4d167	EX3DV4 - SN3925	DAE4 Sn376	2.50	9.55	10	4.71
2020/5/29	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn916	2.26	9.55	9.04	-5.34
2020/6/5	835	250	D835V2-4d167	EX3DV4 - SN7515	DAE4 Sn853	2.43	9.55	9.72	1.78
2020/6/6	835	250	D835V2-4d167	EX3DV4 - SN7515	DAE4 Sn853	2.45	9.55	9.8	2.62
2020/5/7	1750	250	D1750V2-1112	ES3DV3 - SN3169	DAE4 Sn699	8.42	36.70	33.68	-8.23
2020/5/14	1750	250	D1750V2-1112	ES3DV3 - SN3169	DAE4 Sn699	8.30	36.70	33.2	-9.54
2020/5/15	1750	250	D1750V2-1112	EX3DV4 - SN3728	DAE4 Sn699	8.52	36.70	34.08	-7.14
2020/5/25	1750	250	D1750V2-1112	ES3DV3 - SN3184	DAE4 Sn916	8.92	36.70	35.68	-2.78
2020/5/28	1750	250	D1750V2-1112	EX3DV4 - SN3728	DAE4 Sn699	8.47	36.70	33.88	-7.68
2020/6/8	1750	250	D1750V2-1112	EX3DV4 - SN7515	DAE4 Sn853	8.81	36.70	35.24	-3.98
2020/6/9	1750	250	D1750V2-1112	EX3DV4 - SN7515	DAE4 Sn853	9.51	36.70	38.04	3.65
2020/5/7	1900	250	D1900V2-5d185	ES3DV3 - SN3169	DAE4 Sn699	9.50	39.40	38	-3.55
2020/5/14	1900	250	D1900V2-5d185	ES3DV3 - SN3169	DAE4 Sn699	10.10	39.40	40.4	2.54
2020/5/15	1900	250	D1900V2-5d185	EX3DV4 - SN3728	DAE4 Sn699	9.98	39.40	39.92	1.32
2020/5/16	1900	250	D1900V2-5d185	EX3DV4 - SN3728	DAE4 Sn699	9.77	39.40	39.08	-0.81
2020/5/18	1900	250	D1900V2-5d185	EX3DV4 - SN7515	DAE4 Sn853	9.82	39.40	39.28	-0.30
2020/5/24	1900	250	D1900V2-5d185	ES3DV3 - SN3184	DAE4 Sn916	9.36	39.40	37.44	-4.97
2020/5/26	1900	250	D1900V2-5d185	ES3DV3 - SN3184	DAE4 Sn916	9.29	39.40	37.16	-5.69
2020/5/28	1900	250	D1900V2-5d041	EX3DV4 - SN3728	DAE4 Sn699	9.83	40.20	39.32	-2.19
2020/6/1	1900	250	D1900V2-5d041	EX3DV4 - SN7515	DAE4 Sn853	9.82	40.20	39.28	-2.29
2020/6/9	1900	250	D1900V2-5d041	EX3DV4 - SN7515	DAE4 Sn853	9.89	40.20	39.56	-1.59
2020/6/10	1900	250	D1900V2-5d041	EX3DV4 - SN3642	DAE4 Sn376	9.76	40.20	39.04	-2.89
2020/5/28	2300	250	D2300V2-1006	ES3DV3 - SN3184	DAE4 Sn916	11.10	48.70	44.4	-8.83
2020/6/5	2300	250	D2300V2-1006	EX3DV4 - SN7515	DAE4 Sn853	12.80	48.70	51.2	5.13
2020/5/22	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn916	12.90	53.10	51.6	-2.82
2020/6/10	2450	250	D2450V2-929	EX3DV4 - SN3642	DAE4 Sn376	12.90	53.10	51.6	-2.82
2020/5/10	2600	250	D2600V2-1078	ES3DV3 - SN3169	DAE4 Sn699	14.80	57.60	59.2	2.78
2020/5/14	2600	250	D2600V2-1078	EX3DV4 - SN7515	DAE4 Sn853	14.50	57.60	58	0.69
2020/5/23	2600	250	D2600V2-1078	EX3DV4 - SN7515	DAE4 Sn853	14.80	57.60	59.2	2.78
2020/5/26	2600	250	D2600V2-1078	ES3DV3 - SN3184	DAE4 Sn916	13.90	57.60	55.6	-3.47
2020/5/27	2600	250	D2600V2-1078	ES3DV3 - SN3184	DAE4 Sn916	14.00	57.60	56	-2.78
2020/6/16	2600	250	D2600V2-1078	EX3DV4 - SN3642	DAE4 Sn376	13.4	57.60	53.6	-6.94
2020/5/11	3500	100	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn376	6.53	67.90	65.3	-3.83
2020/5/11	3500	100	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn376	6.72	67.90	67.2	-1.03
2020/5/29	3500	100	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn376	6.55	67.90	65.5	-3.53
2020/6/8	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn376	6.51	67.90	65.1	-4.12
2020/5/11	3700	100	D3700V2-1006	EX3DV4 - SN3931	DAE4 Sn376	6.84	67.30	68.4	1.63
2020/5/29	3700	100	D3700V2-1006	EX3DV4 - SN3925	DAE4 Sn376	6.81	67.30	68.1	1.19
2020/6/8	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn376	6.35	67.30	63.5	-5.65
2020/6/14	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn376	6.43	67.30	64.3	-4.46
2020/5/21	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7515	DAE4 Sn853	7.70	80.00	77	-3.75
2020/5/21	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3925	DAE4 Sn376	7.90	80.70	79	-2.11
2020/5/24	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3925	DAE4 Sn376	7.64	80.70	76.4	-5.33
2020/6/11	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	8.30	80.70	83	2.85
2020/5/21	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn376	8.63	83.30	86.3	3.60
2020/5/21	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7515	DAE4 Sn853	8.64	82.40	86.4	4.85
2020/5/26	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn376	8.65	83.30	86.5	3.84
2020/6/11	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	8.70	83.30	87	4.44
2020/5/21	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn376	7.82	80.40	78.2	-2.74
2020/5/21	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN7515	DAE4 Sn853	8.04	80.40	80.4	0.00
2020/5/24	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn376	7.34	80.40	73.4	-8.71
2020/5/26	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn376	7.84	80.40	78.4	-2.49
2020/6/12	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	8.56	80.40	85.6	6.47

Date	Frequency (MHz)	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 (%)
2020/8/1	1750	250	D1750V2-1112	ES3DV3 - SN3184	DAE4 Sn916	4.68	19.40	18.72	-3.51
2020/5/21	5250	100	D5GHZV2-1128-5250	EX3DV4 - SN7515	DAE4 Sn853	2.15	22.90	21.5	-6.11
2020/5/21	5250	100	D5GHZV2-1006-5250	EX3DV4 - SN3925	DAE4 Sn376	2.25	23.20	22.5	-3.02
2020/5/24	5250	100	D5GHZV2-1006-5250	EX3DV4 - SN3925	DAE4 Sn376	2.20	23.20	22	-5.17
2020/6/11	5250	100	D5GHZV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn376	2.34	23.20	23.4	0.86
2020/5/21	5600	100	D5GHZV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn376	2.43	23.80	24.3	2.10
2020/5/21	5600	100	D5GHZV2-1128-5600	EX3DV4 - SN7515	DAE4 Sn853	2.39	23.60	23.9	1.27
2020/5/26	5600	100	D5GHZV2-1006-5600	EX3DV4 - SN3925	DAE4 Sn376	2.44	23.80	24.4	2.52
2020/6/11	5600	100	D5GHZV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn376	2.42	23.80	24.2	1.68
2020/5/21	5750	100	D5GHZV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn376	2.20	22.90	22	-3.93
2020/5/21	5750	100	D5GHZV2-1006-5750	EX3DV4 - SN7515	DAE4 Sn853	2.23	22.90	22.3	-2.62
2020/5/24	5750	100	D5GHZV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn376	2.09	22.90	20.9	-8.73
2020/5/26	5750	100	D5GHZV2-1006-5750	EX3DV4 - SN3925	DAE4 Sn376	2.21	22.90	22.1	-3.49
2020/6/12	5750	100	D5GHZV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn376	2.38	22.90	23.8	3.93

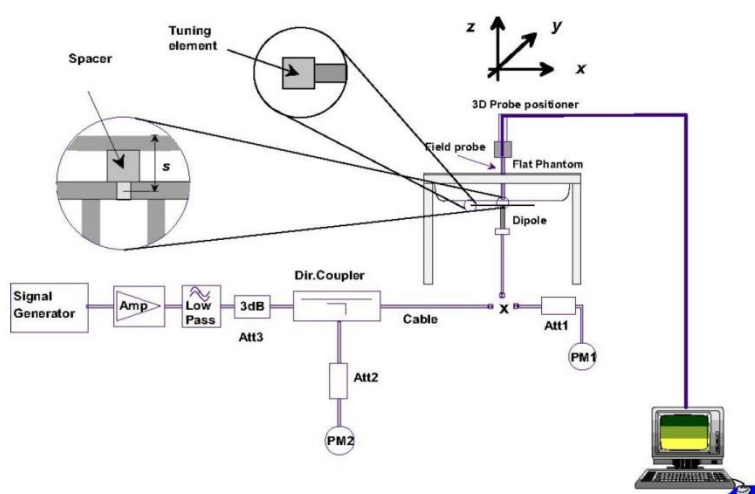


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

11. RF Exposure Positions

11.1 Ear and handset reference point

Figure 9.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled "M," the left ear reference point (ERP) is marked "LE," and the right ERP is marked "RE." Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 9.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 9.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 9.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

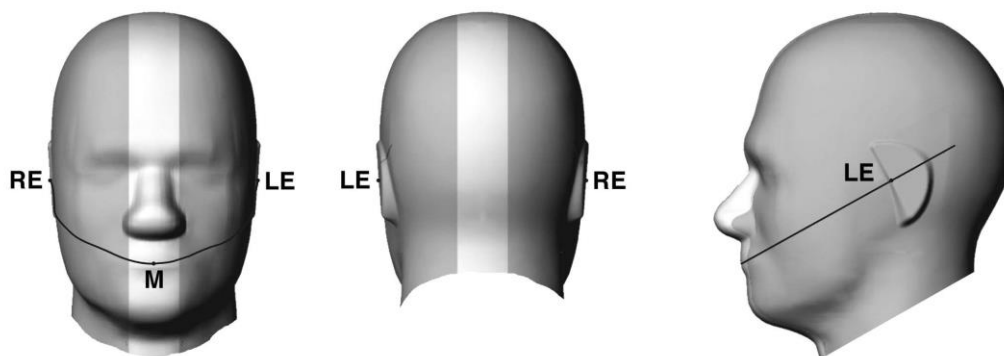


Fig 9.1.1 Front, back, and side views of SAM twin phantom

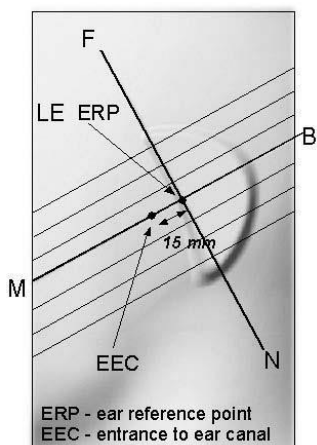


Fig 9.1.2 Close-up side view of phantom showing the ear region.

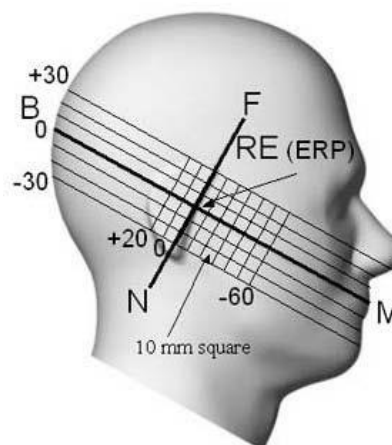


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 9.2.1 and Figure 9.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 9.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 9.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 9.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 9.2.3. The actual rotation angles should be documented in the test report.

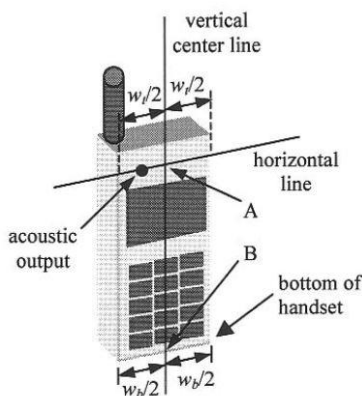


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case"

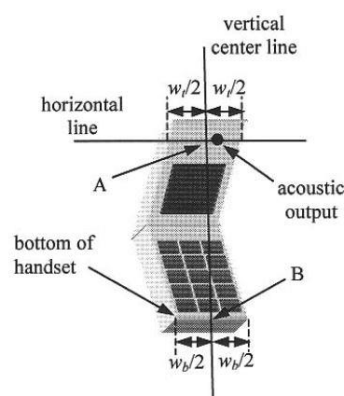


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

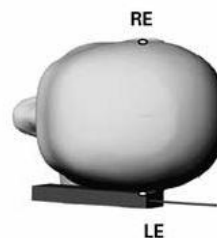
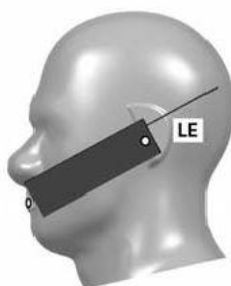
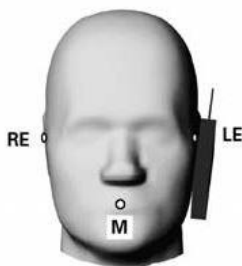


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15° .
3. Rotate the handset around the horizontal line by 15° .
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 9.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

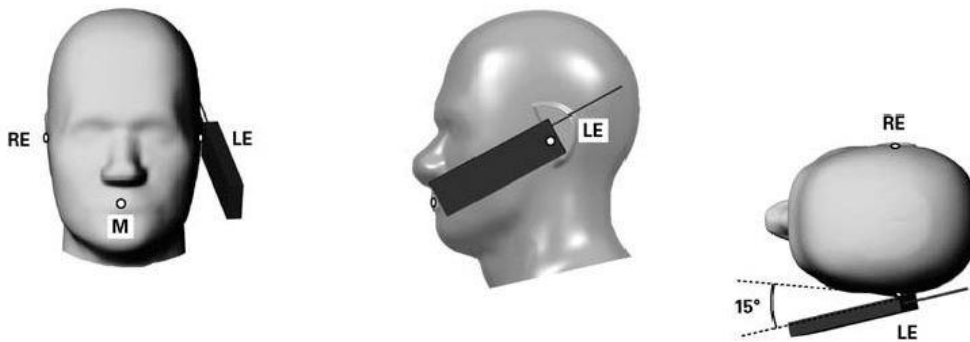


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 9.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

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

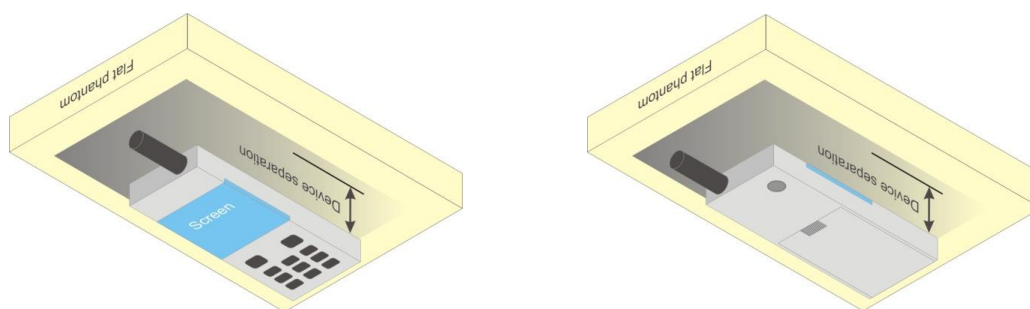


Fig 9.4 Body Worn Position

11.5 Product Specific Exposure

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

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

**11.6 Wireless Router**

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

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

12. DL/UL carrier aggregation

<LTE Carrier Aggregation combinations>

General Note:

1. This device supports Carrier Aggregation on Uplink and downlink for inter and intra band. For the device supports combination bands and configurations are according to 3GPP.
2. In applying the existing power measurement procedure of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of the frequency band and CCs in each row need consideration, and that configurations require power measurement should be highlighted in the below table.

2CC Downlink Carrier Aggregation				3CC Downlink Carrier Aggregation				4CC Downlink Carrier Aggregation			
Number	Combination	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset
1	2A12A		3CC-1	72	2A12A12A		4CC-1	204	2A12A66A66A		
2	2A13A		3CC-5	73	2A12A30A		4CC-11	205	2A12A66C		4CC-1
3	2A14A		3CC-8	74	2A12A66A		4CC-2	206	2A13A46C	B46 SCC only	
4	2A17A			75	2A12B		4CC-2	207	2A13A48C		
5	2A29A	B29 SCC only	3CC-10	76	2A13A46A	B46 SCC only	4CC-4	208	2A13A66A66A		
6	2A30A		3CC-16	77	2A13A48A		4CC-6	209	2A13A66B		4CC-7
7	2A46A	B46 SCC only	3CC-17	78	2A13A66A		4CC-7	210	2A13A66C		4CC-7
8	2A48A		3CC-28	79	2A14A30A			211	2A14A66A66A		
9	2A4A		3CC-18	80	2A14A66A		4CC-15	212	2A2A12A30A		
10	2A5A		3CC-19	81	2A29A30A	B29 SCC only	4CC-16	213	2A2A12A66A		4CC-1
11	2A66A		3CC-21	82	2A29A66A	B29 SCC only		214	2A2A12B		4CC-1
12	2A71A		3CC-22	83	2A2A12A		4CC-11	215	2A2A13A66A		4CC-7
13	2A7A		3CC-20	84	2A2A13A		4CC-14	216	2A2A14A66A		4CC-10
14	4A12A		3CC-58	85	2A2A14A		4CC-15	217	2A2A29A30A	B29 SCC only	
15	4A13A		3CC-66	86	2A2A30A		4CC-17	218	2A2A30A66A		
16	4A17A			87	2A2A46A	B46 SCC only	4CC-18	219	2A2A46C	B46 SCC only	4CC-4
17	4A29A	B29 SCC only	3CC-61	88	2A2A4A		4CC-19	220	2A2A4A12A		
18	4A30A		3CC-34	89	2A2A5A		4CC-22	221	2A2A4A4A		4CC-19
19	4A46A	B46 SCC only	3CC-63	90	2A2A7A		4CC-25	222	2A2A4A5A		
20	4A48A		3CC-64	91	2A2A66A		4CC-23	223	2A2A5A30A		
21	4A5A		3CC-69	92	2A2A71A		4CC-27	224	2A2A5A66A		
22	4A71A		3CC-70	93	2A30A66A		4CC-17	225	2A2A5B		4CC-21
23	4A7A		3CC-71	94	2A46A46A	B46 SCC only	4CC-4	226	2A2A7A66A		
24	5A25A			95	2A46A48A	B46 SCC only	4CC-167	227	2A2A66A66A		4CC-10
25	5A30A		3CC-81	96	2A46A66A	B46 SCC only	4CC-33	228	2A2A66A71A		
26	5A38A			97	2A46C	B46 SCC only	3CC-25	229	2A2A66B		4CC-10
27	5A41A			98	2A48A48A		3CC-25	230	2A2A66C		4CC-10
28	5A46A	B46 SCC only	3CC-82	99	2A48A66A		4CC-37	231	2A30A66A66A		4CC-17
29	5A48A		3CC-84	100	2A48C		4CC-37	232	2A46A46C	B46 SCC only	4CC-4
30	5A66A		3CC-43	101	2A4A12A		4CC-40	233	2A46C66A	B46 SCC only	
31	5A7A		3CC-91	102	2A4A13A		4CC-139	234	2A46D	B46 SCC only	4CC-4
32	7A12A		3CC-98	103	2A4A29A	B29 SCC only		235	2A48A48C		4CC-6
33	7A46A	B46 SCC only	3CC-102	104	2A4A30A			236	2A48C66A		
34	7A66A		3CC-101	105	2A4A4A		4CC-41	237	2A48D		4CC-37
35	12A25A			106	2A4A5A		4CC-43	238	2A4A12B		4CC-19
36	12A30A		3CC-105	107	2A4A71A		4CC-134	239	2A4A4A12A		4CC-39
37	12A46A	B46 SCC only	3CC-106	108	2A4A7A		4CC-45	240	2A4A4A5A		4CC-21
38	12A66A		3CC-104	109	2A5A7A			241	2A4A5B		4CC-42
39	13A46A	B46 SCC only	3CC-109	110	2A5A30A		4CC-53	242	2A4A7A7A		
40	13A48A		3CC-111	111	2A5A46A	B46 SCC only	4CC-47	243	2A4A7C		4CC-44
41	13A66A		3CC-115	112	2A5A48A		4CC-49	244	2A5A12B		
42	14A30A		3CC-118	113	2A5A66A		4CC-52	245	2A5A46C	B46 SCC only	
43	14A66A		3CC-119	114	2A5B		4CC-24	246	2A5A48C		



FCC SAR TEST REPORT

Report No. : FA022521-02A

44	25A26A		3CC-120	115	2A66A66A		4CC-30	247	2A5A66A66A		4CC-23
45	25A41A		3CC-121	116	2A66A71A		4CC-27	248	2A5A66B		4CC-50
46	25A46A	B46 SCC only		117	2A66B		4CC-28	249	2A5A66C		4CC-50
47	26A46A	B46 SCC only		118	2A66C		4CC-9	250	2A5B30A		4CC-22
48	29A30A	B29 SCC only	3CC-10	119	2A7A12A		4CC-62	251	2A5B66A		4CC-50
49	29A66A	B29 SCC only	3CC-11	120	2A7A66A		4CC-25	252	2A66A66A66A		4CC-7
50	30A66A		3CC-123	121	2A7A7A		4CC-44	253	2A46A48C		4CC-167
51	46A66A	B46 SCC only	3CC-82	122	2A7C		4CC-44	254	2A66A66A71A		4CC-27
52	46A71A	B46 SCC only	3CC-129	123	2C66A		4CC-12	255	2A66C71A		4CC-27
53	48A66A		3CC-85	124	4A12A12A		4CC-40	256	2A7A12B		
54	66A71A		3CC-46	125	4A12A30A		4CC-71	257	2A7A66A66A		4CC-25
55	2C		3CC-57	126	4A12B		3CC-60	258	2C66A66A		4CC-63
56	4A4A		3CC-65	127	4A29A30A	B29 SCC only	4CC-73	259	4A46A46C	B46 SCC only	4CC-150
57	5A5A		3CC-80	128	4A46A46A	B46 SCC only	4CC-68	260	4A46D	B46 SCC only	4CC-150
58	5B		3CC-73	129	4A46C	B46 SCC only	4CC-69	261	4A48D		
59	7A7A		3CC-75	130	4A48C		4CC-70	262	4A4A12A30A		
60	7C		3CC-52	131	4A4A12A		4CC-71	263	4A4A12B		4CC-71
61	12A12A		3CC-58	132	4A4A13A		3CC-32	264	4A4A5B		4CC-21
62	12B		3CC-60	133	4A4A5A		4CC-75	265	5A30A66A66A		
63	25A25A		3CC-120	134	4A4A71A		4CC-134	266	5A46C66A	B46 SCC only	
64	41A41A		3CC-157	135	4A4A7A		3CC-74	267	5A46D	B46 SCC only	4CC-79
65	41C		3CC-122	136	4A5A30A		4CC-76	268	5A48A48C		4CC-83
66	48A48A		3CC-84	137	4A5B		4CC-75	269	5A48C66A		4CC-81
67	48C		3CC-86	138	4A7A12A		4CC-77	270	5A48D		4CC-83
68	66A66A		3CC-87	139	4A7A7A		4CC-45	271	5A5A66A66A		4CC-78
69	66B		3CC-88	140	4A7C		4CC-45	272	5A5A66B		4CC-78
70	66C		3CC-89	141	5A5A66A		4CC-85	273	5A5A66C		4CC-78
71	2A2A		3CC-12	142	5A30A66A		4CC-78	274	5B30A66A		4CC-78
				143	5A46A66A	B46 SCC only	4CC-79	275	5B66A66A		4CC-78
				144	5A46C	B46 SCC only	4CC-79	276	5B46C	B46 SCC only	4CC-79
				145	5A48A48A		4CC-83	277	5B66B		4CC-79
				146	5A48A66A		4CC-83	278	5B66C		4CC-79
				147	5A48C		4CC-83	279	7A46D	B46 SCC only	4CC-147
				148	5A66A66A		4CC-78	280	7A7A46C	B46 SCC only	4CC-147
				149	5A66B		4CC-78	281	7C66A66A		4CC-144
				150	5A66C		4CC-78	282	7C46C	B46 SCC only	4CC-147
				151	5A7A7A		3CC-39	283	12A30A66A66A		
				152	5A7C		3CC-91	284	12A46D	B46 SCC only	
				153	5B46A	B46 SCC only	4CC-93	285	12B66A66A		4CC-100
				154	5B66A		4CC-95	286	13A46D	B46 SCC only	4CC-4
				155	7A12A66A		4CC-169	287	13A66A66C		4CC-107
				156	7A12B		4CC-62	288	13A48A66B		4CC-107
				157	7A46C	B46 SCC only	4CC-96	289	13A48A66C		
				158	7A66A66A		4CC-98	290	13A48A48C		4CC-107
				159	7A7A46A	B46 SCC only	4CC-99	291	13A48C66A		4CC-107
				160	12B66A		4CC-102	292	13A48D		4CC-107
				161	12A30A66A		4CC-100	293	13A66A66A66A		4CC-107
				162	12A46C	B46 SCC only	4CC-101	294	13A66A66B		4CC-107
				163	12A66A66A		4CC-102	295	13A66D		4CC-107
				164	12A66C		4CC-102	296	14A30A66A66A		
				165	13A46A66A	B46 SCC only	4CC-170	297	25A25A41C		4CC-116
				166	13A46C	B46 SCC only	4CC-104	298	25A41D		
				167	13A48A48A		4CC-107	299	29A30A66A66A	B29 SCC only	
				168	13A48A66A		4CC-109	300	46A46C66A	B46 SCC only	4CC-79
				169	13A48C		4CC-107	301	46A48D	B46 SCC only	4CC-167
				170	13A66A66A		4CC-104	302	46A66A66A66A	B46 SCC only	4CC-79

				171	13A66B		4CC-104	303	46C66A66A	B46 SCC only	4CC-79
				172	13A66C		4CC-104	304	46D66A	B46 SCC only	4CC-79
				173	14A30A66A		4CC-114	305	48A48A66A66A		4CC-37
				174	14A66A66A		4CC-114	306	48A66A66A66A		4CC-37
				175	25A25A26A			307	48C66B		4CC-37
				176	25A25A41A		4CC-115	308	48C66C		4CC-37
				177	25A41C		4CC-116	309	48A48A66B		4CC-37
				178	29A30A66A	B29 SCC only	4CC-117	310	48A48A66C		4CC-37
				179	29A66A66A	B29 SCC only	4CC-117	311	48A48C66A		4CC-37
				180	30A66A66A		4CC-117	312	48C48C		4CC-37
				181	46A46A66A	B46 SCC only	4CC-121	313	48C66A66A		4CC-37
				182	46A66A66A	B46 SCC only	4CC-120	314	48D66A		4CC-37
				183	46C66A	B46 SCC only	4CC-121	315	2A2A4A71A		
				184	46C71A	B46 SCC only	4CC-161	316	2A7A7A66A		4CC-25
				185	46A66C	B46 SCC only	4CC-121	317	2A7A7A13A		
				186	48A48A66A		4CC-128	318	2A7A46C	B46 SCC only	
				187	48A66A66A		4CC-125	319	46C48A66A	B46 SCC only	4CC-159
				188	48A66B		4CC-125	320	2A46C48A	B46 SCC only	
				189	48A66C		4CC-125	321	46A48C66A	B46 SCC only	4CC-159
				190	48C66A		4CC-125	322	7A12B66A		
				191	66A66A71A		4CC-27	323	13A46C66A	B46 SCC only	
				192	66C71A		4CC-27	324	41A41A41C		4CC-115
				193	7C66A		4CC-144	325	41A41D		4CC-115
				194	7A7A66A		4CC-144	326	41C41C		4CC-115
				195	46A48A66A	B46 SCC only	4CC-166	327	41E		4CC-115
				196	25A25A25A		4CC-115	328	48E		4CC-6
				197	41A41C		4CC-171	329	48A48D		4CC-6

2CC Uplink Carrier Aggregation

Number	Combination
1	5B
2	7C
3	41C
4	48C
5	66B
6	66C

<Power verification for DL Carrier Aggregation>
General Note:

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

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

<Two Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	5A25A	5	10	836.5	20525	QPSK	1	49	25	20	1960	8340	24.66	24.69
	5A41A	5	10	836.5	20525	QPSK	1	49	41	20	2593	40620	24.93	24.95
	12A25A	12	10	704	23060	QPSK	1	0	25	20	1960	8340	24.69	24.72
	26A46A	26	15	831.5	26865	QPSK	1	74	46	20	5537.5	50665	24.77	24.78
	2A17A	2	20	1860	18700	QPSK	1	0	17	10	740	5790	24.40	24.42
	4A17A	4	20	1732.5	20175	QPSK	1	0	17	10	740	5790	24.86	24.88
	25A46A	25	20	1860	26140	QPSK	1	0	46	20	5537.5	50665	24.45	24.48

<Three Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	5A7A46A	5	10	836.5	20525	QPSK	1	49	7	20	2655	3100	7	20	2655	3100	24.67	24.69
	5B38A	5	10	831.6	20476	QPSK	1	49	5	10	886.5	2575	38	20	2595	38000	24.66	24.69
	2A14A30A	2	20	1860	18700	QPSK	1	0	14	10	763	5330	30	10	2355	9820	24.40	24.42
	2A29A66A	2	20	1860	18700	QPSK	1	0	29	10	722.5	9715	66	20	2155	66886	24.38	24.42
	2A4A29A	2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	29	10	722.5	9715	24.38	24.42
	2A4A30A	2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	30	10	2355	9820	24.40	24.42
	2A5A7A	2	20	1860	18700	QPSK	1	0	5	10	881.5	2525	7	20	2655	3100	24.38	24.42
	2A4A46A	2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	46	20	5537.5	50665	24.40	24.42
	2A7A30A	2	20	1860	18700	QPSK	1	0	7	20	2655	3100	30	10	2355	9820	24.36	24.42
	7A30A66A	7	20	2510	20850	QPSK	1	99	30	10	2355	9820	66	20	2155	66886	24.95	24.98
	7A46A66A	7	20	2510	20850	QPSK	1	99	46	20	5537.5	50665	66	20	2155	66886	24.93	24.98
	7A7A26A	7	20	2510	20850	QPSK	1	99	7	5	2687.5	3425	26	15	876.5	8865	24.95	24.98
	25A25A26A	25	20	1860	26140	QPSK	1	0	25	5	1992.5	8665	26	15	876.5	8865	24.44	24.48

<Four Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	5A30A66A66A	5	10	836.5	20525	QPSK	1	49	30	10	2355	9820	66	20	2155	66886	66	20	2155	66886	24.66	24.69
	5A46C66A	5	10	836.5	20525	QPSK	1	49	46	20	5537.5	50665	46	20	5557.3	50863	66	20	2155	66886	24.64	24.69
	5A48A48A66A	5	10	836.5	20525	QPSK	1	49	48	20	3625	55990	48	5	3697.5	56715	66	20	2155	66886	24.66	24.69
	5A7A66A66A	5	10	836.5	20525	QPSK	1	49	7	20	2655	3100	66	20	2155	66886	66	5	2197.5	67311	24.65	24.69
	12A30A66A66A	12	10	704	23060	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.69	24.72
	13A48A48A66A	13	10	782	23230	QPSK	1	0	48	20	3625	55990	48	5	3697.5	56715	66	20	2155	66886	24.02	24.05
	13A46C66A	13	10	782	23230	QPSK	1	0	46	20	5537.5	50665	46	5	5557.3	50863	66	20	2155	66886	24.03	24.05
	14A30A66A66A	14	10	793	23330	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.65	24.68
	29A30A66A66A	30	10	2310	27710	QPSK	1	0	29	10	722.5	9715	66	20	2155	66886	66	5	2197.5	67311	22.91	22.93
	2A12A66A66A	2	20	1860	18700	QPSK	1	0	12	10	737.5	5095	66	20	2155	66886	66	5	2197.5	67311	24.40	24.42
	2A13A46C	2	20	1860	18700	QPSK	1	0	13	10	751	5230	46	20	5537.5	50665	46	20	5557.3	50863	24.39	24.42
	2A13A48A48A	2	20	1860	18700	QPSK	1	0	13	10	751	5230	48	20	3625	55990	48	5	3697.5	56715	24.40	24.42
	2A13A66A66A	2	20	1860	18700	QPSK	1	0	13	10	751	5230	66	20	2155	66886	66	5	2197.5	67311	24.37	24.42
	2A14A66A66A	2	20	1860	18700	QPSK	1	0	14	10	763	5330	66	20	2155	66886	66	5	2197.5	67311	24.39	24.42
	2A2A12A30A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	30	10	2355	9820	24.37	24.42
	2A2A29A30A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	29	10	722.5	9715	30	10	2355	9820	24.38	24.42
	2A2A30A66A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	30	10	2355	9820	66	20	2155	66886	24.41	24.42
	2A2A4A12A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	12	10	737.5	5095	24.37	24.42
	2A2A4A5A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	5	10	881.5	2525	24.38	24.42
	2A2A5A30A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	30	10	2355	9820	24.38	24.42
	2A2A5A66A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	66	20	2155	66886	24.35	24.42
	2A2A7A66A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	7	20	2655	3100	66	20	2155	66886	24.37	24.42
	2A2A66A71A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	66	20	2155	66886	71	20	634.5	68761	24.40	24.42
	2A46A46A66A	2	20	1860	18700	QPSK	1	0	46	20	5537.5	50665	46	20	5905	54340	66	20	2155	66886	24.35	24.42
	2A48A48A66A	2	20	1860	18700	QPSK	1	0	48	20	3625	55990	48	5	3697.5	56715	66	20	2155	66886	24.39	24.42
	2A4A7A7A	2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	7	5	2687.5	3425	24.35	24.42
	2A5A12B	2	20	1860	18700	QPSK	1	0	5	10	881.5	2525	12	10	740	5120	12	5	732.8	5048	24.37	24.42
	2A5A46C	2	20	1860	18700	QPSK	1	0	5	10	881.5	2525	46	20	5537.5	50665	46	20	5557.3	50863	24.40	24.42
	2A5A48A48A	2	20	1860	18700	QPSK	1	0	5	10	881.5	2525	48	20	3625	55990	48	5	3697.5	56715	24.35	24.42
	2A2A4A13A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	13	10	751	5230	24.37	24.42
	2A2A4A71A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	71	20	634.5	68761	24.38	24.42
	2A2A7A12A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	7	20	2655	3100	12	10	737.5	5095	24.40	24.42
	2A46A48A48A	2	20	1860	18700	QPSK	1	0	46	20	5537.5	50665	48	20	3625	55990	48	5	3697.5	56715	24.41	24.42
	2A4A4A13A	2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	13	10	751	5230	24.37	24.42
	2A4A4A71A	2	20	1860	18700	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	71	20	634.5	68761	24.37	24.42
	2A7A7A29A	2	20	1860	18700	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	29	10	722.5	9715	24.35	24.42
	2A7A7A13A	2	20	1860	18700	QPSK	1	0	7	20	2655	3100	7	5	2655	3100	13	10	751	5230	24.39	24.42
	2A7A7A46A	2	20	1860	18700	QPSK	1	0	7	20	2655	3100	7	5	2655	3100	46	20	5537.5	50665	24.35	24.42
	4A4A12A30A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	30	10	2355	9820	24.86	24.88
	4A4A29A30A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	29	10	722.5	9715	30	10	2355	9820	24.84	24.88
	4A4A5A30A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	30	10	2355	9820	24.83	24.88
	4A7A12B	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	740	5120	12	5	732.8	5048	24.86	24.88
	4A4A48A48A	4	20	1732.5	20175	QPSK	1	0	4	20	2132.5	2175	48	20	3625	55990	48	5	3697.5	56715	24.86	24.88
	7A12A66A66A	7	20	2510	20850	QPSK	1	99	12	10	737.5	5095	66	20	2155	66886	66	5	2197.5	67311	24.95	24.98
	7A7A29A66A	7	20	2510	20850	QPSK	1	99	7	5	2687.5	3425	29	10	722.5	9715	66	20	2155	66886	24.97	24.98
	46D71A	71	10	673	133222	QPSK	1	0	46	20	5520.2	50492	46	20	5540	50690	46	20	5559.8	50888	24.87	24.91

<Uplink Carrier Aggregation Active>
<Intra-Band Uplink carrier aggregation>
General Note:

1. The device supports intra-band uplink carrier aggregation for LTE B5/7/41/48/66 with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
2. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
3. Uplink CA is only operating with power class3, and additional SAR measurement for LTE UL CA with other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.

CA_5B_Config 0_DSI 0/2/4/6/7/8										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	2	0	25.26	25.7
20575	20476	QPSK	1	0	1	49	2	0	24.59	25.7
20600	20501	QPSK	1	0	1	49	2	0	25.61	25.7

CA_7C_Config 0_DSI 0/2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	24.90	25.7
21100	20902	QPSK	1	0	1	99	2	0	24.83	25.7
21350	21152	QPSK	1	0	1	99	2	0	24.75	25.7

CA_7C_Config 0_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	23.32	24.2
21100	20902	QPSK	1	0	1	99	2	0	23.25	24.2
21350	21152	QPSK	1	0	1	99	2	0	23.44	24.2

CA_7C_Config 0_DSI 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	24.13	25
21100	20902	QPSK	1	0	1	99	2	0	24.01	25
21350	21152	QPSK	1	0	1	99	2	0	24.34	25

CA_66B_Config 0_DSI 0/2/4/7										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	24.33	25.7
132322	132229	QPSK	1	0	1	24	2	0	25.49	25.7
132597	132504	QPSK	1	0	1	24	2	0	24.83	25.7

CA_66B_Config 0_DSI 6/8										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	24.35	25.1
132322	132229	QPSK	1	0	1	24	2	0	24.06	25.1
132597	132504	QPSK	1	0	1	24	2	0	24.16	25.1

CA_66C_Config 0_DSI 0/2/4/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	25.69	25.7
132322	132124	QPSK	1	0	1	99	2	0	25.59	25.7
132572	132374	QPSK	1	0	1	99	2	0	25.47	25.7

CA_66C_Config 0_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	24.32	25.1
132322	132124	QPSK	1	0	1	99	2	0	24.34	25.1
132572	132374	QPSK	1	0	1	99	2	0	24.21	25.1

CA_41C_Config 0_DSI 0/2/4/6/7/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	25.68	25.7
40185	39987	QPSK	1	0	1	99	2	0	25.67	25.7
40620	40422	QPSK	1	0	1	99	2	0	25.67	25.7
41055	40857	QPSK	1	0	1	99	2	0	25.57	25.7
41490	41292	QPSK	1	0	1	99	2	0	25.70	25.7

CA_41C HPUE_Config 0_DSI 0/2/4/6/7/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	26.36	27
40185	39987	QPSK	1	0	1	99	2	0	26.41	27
40620	40422	QPSK	1	0	1	99	2	0	26.39	27
41055	40857	QPSK	1	0	1	99	2	0	26.34	27
41490	41292	QPSK	1	0	1	99	2	0	26.74	27

CA_48C_Config 0_DSI 0/2/4/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	2	0	7.61	9
55830	55632	QPSK	1	0	1	99	2	0	16.01	17.2
56150	55952	QPSK	1	0	1	99	2	0	16.03	17.2
56640	56442	QPSK	1	0	1	99	2	0	7.82	9

CA_48C_Config 0_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	2	0	7.61	9
55830	55632	QPSK	1	0	1	99	2	0	16.00	17.2
56150	55952	QPSK	1	0	1	99	2	0	16.05	17.2
56640	56442	QPSK	1	0	1	99	2	0	7.80	9

CA_5B_Config 1_DSI 0/4/6/8										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	2	0	25.64	25.7
20575	20476	QPSK	1	0	1	49	2	0	25.31	25.7
20600	20501	QPSK	1	0	1	49	2	0	25.55	25.7

CA_5B_Config 1_DSI 7										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	2	0	23.02	24.2
20575	20476	QPSK	1	0	1	49	2	0	23.09	24.2
20600	20501	QPSK	1	0	1	49	2	0	23.11	24.2

CA_5B_Config 1_DSI 2										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	2	0	23.81	25
20575	20476	QPSK	1	0	1	49	2	0	23.89	25
20600	20501	QPSK	1	0	1	49	2	0	23.98	25

CA_7C_Config 1_DSI 0/2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	24.90	25.7
21100	20902	QPSK	1	0	1	99	2	0	25.09	25.7
21350	21152	QPSK	1	0	1	99	2	0	24.03	25.7

CA_7C_Config 1_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	21.34	22.3
21100	20902	QPSK	1	0	1	99	2	0	21.57	22.3
21350	21152	QPSK	1	0	1	99	2	0	21.53	22.3

CA_7C_Config 1_DSI 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	22.37	23.1
21100	20902	QPSK	1	0	1	99	2	0	22.32	23.1
21350	21152	QPSK	1	0	1	99	2	0	22.35	23.1

CA_66B_Config 1_DSI 0/2/7										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	25.21	25.7
132322	132229	QPSK	1	0	1	24	2	0	25.56	25.7
132597	132504	QPSK	1	0	1	24	2	0	24.92	25.7

CA_66B_Config 1_DSI 6/8										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	20.24	20.8
132322	132229	QPSK	1	0	1	24	2	0	20.07	20.8
132597	132504	QPSK	1	0	1	24	2	0	20.20	20.8

CA_66B_Config 1_DSI 4										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	21.08	21.6
132322	132229	QPSK	1	0	1	24	2	0	20.92	21.6
132597	132504	QPSK	1	0	1	24	2	0	20.96	21.6

CA_66C_Config 1_DSI 0/2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	25.67	25.7
132322	132124	QPSK	1	0	1	99	2	0	25.51	25.7
132572	132374	QPSK	1	0	1	99	2	0	25.42	25.7

CA_66C_Config 1_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	20.54	20.8
132322	132124	QPSK	1	0	1	99	2	0	20.27	20.8
132572	132374	QPSK	1	0	1	99	2	0	20.41	20.8

CA_66C_Config 1_DSI 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	21.23	21.6
132322	132124	QPSK	1	0	1	99	2	0	21.14	21.6
132572	132374	QPSK	1	0	1	99	2	0	21.17	21.6

CA_41C_Config 1_DSI 0/2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	25.48	25.7
40185	39987	QPSK	1	0	1	99	2	0	25.37	25.7
40620	40422	QPSK	1	0	1	99	2	0	25.36	25.7
41055	40857	QPSK	1	0	1	99	2	0	25.33	25.7
41490	41292	QPSK	1	0	1	99	2	0	25.70	25.7

CA_41C_Config 1_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	21.77	22.8
40185	39987	QPSK	1	0	1	99	2	0	21.65	22.8
40620	40422	QPSK	1	0	1	99	2	0	21.69	22.8
41055	40857	QPSK	1	0	1	99	2	0	21.86	22.8
41490	41292	QPSK	1	0	1	99	2	0	21.99	22.8

CA_41C_Config 1_DSI 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	22.58	23.6
40185	39987	QPSK	1	0	1	99	2	0	22.47	23.6
40620	40422	QPSK	1	0	1	99	2	0	22.39	23.6
41055	40857	QPSK	1	0	1	99	2	0	22.44	23.6
41490	41292	QPSK	1	0	1	99	2	0	22.51	23.6

CA_41C HPUE_Config 1_DSI 0/2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	27.21	27.5
40185	39987	QPSK	1	0	1	99	2	0	27.07	27.5
40620	40422	QPSK	1	0	1	99	2	0	27.01	27.5
41055	40857	QPSK	1	0	1	99	2	0	27.06	27.5
41490	41292	QPSK	1	0	1	99	2	0	27.08	27.5

CA_41C HPUE_Config 1_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	23.52	24.6
40185	39987	QPSK	1	0	1	99	2	0	23.35	24.6
40620	40422	QPSK	1	0	1	99	2	0	23.36	24.6
41055	40857	QPSK	1	0	1	99	2	0	23.42	24.6
41490	41292	QPSK	1	0	1	99	2	0	23.44	24.6

CA_41C HPUE_Config 1_DSI 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	24.28	25.4
40185	39987	QPSK	1	0	1	99	2	0	24.18	25.4
40620	40422	QPSK	1	0	1	99	2	0	24.16	25.4
41055	40857	QPSK	1	0	1	99	2	0	24.25	25.4
41490	41292	QPSK	1	0	1	99	2	0	24.21	25.4

CA_48C_Config 1_DSI 0/2/7										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	2	0	5.74	7
55830	55632	QPSK	1	0	1	99	2	0	14.38	15.6
56150	55952	QPSK	1	0	1	99	2	0	14.33	15.6
56640	56442	QPSK	1	0	1	99	2	0	5.73	7

CA_48C_Config 1_DSI 6/8										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	2	0	5.75	7
55830	55632	QPSK	1	0	1	99	2	0	14.39	15.6
56150	55952	QPSK	1	0	1	99	2	0	14.33	15.6
56640	56442	QPSK	1	0	1	99	2	0	5.74	7

CA_48C_Config 1_DSI 4										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
55340	55538	QPSK	1	99	1	0	2	0	5.86	7
55830	55632	QPSK	1	0	1	99	2	0	14.43	15.6
56150	55952	QPSK	1	0	1	99	2	0	14.44	15.6
56640	56442	QPSK	1	0	1	99	2	0	5.83	7

13. RF Exposure position consideration

Distance of the Antenna to the EUT surface/edge						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
WWAN Ant 2	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 5	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 7	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN/BT Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
5GHz WLAN Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm

Positions for SAR tests; Hotspot mode						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 1	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 2	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 5	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 7	Yes	Yes	No	Yes	Yes	Yes
2.4GHz WLAN Ant 3	Yes	Yes	Yes	No	Yes	Yes
2.4GHz WLAN/BT Ant 4	Yes	Yes	Yes	No	Yes	Yes
5GHz WLAN Ant 3	Yes	Yes	Yes	No	Yes	Yes
5GHz WLAN Ant 4	Yes	Yes	Yes	No	Yes	Yes

General Note:

- Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge
- The detail antenna location refers to operation description.

14. 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 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 WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. 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 = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
 - f. For NR TDD SAR = Measured SAR(W/kg)*Tune-up Scaling Factor*transmission cycle factor
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB 648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold, for this device the LTE B66 back side and 5.8GHz WLAN left side product specific SAR is necessary.
6. For 5.3GHz / 5.5GHz WLAN product specific SAR is necessary too, due to an overall diagonal dimension is > 16 cm

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

UMTS Note:

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

CDMA Note:

1. Per KDB 941225 D01v03r01, SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B12/B26/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 B2/B4/B5/B17/B38 SAR test was covered by B12/B25/B26/B66/B41; according to 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.
8. For UL CA, SAR was first measured with only a single carrier active in the uplink (CA non-active) for each exposure condition; the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when UL CA was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power
9. TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly.

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 PI/2 BPSK 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 PI/2 BPSK SAR testing follows 1RB PI/2 BPSK allocation procedure
 - c. PI/2 BPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - d. QPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - e. Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - f. For 5G FR1 n5/n12/n41/n71 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.
 - g. SAR testing for NR was performed using Factory Test Mode software to establish the connection, according to manufacturer definition for TDD actual transmission cycle is 33%, but factory test mode software is set and perform SAR with 25%, therefore, the SAR test result will be scaled up to 33%

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 ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. When in MIMO SAR testing, if the hot spots are separated the scaling factor would scale each hot spot based on the difference between the power for that transmit antenna and the maximum rated power, if the hot spot were not separable or too much overlap which the scaling factor is the worst case rated power/measured power across the two chains in SAR calculation.
6. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

14.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	189	836.4	config 0	27.75	29.50	1.496	-0.14	0.256	0.383
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	189	836.4	config 0	27.75	29.50	1.496	-0.04	0.140	0.209
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	189	836.4	config 0	27.75	29.50	1.496	-0.04	0.264	0.395
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	128	824.2	config 0	27.72	29.50	1.507	-0.16	0.241	0.363
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	251	848.8	config 0	27.66	29.50	1.528	-0.09	0.321	0.490
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	189	836.4	config 0	27.75	29.50	1.496	-0.14	0.143	0.214
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	189	836.4	config 1	26.60	27.90	1.349	-0.03	0.739	0.997
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	128	824.2	config 1	26.53	27.90	1.371	-0.14	0.543	0.744
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 7	251	848.8	config 1	26.39	27.90	1.416	0.13	0.653	0.925
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 7	189	836.4	config 1	26.60	27.90	1.349	-0.11	0.501	0.676
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 7	189	836.4	config 1	26.60	27.90	1.349	-0.17	0.428	0.577
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 7	189	836.4	config 1	26.60	27.90	1.349	-0.07	0.352	0.475
	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	128	824.2	config 1	27.55	28.70	1.303	0.1	0.851	1.109
	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	189	836.4	config 1	27.42	28.70	1.343	0.1	0.876	1.176
01	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2	251	848.8	config 1	27.35	28.70	1.365	-0.19	0.871	1.189
	GSM850_Ant 1-	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2	128	824.2	config 1	27.55	28.70	1.303	-0.19	0.541	0.705
	GSM850_Ant 1-	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2	128	824.2	config 1	27.55	28.70	1.303	-0.15	0.486	0.633
	GSM850_Ant 1-	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2	128	824.2	config 1	27.55	28.70	1.303	-0.19	0.381	0.497
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	512	1850.2	config 0	25.93	27.00	1.279	-0.16	0.341	0.436
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	661	1880	config 0	25.91	27.00	1.285	-0.19	0.329	0.423
02	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	810	1909.8	config 0	25.19	27.00	1.517	-0.18	0.312	0.473
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	512	1850.2	config 0	25.93	27.00	1.279	0.13	0.254	0.325
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	512	1850.2	config 0	25.93	27.00	1.279	-0.05	0.241	0.308
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	512	1850.2	config 0	25.93	27.00	1.279	-0.06	0.212	0.271
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	DSI 2/7	661	1880	config 1	25.14	26.50	1.368	-0.14	0.088	0.120
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	DSI 2/7	661	1880	config 1	25.14	26.50	1.368	-0.02	0.022	0.030
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	661	1880	config 1	25.14	26.50	1.368	0.18	0.166	0.227
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	512	1850.2	config 1	25.06	26.50	1.393	0.09	0.108	0.150
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	DSI 2/7	810	1909.8	config 1	24.84	26.50	1.466	0.13	0.142	0.208
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	DSI 2/7	661	1880	config 1	25.14	26.50	1.368	0.17	0.021	0.029

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9400	1880	config 0	24.58	25.70	1.294	-0.11	0.604	0.782
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9262	1852.4	config 0	24.57	25.70	1.297	0.03	0.544	0.706
03	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9538	1907.6	config 0	24.41	25.70	1.346	0.01	0.637	0.857
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9400	1880	config 0	24.58	25.70	1.294	-0.04	0.375	0.485
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9400	1880	config 0	24.58	25.70	1.294	0.03	0.345	0.446
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9400	1880	config 0	24.58	25.70	1.294	-0.05	0.352	0.456
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9262	1852.4	config 1	24.46	25.70	1.330	-0.07	0.145	0.193
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9400	1880	config 1	24.39	25.70	1.352	0.14	0.202	0.273
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	9538	1907.6	config 1	24.27	25.70	1.390	0.03	0.285	0.396
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	9262	1852.4	config 1	24.46	25.70	1.330	0.06	0.045	0.060
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	9262	1852.4	config 1	24.46	25.70	1.330	0.01	0.079	0.105
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	9262	1852.4	config 1	24.46	25.70	1.330	0.02	0.070	0.093
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1413	1732.6	config 0	24.74	25.70	1.247	0.09	0.418	0.521
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1312	1712.4	config 0	24.70	25.70	1.259	0.09	0.393	0.495
04	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1513	1752.6	config 0	24.67	25.70	1.268	0.07	0.455	0.577
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1413	1732.6	config 0	24.74	25.70	1.247	0.04	0.302	0.377
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1413	1732.6	config 0	24.74	25.70	1.247	0.18	0.348	0.434
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1413	1732.6	config 0	24.74	25.70	1.247	0.07	0.286	0.357
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1413	1732.6	config 1	24.65	25.70	1.274	0.06	0.105	0.134
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1312	1712.4	config 1	24.63	25.70	1.279	0.06	0.046	0.059
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	1513	1752.6	config 1	24.62	25.70	1.282	0.11	0.046	0.059
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	1413	1732.6	config 1	24.65	25.70	1.274	0.14	0.086	0.110
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	1413	1732.6	config 1	24.65	25.70	1.274	0.15	0.066	0.084
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	1413	1732.6	config 1	24.65	25.70	1.274	0.11	0.028	0.035
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4182	836.4	config 0	24.07	25.00	1.239	-0.02	0.277	0.343
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4132	826.4	config 0	24.02	25.00	1.253	-0.05	0.273	0.342
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	DSI 2/7	4233	846.6	config 0	24.06	25.00	1.242	-0.06	0.312	0.387
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	DSI 2/7	4182	836.4	config 0	24.07	25.00	1.239	-0.01	0.140	0.173
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	DSI 2/7	4182	836.4	config 0	24.07	25.00	1.239	-0.07	0.272	0.337
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	DSI 2/7	4182	836.4	config 0	24.07	25.00	1.239	0.01	0.142	0.176
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 7	4182	836.4	config 1	22.73	23.50	1.194	0.08	0.834	0.996
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 7	4132	826.4	config 1	22.61	23.50	1.227	0.09	0.810	0.994
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 7	4233	846.6	config 1	22.69	23.50	1.205	0.1	0.827	0.997
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	DSI 7	4182	836.4	config 1	22.73	23.50	1.194	-0.12	0.543	0.648
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	DSI 7	4182	836.4	config 1	22.73	23.50	1.194	-0.11	0.479	0.572
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	DSI 7	4182	836.4	config 1	22.73	23.50	1.194	-0.05	0.389	0.464
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2	4182	836.4	config 1	22.73	24.30	1.435	0.08	0.834	1.197
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2	4132	826.4	config 1	22.61	24.30	1.476	0.09	0.810	1.195
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	DSI 2	4233	846.6	config 1	22.69	24.30	1.449	0.1	0.827	1.198
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	DSI 2	4182	836.4	config 1	22.73	24.30	1.435	-0.12	0.543	0.779
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	DSI 2	4182	836.4	config 1	22.73	24.30	1.435	-0.11	0.479	0.688
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	DSI 2	4182	836.4	config 1	22.73	24.30	1.435	-0.05	0.389	0.558



<CDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	384	836.52	config 0	24.30	25.50	1.318	-0.08	0.353	0.465
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	1013	824.7	config 0	24.22	25.50	1.343	-0.07	0.337	0.453
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	777	848.31	config 0	23.80	25.50	1.479	-0.04	0.392	0.580
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	384	836.52	config 0	24.30	25.50	1.318	0.02	0.187	0.247
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	384	836.52	config 0	24.30	25.50	1.318	0	0.327	0.431
	CDMA BC0_Ant 0	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	384	836.52	config 0	24.30	25.50	1.318	0	0.185	0.244
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	384	836.52	config 1	22.76	23.80	1.271	-0.11	0.737	0.936
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	1013	824.7	config 1	22.67	23.80	1.297	-0.07	0.674	0.874
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	777	848.31	config 1	22.70	23.80	1.288	-0.08	0.763	0.983
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 7	384	836.52	config 1	22.76	23.80	1.271	0	0.493	0.626
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 7	384	836.52	config 1	22.76	23.80	1.271	0.04	0.385	0.489
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 7	384	836.52	config 1	22.76	23.80	1.271	-0.02	0.304	0.386
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	384	836.52	config 1	22.76	24.60	1.528	-0.11	0.737	1.126
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	1013	824.7	config 1	22.67	24.60	1.560	-0.07	0.674	1.051
06	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	777	848.31	config 1	22.70	24.60	1.549	-0.08	0.763	1.182
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2	384	836.52	config 1	22.76	24.60	1.528	0	0.493	0.753
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2	384	836.52	config 1	22.76	24.60	1.528	0.04	0.385	0.588
	CDMA BC0_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2	384	836.52	config 1	22.76	24.60	1.528	-0.02	0.304	0.464
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	600	1880	config 0	24.67	25.50	1.211	-0.13	0.621	0.752
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	25	1851.25	config 0	24.62	25.50	1.225	0.17	0.547	0.670
07	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	1175	1908.75	config 0	24.59	25.50	1.233	0.03	0.691	0.852
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	600	1880	config 0	24.67	25.50	1.211	0.03	0.212	0.257
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	600	1880	config 0	24.67	25.50	1.211	-0.04	0.111	0.134
	CDMA BC1_Ant 2	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	600	1880	config 0	24.67	25.50	1.211	0.12	0.083	0.100
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	25	1851.25	config 1	24.58	25.50	1.236	0.16	0.154	0.190
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	600	1880	config 1	24.47	25.50	1.268	0	0.159	0.202
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	1175	1908.75	config 1	24.25	25.50	1.334	0.02	0.098	0.131
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	25	1851.25	config 1	24.58	25.50	1.236	-0.05	0.034	0.042
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	25	1851.25	config 1	24.58	25.50	1.236	-0.11	0.076	0.094
	CDMA BC1_Ant 0	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	25	1851.25	config 1	24.58	25.50	1.236	0.02	0.046	0.057
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2/7	580	820.5	config 0	24.33	25.50	1.309	-0.05	0.331	0.433
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2/7	580	820.5	config 0	24.33	25.50	1.309	0.01	0.182	0.238
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2/7	580	820.5	config 0	24.33	25.50	1.309	-0.01	0.312	0.408
	CDMA BC10_Ant 0	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2/7	580	820.5	config 0	24.33	25.50	1.309	0.01	0.183	0.240
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Right Cheek	0mm	DSI 7	580	820.5	config 1	22.72	23.90	1.312	-0.13	0.642	0.842
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Right Tilted	0mm	DSI 7	580	820.5	config 1	22.72	23.90	1.312	-0.11	0.434	0.569
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Left Cheek	0mm	DSI 7	580	820.5	config 1	22.72	23.90	1.312	-0.06	0.364	0.478
	CDMA BC10_Ant 1	1xRTT RC3 SO55	Left Tilted	0mm	DSI 7	580	820.5	config 1	22.72	23.90	1.312	0	0.290	0.381
08	CDMA BC10_Ant 1-	1xRTT RC3 SO55	Right Cheek	0mm	DSI 2	580	820.5	config 1	22.72	24.70	1.578	-0.13	0.642	1.013
	CDMA BC10_Ant 1-	1xRTT RC3 SO55	Right Tilted	0mm	DSI 2	580	820.5	config 1	22.72	24.70	1.578	-0.11	0.434	0.685
	CDMA BC10_Ant 1-	1xRTT RC3 SO55	Left Cheek	0mm	DSI 2	580	820.5	config 1	22.72	24.70	1.578	-0.06	0.364	0.574
	CDMA BC10_Ant 1-	1xRTT RC3 SO55	Left Tilted	0mm	DSI 2	580	820.5	config 1	22.72	24.70	1.578	0	0.290	0.458



FCC SAR TEST REPORT

Report No. : FA022521-02A

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850	2510	config 0	24.98	25.70	1.180	0.05	0.282	0.333
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	21100	2535	config 0	24.85	25.70	1.216	0.12	0.224	0.272
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	21350	2560	config 0	24.61	25.70	1.285	0.16	0.178	0.229
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	20850	2510	config 0	24.04	24.70	1.164	-0.14	0.241	0.281
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	config 0	24.98	25.70	1.180	0.12	0.106	0.125
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	20850	2510	config 0	24.04	24.70	1.164	0.06	0.083	0.097
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	config 0	24.98	25.70	1.180	0.09	0.217	0.256
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	20850	2510	config 0	24.04	24.70	1.164	0.04	0.178	0.207
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	config 0	24.98	25.70	1.180	0.08	0.194	0.229
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	20850	2510	config 0	24.04	24.70	1.164	0.02	0.153	0.178
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850+21048	2510	config 0	24.90	25.70	1.202	0.01	0.269	0.323
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	20850	2510	config 1	24.55	25.70	1.303	0.11	0.280	0.365
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	20850	2510	config 1	23.69	24.70	1.262	0.12	0.234	0.295
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Tilted	0mm	DSI 2/7	20850	2510	config 1	24.55	25.70	1.303	0.07	0.065	0.085
	LTE Band 7_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	20850	2510	config 1	23.69	24.70	1.262	0.13	0.049	0.062
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	20850	2510	config 1	24.55	25.70	1.303	0.02	0.383	0.499
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	21100	2535	config 1	24.46	25.70	1.330	0.14	0.454	0.604
09	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	21350	2560	config 1	24.25	25.70	1.396	0.1	0.461	0.644
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	20850	2510	config 1	23.69	24.70	1.262	0.08	0.311	0.392
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Tilted	0mm	DSI 2/7	20850	2510	config 1	24.55	25.70	1.303	0.06	0.119	0.155
	LTE Band 7_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	20850	2510	config 1	23.69	24.70	1.262	0.13	0.110	0.139
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	21100+20902	2535	config 1	25.09	25.70	1.151	0.03	0.389	0.448
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23095	707.5	config 0	24.52	25.70	1.312	0.02	0.238	0.312
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23095	707.5	config 0	23.69	24.70	1.262	-0.02	0.186	0.235
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23095	707.5	config 0	24.52	25.70	1.312	0.04	0.118	0.155
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23095	707.5	config 0	23.69	24.70	1.262	0.04	0.094	0.119
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23095	707.5	config 0	24.52	25.70	1.312	-0.09	0.277	0.363
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23095	707.5	config 0	23.69	24.70	1.262	0.01	0.211	0.266
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23095	707.5	config 0	24.52	25.70	1.312	0	0.129	0.169
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23095	707.5	config 0	23.69	24.70	1.262	-0.01	0.110	0.139
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 7	23095	707.5	config 1	24.15	25.50	1.365	0.01	0.665	0.907
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 7	23095	707.5	config 1	23.25	24.50	1.334	-0.07	0.551	0.735
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23095	707.5	config 1	23.24	24.50	1.337	-0.04	0.536	0.716
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 7	23095	707.5	config 1	24.15	25.50	1.365	-0.04	0.486	0.663
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 7	23095	707.5	config 1	23.25	24.50	1.334	-0.05	0.385	0.513
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 7	23095	707.5	config 1	24.15	25.50	1.365	-0.03	0.333	0.454
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 7	23095	707.5	config 1	23.25	24.50	1.334	-0.06	0.260	0.347
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 7	23095	707.5	config 1	24.15	25.50	1.365	-0.03	0.241	0.329
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 7	23095	707.5	config 1	23.25	24.50	1.334	0.02	0.188	0.251
10	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Cheek	0mm	DSI 2	23095	707.5	config 1	24.15	25.70	1.429	0.01	0.665	0.950
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 2	23095	707.5	config 1	23.25	24.70	1.396	-0.07	0.551	0.769
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23095	707.5	config 1	23.24	24.70	1.400	-0.04	0.536	0.750
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Tilted	0mm	DSI 2	23095	707.5	config 1	24.15	25.70	1.429	-0.04	0.486	0.694
	LTE Band 12_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 2	23095	707.5	config 1	23.25	24.70	1.396	-0.05	0.385	0.538
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Cheek	0mm	DSI 2	23095	707.5	config 1	24.15	25.70	1.429	-0.03	0.333	0.476
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 2	23095	707.5	config 1	23.25	24.70	1.396	-0.06	0.260	0.363
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Tilted	0mm	DSI 2	23095	707.5	config 1	24.15	25.70	1.429	-0.03	0.241	0.344
	LTE Band 12_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 2	23095	707.5	config 1	23.25	24.70	1.396	0.02	0.188	0.263



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	23230	782	config 0	23.99	25.20	1.321	-0.03	0.307	0.406
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23230	782	config 0	23.00	24.20	1.318	0	0.253	0.334
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	23230	782	config 0	23.99	25.20	1.321	-0.03	0.176	0.233
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23230	782	config 0	23.00	24.20	1.318	0.02	0.144	0.190
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	23230	782	config 0	23.99	25.20	1.321	-0.13	0.307	0.406
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23230	782	config 0	23.00	24.20	1.318	-0.16	0.166	0.219
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	23230	782	config 0	23.99	25.20	1.321	0.05	0.185	0.244
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23230	782	config 0	23.00	24.20	1.318	0.05	0.156	0.206
11	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	23230	782	config 1	24.05	25.20	1.303	0.04	0.431	0.562
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Cheek	0mm	DSI 2/7	23230	782	config 1	23.11	24.20	1.285	0.12	0.345	0.443
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	23230	782	config 1	24.05	25.20	1.303	-0.1	0.286	0.373
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Tilted	0mm	DSI 2/7	23230	782	config 1	23.11	24.20	1.285	0.03	0.230	0.296
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	23230	782	config 1	24.05	25.20	1.303	-0.11	0.217	0.283
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Cheek	0mm	DSI 2/7	23230	782	config 1	23.11	24.20	1.285	-0.01	0.180	0.231
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	23230	782	config 1	24.05	25.20	1.303	-0.04	0.173	0.225
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Tilted	0mm	DSI 2/7	23230	782	config 1	23.11	24.20	1.285	0.03	0.139	0.179
	LTE Band 14_Ant 0	10M	QPSK	1	25	Right Cheek	0mm	DSI 2/7	23330	793	config 0	24.53	25.70	1.309	-0.01	0.336	0.440
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	23330	793	config 0	23.50	24.70	1.318	-0.03	0.278	0.366
	LTE Band 14_Ant 0	10M	QPSK	1	25	Right Tilted	0mm	DSI 2/7	23330	793	config 0	24.53	25.70	1.309	-0.04	0.183	0.240
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	23330	793	config 0	23.50	24.70	1.318	-0.04	0.151	0.199
	LTE Band 14_Ant 0	10M	QPSK	1	25	Left Cheek	0mm	DSI 2/7	23330	793	config 0	24.53	25.70	1.309	-0.04	0.330	0.432
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	23330	793	config 0	23.50	24.70	1.318	-0.06	0.269	0.355
	LTE Band 14_Ant 0	10M	QPSK	1	25	Left Tilted	0mm	DSI 2/7	23330	793	config 0	24.53	25.70	1.309	-0.01	0.204	0.267
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	23330	793	config 0	23.50	24.70	1.318	0	0.167	0.220
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 7	23330	793	config 1	24.35	25.40	1.274	-0.17	0.780	0.993
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 7	23330	793	config 1	23.46	24.40	1.242	-0.08	0.677	0.841
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 7	23330	793	config 1	23.50	24.40	1.230	-0.06	0.666	0.819
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 7	23330	793	config 1	24.35	25.40	1.274	-0.12	0.501	0.638
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 7	23330	793	config 1	23.46	24.40	1.242	-0.06	0.423	0.525
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 7	23330	793	config 1	24.35	25.40	1.274	-0.1	0.450	0.573
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 7	23330	793	config 1	23.46	24.40	1.242	-0.04	0.383	0.476
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 7	23330	793	config 1	24.35	25.40	1.274	-0.02	0.339	0.432
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 7	23330	793	config 1	23.46	24.40	1.242	-0.06	0.293	0.364
12	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2	23330	793	config 1	24.35	25.70	1.365	-0.17	0.780	1.064
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	DSI 2	23330	793	config 1	23.46	24.70	1.330	-0.08	0.677	0.901
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	DSI 2	23330	793	config 1	23.50	24.70	1.318	-0.06	0.666	0.878
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	DSI 2	23330	793	config 1	24.35	25.70	1.365	-0.12	0.501	0.684
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	DSI 2	23330	793	config 1	23.46	24.70	1.330	-0.06	0.423	0.563
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	DSI 2	23330	793	config 1	24.35	25.70	1.365	-0.1	0.450	0.614
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	DSI 2	23330	793	config 1	23.46	24.70	1.330	-0.04	0.383	0.510
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	DSI 2	23330	793	config 1	24.35	25.70	1.365	-0.02	0.339	0.463
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	DSI 2	23330	793	config 1	23.46	24.70	1.330	-0.06	0.293	0.390



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26140	1860	config 0	24.48	25.70	1.324	0	0.572	0.758
13	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26340	1880	config 0	24.39	25.70	1.352	0.04	0.607	0.821
	LTE Band 25_Ant 2	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	26590	1905	config 0	24.26	25.70	1.393	0.04	0.568	0.791
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	26140	1860	config 0	23.54	24.70	1.306	0.01	0.449	0.586
	LTE Band 25_Ant 2	20M	QPSK	100	0	Right Cheek	0mm	DSI 2/7	26140	1860	config 0	23.55	24.70	1.303	0.02	0.475	0.619
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26140	1860	config 0	24.48	25.70	1.324	-0.1	0.284	0.376
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	26140	1860	config 0	23.54	24.70	1.306	-0.05	0.231	0.302
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26140	1860	config 0	24.48	25.70	1.324	-0.11	0.335	0.444
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	26140	1860	config 0	23.54	24.70	1.306	-0.14	0.297	0.388
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26140	1860	config 0	24.48	25.70	1.324	0.06	0.240	0.318
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	26140	1860	config 0	23.54	24.70	1.306	0.08	0.214	0.280
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	26140	1860	config 1	24.22	25.70	1.406	-0.02	0.033	0.046
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	26140	1860	config 1	23.36	24.70	1.361	0.06	0.029	0.039
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	26140	1860	config 1	24.22	25.70	1.406	0.07	0.022	0.031
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	26140	1860	config 1	23.36	24.70	1.361	0.08	0.014	0.019
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26140	1860	config 1	24.22	25.70	1.406	0.06	0.051	0.072
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26340	1880	config 1	24.16	25.70	1.426	0.03	0.059	0.084
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	26590	1905	config 1	24.06	25.70	1.459	0.05	0.076	0.111
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	26140	1860	config 1	23.36	24.70	1.361	0.09	0.044	0.059
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	26140	1860	config 1	24.22	25.70	1.406	0.1	0.019	0.027
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	26140	1860	config 1	23.36	24.70	1.361	0.03	0.016	0.022
	LTE Band 26_Ant 0	15M	QPSK	1	74	Right Cheek	0mm	DSI 2/7	26865	831.5	config 0	24.59	25.70	1.291	-0.03	0.295	0.381
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Cheek	0mm	DSI 2/7	26865	831.5	config 0	23.46	24.70	1.330	-0.04	0.250	0.333
	LTE Band 26_Ant 0	15M	QPSK	1	74	Right Tilted	0mm	DSI 2/7	26865	831.5	config 0	24.59	25.70	1.291	0.01	0.160	0.207
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Tilted	0mm	DSI 2/7	26865	831.5	config 0	23.46	24.70	1.330	0.03	0.137	0.182
	LTE Band 26_Ant 0	15M	QPSK	1	74	Left Cheek	0mm	DSI 2/7	26865	831.5	config 0	24.59	25.70	1.291	0.06	0.302	0.390
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Cheek	0mm	DSI 2/7	26865	831.5	config 0	23.46	24.70	1.330	0.14	0.253	0.337
	LTE Band 26_Ant 0	15M	QPSK	1	74	Left Tilted	0mm	DSI 2/7	26865	831.5	config 0	24.59	25.70	1.291	0.04	0.173	0.223
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Tilted	0mm	DSI 2/7	26865	831.5	config 0	23.46	24.70	1.330	0	0.143	0.190
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	20600+20501	844	config 0	25.61	25.70	1.021	0.06	0.214	0.218
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	DSI 7	26865	831.5	config 1	23.01	24.20	1.315	-0.18	0.665	0.875
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Cheek	0mm	DSI 7	26865	831.5	config 1	23.07	24.20	1.297	-0.13	0.662	0.859
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	DSI 7	26865	831.5	config 1	23.00	24.20	1.318	-0.07	0.661	0.871
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	DSI 7	26865	831.5	config 1	23.01	24.20	1.315	-0.06	0.464	0.610
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Tilted	0mm	DSI 7	26865	831.5	config 1	23.07	24.20	1.297	-0.04	0.449	0.582
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	DSI 7	26865	831.5	config 1	23.01	24.20	1.315	-0.06	0.345	0.454
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Cheek	0mm	DSI 7	26865	831.5	config 1	23.07	24.20	1.297	0.06	0.365	0.473
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	DSI 7	26865	831.5	config 1	23.01	24.20	1.315	0	0.291	0.383
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Tilted	0mm	DSI 7	26865	831.5	config 1	23.07	24.20	1.297	-0.04	0.299	0.388
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 7	20600+20501	844	config 1	23.11	24.20	1.285	0.01	0.680	0.874
14	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	DSI 2	26865	831.5	config 1	23.01	25.00	1.581	-0.18	0.665	1.052
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Cheek	0mm	DSI 2	26865	831.5	config 1	23.07	24.50	1.390	-0.13	0.662	0.920
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	DSI 2	26865	831.5	config 1	23.00	24.50	1.413	-0.07	0.661	0.934
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	DSI 2	26865	831.5	config 1	23.01	25.00	1.581	-0.06	0.464	0.734
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Tilted	0mm	DSI 2	26865	831.5	config 1	23.07	24.50	1.390	-0.04	0.449	0.624
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	DSI 2	26865	831.5	config 1	23.01	25.00	1.581	-0.06	0.345	0.546
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Cheek	0mm	DSI 2	26865	831.5	config 1	23.07	24.50	1.390	0.06	0.365	0.507
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	DSI 2	26865	831.5	config 1	23.01	25.00	1.581	0	0.291	0.460
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Tilted	0mm	DSI 2	26865	831.5	config 1	23.07	24.50	1.390	-0.04	0.299	0.416
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	DSI 2	20600+20501	844	config 1	23.11	25.00	1.545	0.01	0.680	1.051



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	27710	2310	config 0	22.93	23.70	1.194	0.01	0.130	0.155
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	config 0	21.94	22.70	1.191	0.12	0.104	0.124
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	config 0	22.93	23.70	1.194	0.11	0.045	0.054
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	config 0	21.94	22.70	1.191	0.17	0.038	0.045
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	config 0	22.93	23.70	1.194	-0.13	0.084	0.100
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	config 0	21.94	22.70	1.191	0.19	0.064	0.076
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	config 0	22.93	23.70	1.194	0.16	0.071	0.085
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	config 0	21.94	22.70	1.191	0.17	0.058	0.069
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	27710	2310	config 1	22.65	23.70	1.274	-0.13	0.088	0.112
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	DSI 2/7	27710	2310	config 1	21.58	22.70	1.294	0.19	0.065	0.084
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	27710	2310	config 1	22.65	23.70	1.274	0.03	0.034	0.043
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	DSI 2/7	27710	2310	config 1	21.58	22.70	1.294	0.16	0.029	0.038
15	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	27710	2310	config 1	22.65	23.70	1.274	0.1	0.135	0.172
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	DSI 2/7	27710	2310	config 1	21.58	22.70	1.294	0.08	0.106	0.137
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	27710	2310	config 1	22.65	23.70	1.274	0.14	0.023	0.029
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	DSI 2/7	27710	2310	config 1	21.58	22.70	1.294	0.19	0.019	0.025
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132322	1745	config 0	24.76	25.70	1.242	0.11	0.396	0.492
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132072	1720	config 0	24.69	25.70	1.262	0.01	0.381	0.481
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132572	1770	config 0	24.56	25.70	1.300	0.07	0.408	0.530
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	132072	1720	config 0	23.77	24.70	1.239	0.06	0.327	0.405
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132322	1745	config 0	24.76	25.70	1.242	-0.07	0.301	0.374
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	132072	1720	config 0	23.77	24.70	1.239	-0.08	0.253	0.313
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132322	1745	config 0	24.76	25.70	1.242	0.04	0.393	0.488
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	132072	1720	config 0	23.77	24.70	1.239	0.07	0.334	0.414
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132322	1745	config 0	24.76	25.70	1.242	0.02	0.298	0.370
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	132072	1720	config 0	23.77	24.70	1.239	0.02	0.243	0.301
	LTE Band 66C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	DSI 2/7	132072+132270	1720	config 0	25.69	25.70	1.002	-0.04	0.459	0.460
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	132072	1720	config 1	24.78	25.70	1.236	0.04	0.247	0.305
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	132072	1720	config 1	23.66	24.70	1.271	0.07	0.232	0.295
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	132072	1720	config 1	24.78	25.70	1.236	0.02	0.197	0.243
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	132072	1720	config 1	23.66	24.70	1.271	0.06	0.185	0.235
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132072	1720	config 1	24.78	25.70	1.236	0.02	0.394	0.487
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132322	1745	config 1	24.77	25.70	1.239	0.1	0.361	0.447
16	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	132572	1770	config 1	24.71	25.70	1.256	0.14	0.427	0.536
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	132072	1720	config 1	23.66	24.70	1.271	0.07	0.364	0.462
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	132072	1720	config 1	24.78	25.70	1.236	0.14	0.241	0.298
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	132072	1720	config 1	23.66	24.70	1.271	0.16	0.229	0.291
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	132072+132270	1720	config 1	25.67	25.70	1.007	-0.03	0.386	0.389
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	-0.17	0.230	0.293
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	-0.11	0.191	0.238
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	-0.05	0.114	0.145
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	-0.05	0.099	0.123
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	0.03	0.247	0.315
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	0.03	0.200	0.249
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	config 0	24.65	25.70	1.274	0.09	0.123	0.157
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	133322	683	config 0	23.75	24.70	1.245	0.03	0.104	0.129
17	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	133322	683	config 1	24.80	25.70	1.230	0.04	0.606	0.746
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	133322	683	config 1	23.88	24.70	1.208	0.07	0.524	0.633
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	133322	683	config 1	24.80	25.70	1.230	-0.04	0.444	0.546
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	133322	683	config 1	23.88	24.70	1.208	0	0.376	0.454
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	133322	683	config 1	24.80	25.70	1.230	-0.05	0.280	0.344
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	133322	683	config 1	23.88	24.70	1.208	-0.03	0.244	0.295
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	133322	683	config 1	24.80	25.70	1.230	-0.04	0.206	0.253
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	133322	683	config 1	23.88	24.70	1.208	-0.02	0.179	0.216



FCC SAR TEST REPORT

Report No. : FA022521-02A

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.07	0.094	0.112
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	39750	2506	config 0	24.74	25.70	1.247	62.9	1.006	0.07	0.151	0.189
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	40185	2549.5	config 0	24.62	25.70	1.282	62.9	1.006	0.05	0.159	0.205
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	40620	2593	config 0	24.61	25.70	1.285	62.9	1.006	0.1	0.125	0.162
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	41490	2680	config 0	24.84	25.70	1.219	62.9	1.006	0.09	0.086	0.105
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0.05	0.081	0.095
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.03	0.030	0.036
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0.02	0.022	0.026
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.12	0.076	0.091
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0.14	0.061	0.071
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.12	0.062	0.074
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0.1	0.049	0.057
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 0	26.11	27.00	1.227	42.9	1.009	0.07	0.144	0.178
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	41490+41292	2680	config 0	25.70	25.70	1.000	62.9	1.006	0.05	0.042	0.042
	LTE Band 41C_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	41490+41292	2680	config 0	26.74	27.00	1.062	42.9	1.009	0.02	0.066	0.071
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 1	24.89	25.70	1.205	62.9	1.006	0.05	0.242	0.293
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	DSI 2/7	41055	2636.5	config 1	23.99	24.70	1.178	62.9	1.006	0.19	0.208	0.246
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 1	24.89	25.70	1.205	62.9	1.006	0.11	0.061	0.074
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	DSI 2/7	41055	2636.5	config 1	23.99	24.70	1.178	62.9	1.006	0.15	0.054	0.064
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 1	24.89	25.70	1.205	62.9	1.006	0.16	0.284	0.344
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	39750	2506	config 1	24.60	25.70	1.288	62.9	1.006	0.11	0.181	0.235
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	40185	2549.5	config 1	24.31	25.70	1.377	62.9	1.006	0.04	0.200	0.277
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	40620	2593	config 1	24.27	25.70	1.390	62.9	1.006	0.12	0.239	0.334
18	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41490	2680	config 1	24.72	25.70	1.253	62.9	1.006	0.11	0.312	0.393
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	DSI 2/7	41055	2636.5	config 1	23.99	24.70	1.178	62.9	1.006	0.14	0.259	0.307
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 1	24.89	25.70	1.205	62.9	1.006	0.08	0.155	0.188
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	DSI 2/7	41055	2636.5	config 1	23.99	24.70	1.178	62.9	1.006	0.14	0.126	0.149
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	DSI 2/7	41490	2680	config 1	26.57	27.50	1.239	42.9	1.009	0.12	0.301	0.376
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	41490+41292	2680	config 1	25.70	25.70	1.000	62.9	1.006	0.02	0.250	0.252
	LTE Band 41C_HPUE_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	DSI 2/7	39750+39948	2506	config 1	27.21	27.50	1.069	42.9	1.009	0	0.164	0.177
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56640	3690	config 0	23.07	24.20	1.297	62.9	1.006	0.07	0.013	0.017
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	56640	3690	config 0	22.10	23.20	1.288	62.9	1.006	0.16	0.010	0.012
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	56640	3690	config 0	23.07	24.20	1.297	62.9	1.006	-0.1	0.062	0.081
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	56640	3690	config 0	22.10	23.20	1.288	62.9	1.006	0.1	0.048	0.062
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56640	3690	config 0	23.07	24.20	1.297	62.9	1.006	0.03	0.076	0.099
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55340	3560	config 0	22.98	24.20	1.324	62.9	1.006	-0.09	0.089	0.119
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55830	3609	config 0	23.00	24.20	1.318	62.9	1.006	0.04	0.082	0.109
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56150	3641	config 0	22.98	24.20	1.324	62.9	1.006	-0.05	0.076	0.101
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	56640	3690	config 0	22.10	23.20	1.288	62.9	1.006	0.1	0.060	0.078
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	56640	3690	config 0	23.07	24.20	1.297	62.9	1.006	0.08	0.033	0.043
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	56640	3690	config 0	22.10	23.20	1.288	62.9	1.006	0.13	0.024	0.031
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	56150+55952	3641	config 0	16.03	17.20	1.309	62.9	1.006	0.03	0.032	0.042
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55830	3609	config 1	21.66	22.60	1.242	62.9	1.006	-0.06	0.140	0.175
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55340	3560	config 1	21.63	22.60	1.250	62.9	1.006	0.02	0.140	0.176
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56150	3641	config 1	21.62	22.60	1.253	62.9	1.006	0.17	0.149	0.188
19	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	56640	3690	config 1	21.59	22.60	1.262	62.9	1.006	0.17	0.152	0.193
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	DSI 2/7	55830	3609	config 1	20.68	21.60	1.236	62.9	1.006	-0.04	0.117	0.145
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	DSI 2/7	55830	3609	config 1	21.66	22.60	1.242	62.9	1.006	0.02	0.057	0.071
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	DSI 2/7	55830	3609	config 1	20.68	21.60	1.236	62.9	1.006	-0.02	0.044	0.055
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	DSI 2/7	55830	3609	config 1	21.66	22.60	1.242	62.9	1.006	-0.07	0.082	0.102
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	DSI 2/7	55830	3609	config 1	20.68	21.60	1.236	62.9	1.006	0.02	0.063	0.078
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	DSI 2/7	55830	3609	config 1	21.66	22.60	1.242	62.9	1.006	0.16	0.108	0.135
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	DSI 2/7	55830	3609	config 1	20.68	21.60	1.236	62.9	1.006	0.17	0.086	0.107
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	DSI 2/7	55830+55632	3609	config 1	14.38	15.60	1.324	62.9	1.006	0.02	0.001	0.001



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n5_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.80	25.00	1.318	-0.03	0.183	0.241
	n5_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.75	25.00	1.334	-0.13	0.214	0.285
	n5_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.80	25.00	1.318	-0.07	0.098	0.129
	n5_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.75	25.00	1.334	-0.02	0.108	0.144
	n5_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.80	25.00	1.318	-0.19	0.198	0.261
	n5_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	167300	836.5	Config 0	23.75	25.00	1.334	-0.12	0.221	0.295
	n5_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.80	25.00	1.318	-0.09	0.098	0.129
	n5_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	167300	836.5	Config 0	23.75	25.00	1.334	-0.16	0.106	0.141
	n5_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	23.35	23.50	1.035	-0.08	0.876	0.907
	n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	23.38	23.50	1.028	-0.11	0.959	0.986
	n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 7	167300	836.5	Config 1	23.18	23.50	1.076	-0.17	0.870	0.937
	n5_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 7	167300	836.5	Config 1	23.35	23.50	1.035	-0.06	0.642	0.665
	n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 7	167300	836.5	Config 1	23.38	23.50	1.028	-0.03	0.653	0.671
	n5_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 7	167300	836.5	Config 1	23.35	23.50	1.035	-0.03	0.473	0.490
	n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 7	167300	836.5	Config 1	23.38	23.50	1.028	-0.07	0.486	0.500
	n5_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 7	167300	836.5	Config 1	23.35	23.50	1.035	-0.05	0.387	0.401
	n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 7	167300	836.5	Config 1	23.38	23.50	1.028	0.01	0.413	0.425
	n5_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	23.35	24.30	1.245	-0.08	0.876	1.090
20	n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	23.38	24.30	1.236	-0.11	0.959	1.185
	n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 2	167300	836.5	Config 1	23.18	24.30	1.294	-0.17	0.870	1.126
	n5_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	23.35	24.30	1.245	-0.06	0.642	0.799
	n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 2	167300	836.5	Config 1	23.38	24.30	1.236	-0.03	0.633	0.782
	n5_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 2	167300	836.5	Config 1	23.35	24.30	1.245	-0.03	0.473	0.589
	n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 2	167300	836.5	Config 1	23.38	24.30	1.236	-0.07	0.486	0.601
	n5_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 2	167300	836.5	Config 1	23.35	24.30	1.245	-0.05	0.387	0.482
	n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 2	167300	836.5	Config 1	23.38	24.30	1.236	0.01	0.413	0.510
	n12_Ant 0	15M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.35	24.70	1.365	-0.13	0.231	0.315
	n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.22	24.70	1.406	-0.03	0.224	0.315
	n12_Ant 0	15M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.35	24.70	1.365	-0.09	0.148	0.202
	n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.22	24.70	1.406	-0.04	0.132	0.186
	n12_Ant 0	15M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.35	24.70	1.365	-0.16	0.268	0.366
	n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 0	23.22	24.70	1.406	-0.12	0.244	0.343
	n12_Ant 0	15M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.35	24.70	1.365	-0.04	0.142	0.194
	n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 0	23.22	24.70	1.406	-0.19	0.135	0.190
	n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.55	24.70	1.303	-0.04	0.595	0.775
21	n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.42	24.70	1.343	-0.09	0.590	0.792
	n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.55	24.70	1.303	-0.19	0.371	0.483
	n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.42	24.70	1.343	-0.08	0.377	0.506
	n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.55	24.70	1.303	-0.13	0.250	0.326
	n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	DSI 2/7	141500	707.5	Config 1	23.42	24.70	1.343	-0.19	0.264	0.354
	n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.55	24.70	1.303	-0.03	0.178	0.232
	n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	DSI 2/7	141500	707.5	Config 1	23.42	24.70	1.343	-0.1	0.189	0.254



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
22	n25_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	372000	1860	Config 0	24.25	25.70	1.396	0.18	0.509	0.711
	n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	372000	1860	Config 0	24.45	25.70	1.334	0.18	0.570	0.760
	n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	376000	1880	Config 0	24.33	25.70	1.371	-0.1	0.642	0.880
	n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	381000	1905	Config 0	23.90	25.70	1.514	0.1	0.538	0.814
	n25_Ant 2	20M	BPSK	100	0	Right Cheek	0mm	DSI 2/7	376000	1880	Config 0	23.79	25.20	1.384	0.09	0.590	0.816
	n25_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	372000	1860	Config 0	24.25	25.70	1.396	-0.01	0.318	0.444
	n25_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	372000	1860	Config 0	24.45	25.70	1.334	-0.08	0.326	0.435
	n25_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	372000	1860	Config 0	24.25	25.70	1.396	-0.14	0.275	0.384
	n25_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	372000	1860	Config 0	24.45	25.70	1.334	-0.14	0.294	0.392
	n25_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	372000	1860	Config 0	24.25	25.70	1.396	-0.02	0.307	0.429
	n25_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	372000	1860	Config 0	24.45	25.70	1.334	-0.05	0.320	0.427
	n25_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	372000	1860	Config 1	25.21	25.70	1.119	0.14	0.037	0.041
	n25_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	376000	1880	Config 1	25.22	25.70	1.117	-0.1	0.080	0.089
	n25_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	372000	1860	Config 1	25.21	25.70	1.119	0.13	0.011	0.012
	n25_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	376000	1880	Config 1	25.22	25.70	1.117	-0.15	0.017	0.019
	n25_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	372000	1860	Config 1	25.21	25.70	1.119	0.14	0.060	0.067
	n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	376000	1880	Config 1	25.22	25.70	1.117	-0.08	0.084	0.094
	n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	372000	1860	Config 1	25.21	25.70	1.119	0.19	0.075	0.084
	n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	381000	1905	Config 1	25.20	25.70	1.122	-0.12	0.072	0.081
	n25_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	372000	1860	Config 1	25.21	25.70	1.119	-0.01	0.025	0.028
23	n25_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	376000	1880	Config 1	25.22	25.70	1.117	-0.18	0.023	0.026
	n66_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.57	25.70	1.297	-0.05	0.426	0.553
	n66_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.43	25.70	1.340	0.13	0.435	0.583
	n66_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.57	25.70	1.297	-0.12	0.294	0.381
	n66_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.43	25.70	1.340	-0.1	0.313	0.419
	n66_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.57	25.70	1.297	0.14	0.472	0.612
	n66_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	349000	1745	Config 0	24.40	25.70	1.349	0.15	0.407	0.549
	n66_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	354000	1770	Config 0	24.34	25.70	1.368	0.07	0.400	0.547
	n66_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	344000	1720	Config 0	24.43	25.70	1.340	0.01	0.415	0.556
	n66_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.57	25.70	1.297	-0.11	0.297	0.385
	n66_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	344000	1720	Config 0	24.43	25.70	1.340	-0.08	0.301	0.403
	n66_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.95	25.70	1.189	-0.13	0.197	0.234
	n66_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.94	25.70	1.191	0.05	0.214	0.255
	n66_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	349000	1745	Config 1	24.93	25.70	1.194	0.07	0.229	0.273
	n66_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	354000	1770	Config 1	24.89	25.70	1.205	-0.08	0.259	0.312
	n66_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.95	25.70	1.189	-0.15	0.103	0.122
	n66_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.94	25.70	1.191	-0.16	0.127	0.151
	n66_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.95	25.70	1.189	-0.13	0.125	0.149
	n66_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	344000	1720	Config 1	24.94	25.70	1.191	-0.04	0.175	0.208
	n66_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.95	25.70	1.189	-0.04	0.111	0.132
	n66_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	344000	1720	Config 1	24.94	25.70	1.191	-0.13	0.123	0.147



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n71_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.29	25.70	1.384	-0.14	0.269	0.372
	n71_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.33	25.70	1.371	-0.16	0.269	0.369
	n71_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.29	25.70	1.384	-0.11	0.128	0.177
	n71_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.33	25.70	1.371	-0.04	0.148	0.203
	n71_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.29	25.70	1.384	-0.17	0.299	0.414
	n71_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	DSI 2/7	136100	680.5	Config 0	24.33	25.70	1.371	-0.15	0.301	0.413
	n71_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.29	25.70	1.384	0.05	0.132	0.183
	n71_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	DSI 2/7	136100	680.5	Config 0	24.33	25.70	1.371	-0.10	0.145	0.199
	n71_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 7	136100	680.5	Config 1	24.55	25.10	1.135	-0.07	0.696	0.790
	n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 7	136100	680.5	Config 1	24.37	25.10	1.183	-0.13	0.845	1.000
	n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 7	136100	680.5	Config 1	23.91	25.10	1.315	-0.15	0.605	0.796
	n71_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 7	136100	680.5	Config 1	24.55	25.10	1.135	-0.10	0.393	0.446
	n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 7	136100	680.5	Config 1	24.37	25.10	1.183	-0.09	0.492	0.582
	n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 7	136100	680.5	Config 1	24.55	25.10	1.135	-0.12	0.311	0.353
	n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 7	136100	680.5	Config 1	24.37	25.10	1.183	0.01	0.373	0.441
	n71_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 7	136100	680.5	Config 1	24.55	25.10	1.135	-0.06	0.235	0.267
	n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 7	136100	680.5	Config 1	24.37	25.10	1.183	-0.09	0.291	0.344
	n71_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	DSI 2	136100	680.5	Config 1	24.55	25.70	1.303	-0.07	0.696	0.907
24	n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	DSI 2	136100	680.5	Config 1	24.37	25.70	1.358	-0.13	0.845	1.148
	n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	DSI 2	136100	680.5	Config 1	23.91	25.20	1.346	-0.15	0.605	0.814
	n71_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	DSI 2	136100	680.5	Config 1	24.55	25.70	1.303	-0.10	0.393	0.512
	n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	DSI 2	136100	680.5	Config 1	24.37	25.70	1.358	-0.09	0.492	0.668
	n71_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	DSI 2	136100	680.5	Config 1	24.55	25.70	1.303	-0.12	0.311	0.405
	n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	DSI 2	136100	680.5	Config 1	24.37	25.70	1.358	0.01	0.373	0.507
	n71_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	DSI 2	136100	680.5	Config 1	24.55	25.70	1.303	-0.06	0.235	0.306
	n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	DSI 2	136100	680.5	Config 1	24.37	25.70	1.358	-0.09	0.291	0.395



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Transmission Cycle %	Transmission Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n41_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.09	0.038	0.060
	n41_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	-0.09	0.033	0.056
	n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.08	0.010	0.015
	n41_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	0.09	0.012	0.020
	n41_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.06	0.034	0.054
	n41_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	-0.04	0.030	0.051
	n41_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.12	0.025	0.040
	n41_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	-0.03	0.024	0.041
	n41_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	0	0.138	0.217
	n41_Ant 5	100M	BPSK	135	0	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0.01	0.140	0.235
	n41_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	0.03	0.043	0.068
	n41_Ant 5	100M	BPSK	135	0	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	-0.02	0.054	0.091
	n41_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	0.02	0.453	0.712
	n41_Ant 5	100M	BPSK	135	0	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0.06	0.424	0.711
	n41_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	-0.04	0.038	0.060
	n41_Ant 5	100M	BPSK	135	0	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0.05	0.040	0.067
	n41_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	DSI 7	518598	2592.99	Config 0	26.45	26.80	1.084	25	1.320	0.18	0.220	0.315
	n41_HPUE_Ant 5	100M	BPSK	135	0	Right Cheek	0mm	DSI 7	518598	2592.99	Config 0	26.08	26.80	1.180	25	1.320	-0.08	0.202	0.315
	n41_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	DSI 7	518598	2592.99	Config 0	26.45	26.80	1.084	25	1.320	-0.18	0.067	0.096
	n41_HPUE_Ant 5	100M	BPSK	135	0	Right Tilted	0mm	DSI 7	518598	2592.99	Config 0	26.08	26.80	1.180	25	1.320	-0.11	0.078	0.122
	n41_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	DSI 7	518598	2592.99	Config 0	26.45	26.80	1.084	25	1.320	-0.05	0.663	0.949
	n41_HPUE_Ant 5	100M	BPSK	135	0	Left Cheek	0mm	DSI 7	518598	2592.99	Config 0	26.08	26.80	1.180	25	1.320	0.12	0.606	0.944
	n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	DSI 7	518598	2592.99	Config 0	26.01	26.30	1.069	25	1.320	0.11	0.569	0.803
	n41_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	DSI 7	518598	2592.99	Config 0	26.45	26.80	1.084	25	1.320	-0.13	0.056	0.080
	n41_HPUE_Ant 5	100M	BPSK	135	0	Left Tilted	0mm	DSI 7	518598	2592.99	Config 0	26.08	26.80	1.180	25	1.320	-0.16	0.053	0.083
	n41_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	DSI 2	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	0.18	0.220	0.370
	n41_HPUE_Ant 5	100M	BPSK	135	0	Right Cheek	0mm	DSI 2	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.08	0.202	0.370
	n41_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	DSI 2	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.18	0.067	0.113
	n41_HPUE_Ant 5	100M	BPSK	135	0	Right Tilted	0mm	DSI 2	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.11	0.078	0.143
25	n41_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	DSI 2	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.05	0.663	1.115
	n41_HPUE_Ant 5	100M	BPSK	135	0	Left Cheek	0mm	DSI 2	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	0.12	0.606	1.109
	n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	DSI 2	518598	2592.99	Config 0	26.01	27.00	1.256	25	1.320	0.11	0.569	0.943
	n41_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	DSI 2	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.13	0.056	0.094
	n41_HPUE_Ant 5	100M	BPSK	135	0	Left Tilted	0mm	DSI 2	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.16	0.053	0.097
	n41_Ant 0	100M	BPSK	1	1	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.02	0.062	0.108
	n41_Ant 0	100M	BPSK	135	69	Right Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.01	0.080	0.149
	n41_Ant 0	100M	BPSK	1	1	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.07	0.016	0.028
	n41_Ant 0	100M	BPSK	135	69	Right Tilted	0mm	DSI 2/7	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.05	0.028	0.052
	n41_Ant 0	100M	BPSK	1	1	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.05	0.085	0.148
	n41_Ant 0	100M	BPSK	135	69	Left Cheek	0mm	DSI 2/7	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.07	0.094	0.175
	n41_Ant 0	100M	BPSK	1	1	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.15	0.040	0.069
	n41_Ant 0	100M	BPSK	135	69	Left Tilted	0mm	DSI 2/7	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.03	0.054	0.100

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	-0.03	0.088	0.091
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	-0.04	0.073	0.076
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	-0.14	0.340	0.352
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	2	6	2437	11.90	12.00	1.023	98.72	1.013	0.01	0.266	0.276
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.16	0.240	0.248
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.04	0.042	0.043
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.19	0.238	0.246
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.17	0.031	0.032
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	-0.16	0.110	0.119
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.16	0.433	0.448
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	0.09	0.109	0.118
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	0.09	0.115	0.119
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	-0.15	0.467	0.506
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.15	0.417	0.431
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	6	2437	13.60	14.00	1.096	98.92	1.011	-0.04	0.440	0.488
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	6	2437	14.70	15.00	1.072	98.92	1.011	-0.04	0.224	0.243
26	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	11	2462	13.80	14.00	1.047	98.92	1.011	-0.12	0.496	0.525
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	11	2462	14.70	15.00	1.072	98.92	1.011	-0.12	0.267	0.289
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	1	2412	13.70	14.00	1.072	98.92	1.011	-0.06	0.366	0.396
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	1	2412	14.90	15.00	1.023	98.92	1.011	-0.06	0.076	0.079

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	-0.11	0.127	0.141
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	0.06	0.131	0.146
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	0.16	0.114	0.127
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	58	5290	10.90	11.00	1.023	92.00	1.087	0.1	0.150	0.167
27	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	0.05	0.186	0.198
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3	2	62	5310	13.50	14.00	1.122	95.96	1.042	0.13	0.126	0.147
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	-0.16	0.020	0.021
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	0.02	0.178	0.190
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3	2	54	5270	15.40	15.50	1.023	95.96	1.042	-0.15	0.014	0.015
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	-0.03	0.065	0.071
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	-0.03	0.143	0.156
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	0.11	0.084	0.092
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	0.11	0.021	0.023
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	-0.02	0.114	0.124
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	-0.02	0.181	0.197
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	54	5270	10.80	11.00	1.047	95.93	1.042	0.11	0.135	0.147
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	54	5270	15.30	15.50	1.047	95.93	1.042	0.11	0.014	0.015



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.15	0.156	0.174
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.02	0.224	0.249
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.16	0.262	0.291
28	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.11	0.333	0.370
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	-0.16	0.129	0.147
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	0.18	0.007	0.008
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	-0.05	0.128	0.146
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3	2	138	5690	11.80	12.00	1.047	92.00	1.087	-0.09	0.011	0.013
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.12	0.131	0.146
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.12	0.134	0.149
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	0.19	0.176	0.196
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	0.19	0.006	0.007
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.09	0.184	0.205
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.09	0.099	0.110
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	138	5690	12.90	13.00	1.023	92.00	1.087	-0.09	0.317	0.353
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	138	5690	11.90	12.00	1.023	92.00	1.087	-0.09	0.014	0.016
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	106	5530	12.40	12.50	1.023	92.00	1.087	-0.04	0.177	0.197
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	106	5530	11.90	12.00	1.023	92.00	1.087	-0.04	0.009	0.010
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	122	5610	12.80	13.00	1.047	92.00	1.087	0.01	0.258	0.294
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	122	5610	11.80	12.00	1.047	92.00	1.087	0.01	0.011	0.013
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	-0.04	0.183	0.204
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.16	0.217	0.241
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.13	0.251	0.279
29	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.09	0.373	0.415
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	-0.11	0.146	0.162
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	-0.01	0.072	0.080
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3	2	155	5775	12.40	12.50	1.023	92.00	1.087	-0.01	0.014	0.016
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	-0.05	0.209	0.232
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	-0.05	0.069	0.079
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	-0.03	0.210	0.234
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	-0.03	0.015	0.017
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	0.02	0.199	0.221
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	0.02	0.087	0.099
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	155	5775	14.40	14.50	1.023	92.00	1.087	-0.04	0.346	0.385
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	155	5775	12.30	12.50	1.047	92.00	1.087	-0.04	0.150	0.171

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	-0.17	0.052	0.057
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	-0.04	0.045	0.049
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	-0.08	0.199	0.216
30	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	2	0	2402	11.38	12.00	1.153	77.13	1.080	-0.06	0.228	0.284
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	2	78	2480	11.77	12.00	1.054	77.13	1.080	-0.02	0.235	0.268
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	2	39	2441	11.97	12.00	1.007	77.13	1.080	-0.15	0.141	0.153

14.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	189	836.4	config 0	27.75	29.50	1.496	-0.15	0.216	0.323
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	189	836.4	config 0	27.75	29.50	1.496	-0.07	0.316	0.473
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	128	824.2	config 0	27.72	29.50	1.507	-0.02	0.338	0.509
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	251	848.8	config 0	27.66	29.50	1.528	-0.01	0.337	0.515
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	189	836.4	config 0	27.75	29.50	1.496	-0.13	0.261	0.391
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	189	836.4	config 0	27.75	29.50	1.496	-0.11	0.251	0.376
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	189	836.4	config 0	27.75	29.50	1.496	-0.13	0.079	0.118
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	DSI 6	128	824.2	config 1	28.09	29.50	1.384	-0.13	0.310	0.429
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 6	128	824.2	config 1	28.09	29.50	1.384	-0.17	0.399	0.552
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 6	189	836.4	config 1	28.07	29.50	1.390	-0.13	0.452	0.628
31	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 6	251	848.8	config 1	27.91	29.50	1.442	-0.14	0.464	0.669
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	128	824.2	config 1	28.09	29.50	1.384	-0.14	0.141	0.195
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	128	824.2	config 1	28.09	29.50	1.384	-0.09	0.160	0.221
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	DSI 6	128	824.2	config 1	28.09	29.50	1.384	-0.02	0.247	0.342
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	512	1850.2	config 0	25.93	27.00	1.279	-0.15	0.540	0.691
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	661	1880	config 0	25.91	27.00	1.285	-0.17	0.597	0.767
32	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 6	810	1909.8	config 0	25.19	27.00	1.517	-0.17	0.578	0.877
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 6	512	1850.2	config 0	25.93	27.00	1.279	-0.13	0.451	0.577
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	512	1850.2	config 0	25.93	27.00	1.279	0.14	0.255	0.326
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	512	1850.2	config 0	25.93	27.00	1.279	0.07	0.457	0.585
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	512	1850.2	config 0	25.93	27.00	1.279	0	0.260	0.333
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 6	512	1850.2	config 1	20.69	22.60	1.552	-0.02	0.254	0.394
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	512	1850.2	config 1	20.69	22.60	1.552	-0.06	0.439	0.681
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	661	1880	config 1	20.61	22.60	1.581	-0.16	0.490	0.775
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 6	810	1909.8	config 1	20.68	22.60	1.556	-0.12	0.557	0.867
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	DSI 6	512	1850.2	config 1	20.69	22.60	1.552	-0.03	0.256	0.397
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	DSI 6	512	1850.2	config 1	20.69	22.60	1.552	-0.12	0.015	0.023
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	DSI 6	512	1850.2	config 1	20.69	22.60	1.552	0.03	0.429	0.666

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9400	1880	config 0	23.32	24.30	1.253	-0.02	0.718	0.900
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9262	1852.4	config 0	23.31	24.30	1.256	-0.01	0.663	0.833
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	9538	1907.6	config 0	23.23	24.30	1.279	-0.07	0.726	0.929
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	config 0	23.32	24.30	1.253	-0.12	0.709	0.888
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9262	1852.4	config 0	23.31	24.30	1.256	-0.16	0.603	0.757
33	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	9538	1907.6	config 0	23.23	24.30	1.279	-0.09	0.762	0.975
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	9400	1880	config 0	23.32	24.30	1.253	-0.1	0.459	0.575
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	9400	1880	config 0	23.32	24.30	1.253	0.06	0.628	0.787
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	config 0	23.32	24.30	1.253	0.15	0.347	0.435
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	9400	1880	config 1	20.33	21.30	1.250	-0.01	0.428	0.535
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9400	1880	config 1	20.33	21.30	1.250	-0.14	0.739	0.924
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9262	1852.4	config 1	20.29	21.30	1.262	-0.09	0.748	0.944
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	9538	1907.6	config 1	20.16	21.30	1.300	-0.08	0.684	0.889
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	9400	1880	config 1	20.33	21.30	1.250	-0.15	0.248	0.310
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	9400	1880	config 1	20.33	21.30	1.250	-0.03	0.046	0.058
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9400	1880	config 1	20.33	21.30	1.250	-0.1	0.747	0.934
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9262	1852.4	config 1	20.29	21.30	1.262	-0.16	0.735	0.927
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	9538	1907.6	config 1	20.16	21.30	1.300	-0.18	0.715	0.930
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1312	1712.4	config 0	23.95	24.50	1.135	-0.07	0.797	0.905
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1413	1732.6	config 0	23.94	24.50	1.138	-0.01	0.817	0.929
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 6	1513	1752.6	config 0	23.82	24.50	1.169	-0.07	0.792	0.926
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 6	1312	1712.4	config 0	23.95	24.50	1.135	-0.13	0.682	0.774
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	DSI 6	1312	1712.4	config 0	23.95	24.50	1.135	-0.14	0.198	0.225
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	DSI 6	1312	1712.4	config 0	23.95	24.50	1.135	-0.08	0.537	0.610
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1312	1712.4	config 0	23.95	24.50	1.135	0.01	0.441	0.501
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	1312	1712.4	config 1	19.67	20.90	1.327	0.03	0.263	0.349
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1312	1712.4	config 1	19.67	20.90	1.327	-0.18	0.709	0.941
34	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1413	1732.6	config 1	19.59	20.90	1.352	-0.01	0.705	0.953
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	1513	1752.6	config 1	19.50	20.90	1.380	-0.19	0.677	0.935
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	1312	1712.4	config 1	19.67	20.90	1.327	-0.13	0.199	0.264
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	1312	1712.4	config 1	19.67	20.90	1.327	-0.08	0.007	0.009
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	1312	1712.4	config 1	19.67	20.90	1.327	-0.03	0.515	0.684
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 6	4182	836.4	config 0	24.07	25.00	1.239	-0.07	0.268	0.332
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	4182	836.4	config 0	24.07	25.00	1.239	-0.08	0.405	0.502
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	4132	826.4	config 0	24.02	25.00	1.253	-0.07	0.426	0.534
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 6	4233	846.6	config 0	24.06	25.00	1.242	-0.05	0.429	0.533
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	DSI 6	4182	836.4	config 0	24.07	25.00	1.239	-0.17	0.312	0.387
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	DSI 6	4182	836.4	config 0	24.07	25.00	1.239	-0.03	0.312	0.387
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	DSI 6	4182	836.4	config 0	24.07	25.00	1.239	0.1	0.106	0.131
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 6	4182	836.4	config 1	24.14	25.00	1.219	-0.03	0.284	0.346
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 6	4182	836.4	config 1	24.14	25.00	1.219	-0.16	0.503	0.613
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 6	4132	826.4	config 1	24.12	25.00	1.225	-0.11	0.464	0.568
35	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 6	4233	846.6	config 1	24.13	25.00	1.222	-0.14	0.533	0.651
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	DSI 6	4182	836.4	config 1	24.14	25.00	1.219	0.07	0.137	0.167
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	DSI 6	4182	836.4	config 1	24.14	25.00	1.219	-0.02	0.163	0.199
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	DSI 6	4182	836.4	config 1	24.14	25.00	1.219	-0.09	0.245	0.299



<CDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	384	836.52	config 0	24.40	25.50	1.288	-0.16	0.326	0.420
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	384	836.52	config 0	24.40	25.50	1.288	-0.07	0.467	0.602
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	1013	824.7	config 0	24.35	25.50	1.303	-0.06	0.516	0.672
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	777	848.31	config 0	23.92	25.50	1.439	-0.12	0.528	0.760
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	384	836.52	config 0	24.40	25.50	1.288	0.04	0.408	0.526
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	384	836.52	config 0	24.40	25.50	1.288	0.15	0.369	0.475
	CDMA BC0_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	384	836.52	config 0	24.40	25.50	1.288	0.08	0.128	0.165
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Front	10mm	DSI 6	384	836.52	config 1	24.45	25.50	1.274	-0.01	0.308	0.392
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	384	836.52	config 1	24.45	25.50	1.274	-0.09	0.551	0.702
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	1013	824.7	config 1	24.31	25.50	1.315	-0.12	0.524	0.689
36	CDMA BC0_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	777	848.31	config 1	24.27	25.50	1.327	-0.15	0.608	0.807
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Left Side	10mm	DSI 6	384	836.52	config 1	24.45	25.50	1.274	0.12	0.161	0.205
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Right Side	10mm	DSI 6	384	836.52	config 1	24.45	25.50	1.274	0.18	0.183	0.233
	CDMA BC0_Ant 1	RTAP 153.6Kbps	Top Side	10mm	DSI 6	384	836.52	config 1	24.45	25.50	1.274	-0.06	0.265	0.337
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	600	1880	config 0	23.07	24.00	1.239	-0.07	0.683	0.846
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	25	1851.25	config 0	23.01	24.00	1.256	-0.12	0.642	0.806
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Front	10mm	DSI 6	1175	1908.75	config 0	22.96	24.00	1.271	-0.05	0.667	0.847
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	600	1880	config 0	23.07	24.00	1.239	-0.01	0.766	0.949
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	25	1851.25	config 0	23.01	24.00	1.256	-0.03	0.654	0.821
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Back	10mm	DSI 6	1175	1908.75	config 0	22.96	24.00	1.271	0	0.766	0.973
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Left Side	10mm	DSI 6	600	1880	config 0	23.07	24.00	1.239	0.06	0.408	0.505
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Right Side	10mm	DSI 6	600	1880	config 0	23.07	24.00	1.239	0.03	0.588	0.728
	CDMA BC1_Ant 2	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	600	1880	config 0	23.07	24.00	1.239	-0.05	0.342	0.424
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	25	1851.25	config 1	19.68	20.60	1.236	-0.11	0.349	0.431
37	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	25	1851.25	config 1	19.68	20.60	1.236	-0.15	0.799	0.988
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	600	1880	config 1	19.55	20.60	1.274	-0.04	0.761	0.969
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	1175	1908.75	config 1	19.40	20.60	1.318	-0.16	0.737	0.972
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	25	1851.25	config 1	19.68	20.60	1.236	0.07	0.270	0.334
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	25	1851.25	config 1	19.68	20.60	1.236	-0.1	0.028	0.035
	CDMA BC1_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	25	1851.25	config 1	19.68	20.60	1.236	0.15	0.601	0.743
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Front	10mm	DSI 6	580	820.5	config 0	24.33	25.50	1.309	-0.01	0.346	0.453
38	CDMA BC10_Ant 0	RTAP 153.6Kbps	Back	10mm	DSI 6	580	820.5	config 0	24.33	25.50	1.309	-0.1	0.514	0.673
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Left Side	10mm	DSI 6	580	820.5	config 0	24.33	25.50	1.309	0.16	0.415	0.543
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Right Side	10mm	DSI 6	580	820.5	config 0	24.33	25.50	1.309	0.14	0.379	0.496
	CDMA BC10_Ant 0	RTAP 153.6Kbps	Bottom Side	10mm	DSI 6	580	820.5	config 0	24.33	25.50	1.309	0.07	0.112	0.147
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Front	10mm	DSI 6	580	820.5	config 1	24.45	25.50	1.274	0.01	0.284	0.362
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Back	10mm	DSI 6	580	820.5	config 1	24.45	25.50	1.274	-0.11	0.507	0.646
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Left Side	10mm	DSI 6	580	820.5	config 1	24.45	25.50	1.274	0.14	0.182	0.232
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Right Side	10mm	DSI 6	580	820.5	config 1	24.45	25.50	1.274	-0.02	0.188	0.239
	CDMA BC10_Ant 1	RTAP 153.6Kbps	Top Side	10mm	DSI 6	580	820.5	config 1	24.45	25.50	1.274	-0.09	0.233	0.297



FCC SAR TEST REPORT

Report No. : FA022521-02A

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 6	21100	2535	config 0	23.39	24.20	1.205	-0.05	0.506	0.610
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 6	21100	2535	config 0	23.48	24.20	1.180	-0.12	0.529	0.624
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	config 0	23.39	24.20	1.205	0.11	0.678	0.817
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 6	20850	2510	config 0	23.27	24.20	1.239	-0.07	0.579	0.717
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	21350	2560	config 0	23.27	24.20	1.239	0.08	0.764	0.946
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	21100	2535	config 0	23.48	24.20	1.180	-0.07	0.677	0.799
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	20850	2510	config 0	23.36	24.20	1.213	-0.09	0.577	0.700
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 6	21350	2560	config 0	23.41	24.20	1.199	0.06	0.804	0.964
39	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	21350	2560	config 0	23.37	24.20	1.211	0.11	0.804	0.973
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Side	10mm	DSI 6	21100	2535	config 0	23.39	24.20	1.205	-0.05	0.123	0.148
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Side	10mm	DSI 6	21100	2535	config 0	23.48	24.20	1.180	-0.16	0.135	0.159
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Side	10mm	DSI 6	21100	2535	config 0	23.39	24.20	1.205	-0.07	0.577	0.695
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Side	10mm	DSI 6	21100	2535	config 0	23.48	24.20	1.180	-0.16	0.580	0.685
	LTE Band 7_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21100	2535	config 0	23.39	24.20	1.205	0.07	0.591	0.712
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21100	2535	config 0	23.48	24.20	1.180	0.14	0.616	0.727
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	21350+21152	2560	config 0	23.44	24.20	1.191	0.06	0.815	0.971
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 6	21100	2535	config 1	20.91	22.30	1.377	-0.01	0.221	0.304
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 6	21100	2535	config 1	20.99	22.30	1.352	-0.14	0.232	0.314
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	21100	2535	config 1	20.91	22.30	1.377	-0.17	0.563	0.775
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	21100	2535	config 1	20.99	22.30	1.352	-0.14	0.578	0.781
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	20850	2510	config 1	20.89	22.30	1.384	-0.17	0.541	0.749
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 6	21350	2560	config 1	20.94	22.30	1.368	-0.13	0.585	0.800
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	21100	2535	config 1	20.89	22.30	1.384	-0.12	0.651	0.901
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Side	10mm	DSI 6	21100	2535	config 1	20.91	22.30	1.377	-0.11	0.156	0.215
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Side	10mm	DSI 6	21100	2535	config 1	20.99	22.30	1.352	-0.12	0.161	0.218
	LTE Band 7_Ant 0	20M	QPSK	1	99	Right Side	10mm	DSI 6	21100	2535	config 1	20.91	22.30	1.377	0.13	0.051	0.070
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Side	10mm	DSI 6	21100	2535	config 1	20.99	22.30	1.352	0.09	0.051	0.069
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21100	2535	config 1	20.91	22.30	1.377	0.13	0.629	0.866
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	20850	2510	config 1	20.82	22.30	1.406	0.12	0.625	0.879
	LTE Band 7_Ant 0	20M	QPSK	1	99	Bottom Side	10mm	DSI 6	21350	2560	config 1	20.85	22.30	1.396	0.11	0.580	0.810
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21100	2535	config 1	20.99	22.30	1.352	0.1	0.651	0.880
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	20850	2510	config 1	20.89	22.30	1.384	0.12	0.646	0.894
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	DSI 6	21350	2560	config 1	20.94	22.30	1.368	0.11	0.639	0.874
	LTE Band 7_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	21100	2535	config 1	20.89	22.30	1.384	0.03	0.650	0.899
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	21100+20902	2535	config 1	21.57	22.30	1.183	0.02	0.715	0.846
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 6	23095	707.5	Config 0	24.52	25.70	1.312	-0.14	0.280	0.367
	LTE Band 12_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 6	23095	707.5	Config 0	23.69	24.70	1.262	-0.06	0.232	0.293
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	23095	707.5	Config 0	24.52	25.70	1.312	-0.17	0.400	0.525
	LTE Band 12_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 6	23095	707.5	Config 0	23.69	24.70	1.262	-0.11	0.350	0.442
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	DSI 6	23095	707.5	Config 0	24.52	25.70	1.312	-0.03	0.279	0.366
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Side	10mm	DSI 6	23095	707.5	Config 0	23.69	24.70	1.262	-0.1	0.226	0.285
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	DSI 6	23095	707.5	Config 0	24.52	25.70	1.312	-0.18	0.259	0.340
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Side	10mm	DSI 6	23095	707.5	Config 0	23.69	24.70	1.262	-0.1	0.218	0.275
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	23095	707.5	Config 0	24.52	25.70	1.312	-0.08	0.087	0.114
	LTE Band 12_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	DSI 6	23095	707.5	Config 0	23.69	24.70	1.262	-0.09	0.074	0.093
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 6	23095	707.5	Config 1	24.35	25.70	1.365	0.01	0.232	0.317
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 6	23095	707.5	Config 1	23.48	24.70	1.324	0.01	0.191	0.253
40	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 6	23095	707.5	Config 1	24.35	25.70	1.365	-0.09	0.418	0.570
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 6	23095	707.5	Config 1	23.48	24.70	1.324	-0.02	0.343	0.454
	LTE Band 12_Ant 1	10M	QPSK	1	49	Left Side	10mm	DSI 6	23095	707.5	Config 1	24.35	25.70	1.365	0.02	0.291	0.397
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Side	10mm	DSI 6	23095	707.5	Config 1	23.48	24.70	1.324	0.01	0.252	0.334
	LTE Band 12_Ant 1	10M	QPSK	1	49	Right Side	10mm	DSI 6	23095	707.5	Config 1	24.35	25.70	1.365	0.05	0.256	0.349
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Side	10mm	DSI 6	23095	707.5	Config 1	23.48	24.70	1.324	0.03	0.219	0.290
	LTE Band 12_Ant 1	10M	QPSK	1	49	Top Side	10mm	DSI 6	23095	707.5	Config 1	24.35	25.70	1.365	-0.04	0.150	0.205
	LTE Band 12_Ant 1	10M	QPSK	25	25	Top Side	10mm	DSI 6	23095	707.5	Config 1	23.48	24.70	1.324	-0.07	0.120	0.159



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
41	LTE Band 13_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	23230	782	Config 0	23.99	25.20	1.321	-0.06	0.367	0.485
	LTE Band 13_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 6	23230	782	Config 0	23.00	24.20	1.318	-0.05	0.312	0.411
	LTE Band 13_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	23230	782	Config 0	23.99	25.20	1.321	-0.08	0.530	0.700
	LTE Band 13_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 6	23230	782	Config 0	23.00	24.20	1.318	-0.13	0.451	0.595
	LTE Band 13_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	23230	782	Config 0	23.99	25.20	1.321	-0.13	0.467	0.617
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Side	10mm	DSI 6	23230	782	Config 0	23.00	24.20	1.318	-0.07	0.395	0.521
	LTE Band 13_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	23230	782	Config 0	23.99	25.20	1.321	-0.1	0.448	0.592
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Side	10mm	DSI 6	23230	782	Config 0	23.00	24.20	1.318	-0.12	0.377	0.497
	LTE Band 13_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	23230	782	Config 0	23.99	25.20	1.321	-0.08	0.101	0.133
	LTE Band 13_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	DSI 6	23230	782	Config 0	23.00	24.20	1.318	-0.09	0.082	0.108
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23230	782	Config 1	24.05	25.20	1.303	0	0.180	0.235
	LTE Band 13_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 6	23230	782	Config 1	23.11	24.20	1.285	-0.01	0.140	0.180
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23230	782	Config 1	24.05	25.20	1.303	-0.13	0.325	0.424
	LTE Band 13_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 6	23230	782	Config 1	23.11	24.20	1.285	-0.06	0.253	0.325
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23230	782	Config 1	24.05	25.20	1.303	-0.17	0.172	0.224
	LTE Band 13_Ant 1	10M	QPSK	25	12	Left Side	10mm	DSI 6	23230	782	Config 1	23.11	24.20	1.285	-0.11	0.121	0.156
42	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23230	782	Config 1	24.05	25.20	1.303	0.02	0.166	0.216
	LTE Band 13_Ant 1	10M	QPSK	25	12	Right Side	10mm	DSI 6	23230	782	Config 1	23.11	24.20	1.285	0.08	0.124	0.159
	LTE Band 13_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23230	782	Config 1	24.05	25.20	1.303	-0.14	0.127	0.166
	LTE Band 13_Ant 1	10M	QPSK	25	12	Top Side	10mm	DSI 6	23230	782	Config 1	23.11	24.20	1.285	-0.04	0.101	0.130
	LTE Band 14_Ant 0	10M	QPSK	1	25	Front	10mm	DSI 6	23330	793	Config 0	24.53	25.70	1.309	-0.05	0.343	0.449
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	23330	793	Config 0	23.50	24.70	1.318	-0.04	0.289	0.381
	LTE Band 14_Ant 0	10M	QPSK	1	25	Back	10mm	DSI 6	23330	793	Config 0	24.53	25.70	1.309	-0.1	0.473	0.619
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	23330	793	Config 0	23.50	24.70	1.318	-0.12	0.400	0.527
	LTE Band 14_Ant 0	10M	QPSK	1	25	Left Side	10mm	DSI 6	23330	793	Config 0	24.53	25.70	1.309	-0.1	0.352	0.461
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	23330	793	Config 0	23.50	24.70	1.318	-0.08	0.302	0.398
	LTE Band 14_Ant 0	10M	QPSK	1	25	Right Side	10mm	DSI 6	23330	793	Config 0	24.53	25.70	1.309	-0.08	0.400	0.524
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	23330	793	Config 0	23.50	24.70	1.318	-0.09	0.339	0.447
	LTE Band 14_Ant 0	10M	QPSK	1	25	Bottom Side	10mm	DSI 6	23330	793	Config 0	24.53	25.70	1.309	-0.14	0.120	0.157
	LTE Band 14_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	23330	793	Config 0	23.50	24.70	1.318	-0.12	0.101	0.133
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 6	23330	793	Config 1	24.68	25.70	1.265	-0.05	0.311	0.393
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 6	23330	793	Config 1	23.65	24.70	1.274	-0.03	0.244	0.311
42	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 6	23330	793	Config 1	24.68	25.70	1.265	0.02	0.526	0.665
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 6	23330	793	Config 1	23.65	24.70	1.274	-0.01	0.427	0.544
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Side	10mm	DSI 6	23330	793	Config 1	24.68	25.70	1.265	0.06	0.220	0.278
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Side	10mm	DSI 6	23330	793	Config 1	23.65	24.70	1.274	0.01	0.160	0.204
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Side	10mm	DSI 6	23330	793	Config 1	24.68	25.70	1.265	-0.02	0.264	0.334
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Side	10mm	DSI 6	23330	793	Config 1	23.65	24.70	1.274	0.02	0.193	0.246
	LTE Band 14_Ant 1	10M	QPSK	1	0	Top Side	10mm	DSI 6	23330	793	Config 1	24.68	25.70	1.265	-0.05	0.223	0.282
	LTE Band 14_Ant 1	10M	QPSK	25	25	Top Side	10mm	DSI 6	23330	793	Config 1	23.65	24.70	1.274	-0.09	0.184	0.234



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26140	1860	config 0	23.20	24.40	1.318	-0.13	0.674	0.889
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26340	1880	config 0	23.18	24.40	1.324	-0.18	0.704	0.932
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	26590	1905	config 0	23.06	24.40	1.361	-0.17	0.638	0.869
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	0.15	0.706	0.897
43	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26340	1880	config 0	23.32	24.40	1.282	-0.16	0.728	0.934
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	26590	1905	config 0	23.22	24.40	1.312	-0.18	0.676	0.887
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	-0.13	0.710	0.902
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26140	1860	config 0	23.20	24.40	1.318	-0.04	0.616	0.812
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26340	1880	config 0	23.18	24.40	1.324	-0.06	0.686	0.908
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	26590	1905	config 0	23.06	24.40	1.361	-0.04	0.664	0.904
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	-0.11	0.666	0.846
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	26340	1880	config 0	23.32	24.40	1.282	-0.04	0.723	0.927
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	26590	1905	config 0	23.22	24.40	1.312	0.02	0.693	0.909
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	-0.02	0.666	0.846
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	26140	1860	config 0	23.20	24.40	1.318	-0.02	0.224	0.295
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	0.19	0.262	0.333
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	26140	1860	config 0	23.20	24.40	1.318	-0.18	0.635	0.837
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	26340	1880	config 0	23.18	24.40	1.324	-0.08	0.663	0.878
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	26590	1905	config 0	23.06	24.40	1.361	-0.03	0.545	0.742
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	-0.11	0.672	0.854
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	26340	1880	config 0	23.32	24.40	1.282	-0.08	0.662	0.849
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	26590	1905	config 0	23.22	24.40	1.312	-0.14	0.576	0.756
	LTE Band 25_Ant 2	20M	QPSK	100	0	Right Side	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	-0.16	0.683	0.868
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26140	1860	config 0	23.20	24.40	1.318	0.08	0.516	0.680
	LTE Band 25_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26140	1860	config 0	23.36	24.40	1.271	0.11	0.567	0.720
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	26140	1860	config 1	17.45	18.90	1.396	0.13	0.246	0.344
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	26140	1860	config 1	17.56	18.90	1.361	0.12	0.274	0.373
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26140	1860	config 1	17.45	18.90	1.396	-0.1	0.573	0.800
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26340	1880	config 1	17.36	18.90	1.426	-0.09	0.562	0.801
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	26590	1905	config 1	17.21	18.90	1.476	-0.06	0.593	0.875
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26140	1860	config 1	17.56	18.90	1.361	-0.06	0.588	0.801
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26340	1880	config 1	17.53	18.90	1.371	-0.11	0.620	0.850
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	26590	1905	config 1	17.35	18.90	1.429	-0.12	0.589	0.842
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	26140	1860	config 1	17.57	18.90	1.358	-0.08	0.487	0.661
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	26140	1860	config 1	17.45	18.90	1.396	0.01	0.156	0.218
	LTE Band 25_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	26140	1860	config 1	17.56	18.90	1.361	0.01	0.174	0.237
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	26140	1860	config 1	17.45	18.90	1.396	-0.19	0.017	0.024
	LTE Band 25_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	26140	1860	config 1	17.56	18.90	1.361	-0.13	0.018	0.025
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	26140	1860	config 1	17.45	18.90	1.396	0.06	0.407	0.568
	LTE Band 25_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	26140	1860	config 1	17.56	18.90	1.361	0.08	0.451	0.614



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Ant 0	15M	QPSK	1	74	Front	10mm	DSI 6	26865	831.5	config 0	24.59	25.70	1.291	-0.08	0.289	0.373
	LTE Band 26_Ant 0	15M	QPSK	36	20	Front	10mm	DSI 6	26865	831.5	config 0	23.46	24.70	1.330	-0.04	0.250	0.333
	LTE Band 26_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 6	26865	831.5	config 0	24.59	25.70	1.291	-0.06	0.416	0.537
	LTE Band 26_Ant 0	15M	QPSK	36	20	Back	10mm	DSI 6	26865	831.5	config 0	23.46	24.70	1.330	-0.16	0.360	0.479
	LTE Band 26_Ant 0	15M	QPSK	1	74	Left Side	10mm	DSI 6	26865	831.5	config 0	24.59	25.70	1.291	-0.17	0.320	0.413
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Side	10mm	DSI 6	26865	831.5	config 0	23.46	24.70	1.330	-0.17	0.275	0.366
	LTE Band 26_Ant 0	15M	QPSK	1	74	Right Side	10mm	DSI 6	26865	831.5	config 0	24.59	25.70	1.291	-0.08	0.326	0.421
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Side	10mm	DSI 6	26865	831.5	config 0	23.46	24.70	1.330	-0.09	0.282	0.375
	LTE Band 26_Ant 0	15M	QPSK	1	74	Bottom Side	10mm	DSI 6	26865	831.5	config 0	24.59	25.70	1.291	0.07	0.125	0.161
	LTE Band 26_Ant 0	15M	QPSK	36	20	Bottom Side	10mm	DSI 6	26865	831.5	config 0	23.46	24.70	1.330	0.08	0.104	0.138
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 6	20600+20501	844	config 0	25.61	25.70	1.021	0.06	0.466	0.476
	LTE Band 26_Ant 1	15M	QPSK	1	74	Front	10mm	DSI 6	26865	831.5	config 1	24.78	25.70	1.236	-0.12	0.296	0.366
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	DSI 6	26865	831.5	config 1	23.66	24.70	1.271	-0.11	0.242	0.307
44	LTE Band 26_Ant 1	15M	QPSK	1	74	Back	10mm	DSI 6	26865	831.5	config 1	24.78	25.70	1.236	-0.06	0.534	0.660
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	DSI 6	26865	831.5	config 1	23.66	24.70	1.271	-0.04	0.447	0.568
	LTE Band 26_Ant 1	15M	QPSK	1	74	Left Side	10mm	DSI 6	26865	831.5	config 1	24.78	25.70	1.236	-0.07	0.131	0.162
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Side	10mm	DSI 6	26865	831.5	config 1	23.66	24.70	1.271	-0.09	0.102	0.130
	LTE Band 26_Ant 1	15M	QPSK	1	74	Right Side	10mm	DSI 6	26865	831.5	config 1	24.78	25.70	1.236	-0.19	0.129	0.159
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Side	10mm	DSI 6	26865	831.5	config 1	23.66	24.70	1.271	-0.15	0.115	0.146
	LTE Band 26_Ant 1	15M	QPSK	1	74	Top Side	10mm	DSI 6	26865	831.5	config 1	24.78	25.70	1.236	-0.07	0.232	0.287
	LTE Band 26_Ant 1	15M	QPSK	36	20	Top Side	10mm	DSI 6	26865	831.5	config 1	23.66	24.70	1.271	-0.06	0.194	0.246
	LTE Band 5B_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 6	20450+20549	844	config 1	25.64	25.70	1.014	0.12	0.649	0.658
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 6	27710	2310	config 0	22.93	23.70	1.194	-0.12	0.339	0.405
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 6	27710	2310	config 0	21.94	22.70	1.191	-0.07	0.268	0.319
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 6	27710	2310	config 0	22.93	23.70	1.194	-0.04	0.284	0.339
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 6	27710	2310	config 0	21.94	22.70	1.191	-0.16	0.223	0.266
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	DSI 6	27710	2310	config 0	22.93	23.70	1.194	0.18	0.057	0.068
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Side	10mm	DSI 6	27710	2310	config 0	21.94	22.70	1.191	-0.09	0.044	0.052
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	DSI 6	27710	2310	config 0	22.93	23.70	1.194	0.06	0.244	0.291
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Side	10mm	DSI 6	27710	2310	config 0	21.94	22.70	1.191	0.15	0.199	0.237
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	DSI 6	27710	2310	config 0	22.93	23.70	1.194	0.1	0.300	0.358
	LTE Band 30_Ant 2	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	27710	2310	config 0	21.94	22.70	1.191	0.11	0.231	0.275
	LTE Band 30_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.03	0.347	0.454
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.03	0.362	0.474
	LTE Band 30_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.09	0.638	0.835
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.05	0.697	0.912
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 6	27710	2310	config 1	21.30	22.50	1.318	-0.03	0.702	0.925
	LTE Band 30_Ant 0	10M	QPSK	1	49	Left Side	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.11	0.095	0.124
	LTE Band 30_Ant 0	10M	QPSK	25	25	Left Side	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.04	0.094	0.123
	LTE Band 30_Ant 0	10M	QPSK	1	49	Right Side	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.06	0.075	0.098
	LTE Band 30_Ant 0	10M	QPSK	25	25	Right Side	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.06	0.080	0.105
	LTE Band 30_Ant 0	10M	QPSK	1	49	Bottom Side	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	0.04	0.671	0.878
	LTE Band 30_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	DSI 6	27710	2310	config 1	21.33	22.50	1.309	-0.04	0.704	0.922
45	LTE Band 30_Ant 0	10M	QPSK	50	0	Bottom Side	10mm	DSI 6	27710	2310	config 1	21.30	22.50	1.318	-0.02	0.719	0.948



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132072	1720	config 0	24.18	25.10	1.236	-0.08	0.789	0.975
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132322	1745	config 0	24.12	25.10	1.253	-0.16	0.770	0.965
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132572	1770	config 0	24.09	25.10	1.262	-0.17	0.727	0.917
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	132072	1720	config 0	23.55	24.10	1.135	-0.19	0.736	0.835
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	132322	1745	config 0	23.37	24.10	1.183	-0.17	0.711	0.841
	LTE Band 66_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 6	132572	1770	config 0	23.38	24.10	1.180	-0.17	0.681	0.804
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 6	132072	1720	config 0	23.50	24.10	1.148	-0.16	0.749	0.860
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	132072	1720	config 0	24.38	25.10	1.180	-0.06	0.636	0.751
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	132072	1720	config 0	23.55	24.10	1.135	-0.08	0.593	0.673
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	132072	1720	config 0	24.18	25.10	1.236	-0.09	0.232	0.287
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	132072	1720	config 0	23.55	24.10	1.135	0.07	0.221	0.251
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	132072	1720	config 0	24.18	25.10	1.236	-0.05	0.484	0.598
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	132072	1720	config 0	23.55	24.10	1.135	-0.08	0.453	0.514
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132072	1720	config 0	24.18	25.10	1.236	-0.19	0.339	0.419
	LTE Band 66_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	132072	1720	config 0	23.55	24.10	1.135	-0.13	0.317	0.360
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	132322+132124	1745	config 0	24.34	25.10	1.191	0.09	0.770	0.917
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	132072	1720	config 1	19.37	20.80	1.390	-0.13	0.261	0.363
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 6	132072	1720	config 1	19.51	20.80	1.346	-0.15	0.266	0.358
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132072	1720	config 1	19.37	20.80	1.390	0.01	0.704	0.979
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132322	1745	config 1	19.31	20.80	1.409	-0.05	0.706	0.995
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	132572	1770	config 1	19.25	20.80	1.429	-0.01	0.699	0.999
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 6	132072	1720	config 1	19.51	20.80	1.346	-0.02	0.724	0.974
46	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 6	132322	1745	config 1	19.32	20.80	1.406	0.05	0.711	1.000
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 6	132572	1770	config 1	19.34	20.80	1.400	-0.05	0.696	0.974
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	132072	1720	config 1	19.53	20.80	1.340	0.01	0.737	0.987
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	132072	1720	config 1	19.37	20.80	1.390	0.08	0.251	0.349
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Side	10mm	DSI 6	132072	1720	config 1	19.51	20.80	1.346	0.05	0.259	0.349
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	132072	1720	config 1	19.37	20.80	1.390	0.13	0.007	0.010
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Side	10mm	DSI 6	132072	1720	config 1	19.51	20.80	1.346	-0.14	0.008	0.011
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	132072	1720	config 1	19.37	20.80	1.390	-0.12	0.567	0.788
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	132072	1720	config 1	19.51	20.80	1.346	-0.11	0.589	0.793
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	132072+132270	1720	config 1	20.54	20.80	1.062	0.07	0.709	0.753
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 6	133322	683	config 0	24.65	25.70	1.274	0.13	0.137	0.174
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	133322	683	config 0	23.75	24.70	1.245	0	0.085	0.106
47	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	config 0	24.65	25.70	1.274	-0.01	0.489	0.623
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	133322	683	config 0	23.75	24.70	1.245	0	0.430	0.535
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	config 0	24.65	25.70	1.274	-0.06	0.307	0.391
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	133322	683	config 0	23.75	24.70	1.245	-0.09	0.301	0.375
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	config 0	24.65	25.70	1.274	-0.1	0.264	0.336
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	133322	683	config 0	23.75	24.70	1.245	-0.11	0.224	0.279
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	133322	683	config 0	24.65	25.70	1.274	-0.16	0.088	0.112
	LTE Band 71_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	133322	683	config 0	23.75	24.70	1.245	-0.16	0.070	0.087
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 6	133322	683	config 1	24.80	25.70	1.230	-0.04	0.248	0.305
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	DSI 6	133322	683	config 1	23.88	24.70	1.208	-0.01	0.202	0.244
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 6	133322	683	config 1	24.80	25.70	1.230	0.01	0.492	0.605
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	DSI 6	133322	683	config 1	23.88	24.70	1.208	-0.07	0.384	0.464
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	DSI 6	133322	683	config 1	24.80	25.70	1.230	-0.13	0.447	0.550
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Side	10mm	DSI 6	133322	683	config 1	23.88	24.70	1.208	0.03	0.337	0.407
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	DSI 6	133322	683	config 1	24.80	25.70	1.230	0.02	0.203	0.250
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Side	10mm	DSI 6	133322	683	config 1	23.88	24.70	1.208	0.02	0.170	0.205
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	DSI 6	133322	683	config 1	24.80	25.70	1.230	0.07	0.134	0.165
	LTE Band 71_Ant 1	20M	QPSK	50	24	Top Side	10mm	DSI 6	133322	683	config 1	23.88	24.70	1.208	0.08	0.111	0.134

**<TDD LTE SAR>**

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	49	Front	10mm	DSI 6	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.05	0.494	0.591
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 6	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0	0.400	0.467
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	-0.18	0.668	0.799
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	39750	2506	config 0	24.74	25.70	1.247	62.9	1.006	-0.17	0.544	0.683
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	40185	2549.5	config 0	24.62	25.70	1.282	62.9	1.006	-0.16	0.624	0.805
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	40620	2593	config 0	24.61	25.70	1.285	62.9	1.006	-0.12	0.713	0.922
48	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	config 0	24.84	25.70	1.219	62.9	1.006	-0.09	0.815	0.999
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	-0.16	0.547	0.639
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	39750	2506	config 0	23.87	24.70	1.211	62.9	1.006	-0.02	0.448	0.546
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	40185	2549.5	config 0	23.74	24.70	1.247	62.9	1.006	-0.01	0.532	0.668
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	40620	2593	config 0	23.69	24.70	1.262	62.9	1.006	-0.1	0.592	0.751
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 6	41490	2680	config 0	23.93	24.70	1.194	62.9	1.006	-0.08	0.681	0.818
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	41055	2636.5	config 0	23.95	24.70	1.189	62.9	1.006	-0.02	0.535	0.640
	LTE Band 41_Ant 2	20M	QPSK	1	49	Left Side	10mm	DSI 6	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	-0.11	0.063	0.075
	LTE Band 41_Ant 2	20M	QPSK	50	24	Left Side	10mm	DSI 6	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	-0.07	0.055	0.064
	LTE Band 41_Ant 2	20M	QPSK	1	49	Right Side	10mm	DSI 6	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.1	0.496	0.593
	LTE Band 41_Ant 2	20M	QPSK	50	24	Right Side	10mm	DSI 6	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0.11	0.402	0.470
	LTE Band 41_Ant 2	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	-0.18	0.448	0.536
	LTE Band 41_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	-0.13	0.360	0.421
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	config 0	25.95	27.00	1.274	42.9	1.009	-0.19	0.680	0.874
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	41490+41292	2680	config 0	25.70	25.70	1.000	62.9	1.006	0.04	0.979	0.985
	LTE Band 41C_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	41490+41292	2680	config 1	26.74	27.00	1.062	42.9	1.009	-0.06	0.678	0.726
	LTE Band 41_Ant 0	20M	QPSK	1	49	Front	10mm	DSI 6	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	-0.04	0.204	0.272
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 6	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	0.09	0.199	0.266
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	-0.05	0.691	0.923
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	39750	2506	config 1	21.19	22.80	1.449	62.9	1.006	-0.14	0.394	0.574
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40185	2549.5	config 1	21.13	22.80	1.469	62.9	1.006	0.03	0.447	0.661
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	40620	2593	config 1	21.15	22.80	1.462	62.9	1.006	-0.02	0.491	0.722
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 6	41490	2680	config 1	21.43	22.80	1.371	62.9	1.006	-0.05	0.672	0.927
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	-0.01	0.697	0.933
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	39750	2506	config 1	21.32	22.80	1.406	62.9	1.006	-0.02	0.426	0.603
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	40185	2549.5	config 1	21.28	22.80	1.419	62.9	1.006	-0.04	0.474	0.677
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	40620	2593	config 1	21.19	22.80	1.449	62.9	1.006	-0.03	0.530	0.772
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41490	2680	config 1	21.52	22.80	1.343	62.9	1.006	-0.03	0.660	0.892
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 6	41055	2636.5	config 1	21.47	22.80	1.358	62.9	1.006	-0.02	0.679	0.928
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Side	10mm	DSI 6	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	0.07	0.189	0.252
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Side	10mm	DSI 6	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	0.08	0.194	0.260
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Side	10mm	DSI 6	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	-0.03	0.064	0.085
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Side	10mm	DSI 6	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	0	0.067	0.090
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	-0.05	0.468	0.625
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	39750	2506	config 1	21.19	22.80	1.449	62.9	1.006	-0.03	0.432	0.630
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	40185	2549.5	config 1	21.13	22.80	1.469	62.9	1.006	0.01	0.431	0.637
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	40620	2593	config 1	21.15	22.80	1.462	62.9	1.006	-0.01	0.437	0.643
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	DSI 6	41490	2680	config 1	21.43	22.80	1.371	62.9	1.006	-0.06	0.319	0.440
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	0.11	0.472	0.632
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	39750	2506	config 1	21.32	22.80	1.406	62.9	1.006	-0.02	0.445	0.629
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40185	2549.5	config 1	21.28	22.80	1.419	62.9	1.006	0.01	0.426	0.608
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	40620	2593	config 1	21.19	22.80	1.449	62.9	1.006	-0.06	0.441	0.643
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	DSI 6	41490	2680	config 1	21.52	22.80	1.343	62.9	1.006	-0.09	0.309	0.417
	LTE Band 41_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	DSI 6	41055	2636.5	config 1	21.47	22.80	1.358	62.9	1.006	0.09	0.301	0.411
	LTE Band 41_HPUE_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 6	41055	2636.5	config 1	23.31	24.60	1.346	42.9	1.009	-0.1	0.652	0.885
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 6	41490+41292	2680	config 1	21.99	22.80	1.205	62.9	1.006	0.03	0.588	0.713
	LTE Band 41C_HPUE_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 6	39750+39948	2506	config 1	23.52	24.60	1.282	42.9	1.009	-0.08	0.521	0.674



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 6	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	-0.06	0.209	0.255
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 6	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	-0.17	0.195	0.228
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	-0.02	0.662	0.806
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	55340	3560	config 0	22.52	23.40	1.225	62.9	1.006	-0.14	0.632	0.779
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	config 0	22.53	23.40	1.222	62.9	1.006	-0.04	0.693	0.852
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56640	3690	config 0	22.52	23.40	1.225	62.9	1.006	-0.11	0.721	0.888
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	-0.03	0.536	0.626
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	55340	3560	config 0	22.25	22.90	1.161	62.9	1.006	-0.14	0.492	0.575
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	config 0	22.22	22.90	1.169	62.9	1.006	0	0.552	0.649
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 6	56640	3690	config 0	22.19	22.90	1.178	62.9	1.006	-0.07	0.571	0.676
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 6	55340	3560	config 0	22.19	22.90	1.178	62.9	1.006	-0.15	0.508	0.602
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	0.03	0.516	0.628
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	55340	3560	config 0	22.52	23.40	1.225	62.9	1.006	0.14	0.473	0.583
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56150	3641	config 0	22.53	23.40	1.222	62.9	1.006	0.17	0.531	0.653
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	DSI 6	56640	3690	config 0	22.52	23.40	1.225	62.9	1.006	0.09	0.547	0.674
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	DSI 6	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	0.07	0.415	0.485
	LTE Band 48_Ant 7	20M	QPSK	100	0	Left Side	10mm	DSI 6	55340	3560	config 0	22.19	22.90	1.178	62.9	1.006	0.09	0.387	0.458
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Side	10mm	DSI 6	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	-0.04	0.018	0.022
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Side	10mm	DSI 6	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	-0.13	0.012	0.014
	LTE Band 48_Ant 7	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	-0.12	0.111	0.135
	LTE Band 48_Ant 7	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	-0.03	0.101	0.118
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 6	56150+55952	3641	config 0	16.05	17.20	1.303	62.9	1.006	0.05	0.157	0.206
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.04	0.304	0.394
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.03	0.312	0.404
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.1	0.722	0.936
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	55340	3560	config 1	20.17	21.30	1.297	62.9	1.006	-0.02	0.719	0.938
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56150	3641	config 1	20.17	21.30	1.297	62.9	1.006	0.02	0.649	0.847
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 6	56640	3690	config 1	20.20	21.30	1.288	62.9	1.006	0.05	0.608	0.788
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	0.02	0.662	0.858
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	55340	3560	config 1	20.20	21.30	1.288	62.9	1.006	0.02	0.721	0.934
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56150	3641	config 1	20.16	21.30	1.300	62.9	1.006	0.02	0.658	0.861
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 6	56640	3690	config 1	20.18	21.30	1.294	62.9	1.006	0.03	0.623	0.811
49	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 6	55340	3560	config 1	20.13	21.30	1.309	62.9	1.006	-0.01	0.719	0.947
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Side	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	0	0.001	0.001
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Side	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	0	0.001	0.001
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.03	0.691	0.896
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	55340	3560	config 1	20.17	21.30	1.297	62.9	1.006	-0.14	0.579	0.756
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	56150	3641	config 1	20.17	21.30	1.297	62.9	1.006	-0.18	0.527	0.688
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	DSI 6	56640	3690	config 1	20.20	21.30	1.288	62.9	1.006	-0.11	0.543	0.704
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.14	0.575	0.745
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	55340	3560	config 1	20.20	21.30	1.288	62.9	1.006	-0.18	0.582	0.754
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	56150	3641	config 1	20.16	21.30	1.300	62.9	1.006	-0.08	0.545	0.713
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	DSI 6	56640	3690	config 1	20.18	21.30	1.294	62.9	1.006	-0.1	0.521	0.678
	LTE Band 48_Ant 2	20M	QPSK	100	0	Right Side	10mm	DSI 6	55340	3560	config 1	20.13	21.30	1.309	62.9	1.006	0.12	0.574	0.756
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	0.11	0.393	0.509
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	DSI 6	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	0.09	0.397	0.515



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n5_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	167300	836.5	Config 0	23.80	25.00	1.318	0.05	0.088	0.116
	n5_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	167300	836.5	Config 0	23.75	25.00	1.334	-0.11	0.080	0.107
	n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	167300	836.5	Config 0	23.80	25.00	1.318	-0.01	0.104	0.137
	n5_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	167300	836.5	Config 0	23.75	25.00	1.334	-0.09	0.093	0.124
	n5_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	167300	836.5	Config 0	23.80	25.00	1.318	-0.13	0.124	0.163
	n5_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	167300	836.5	Config 0	23.75	25.00	1.334	-0.04	0.103	0.137
	n5_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	167300	836.5	Config 0	23.80	25.00	1.318	-0.04	0.123	0.162
	n5_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	167300	836.5	Config 0	23.75	25.00	1.334	-0.05	0.104	0.139
	n5_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	167300	836.5	Config 0	23.80	25.00	1.318	-0.1	0.046	0.061
	n5_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	167300	836.5	Config 0	23.75	25.00	1.334	-0.02	0.043	0.057
	n5_Ant 1	20M	BPSK	1	53	Front	10mm	DSI 6	167300	836.5	Config 1	24.03	25.00	1.250	0.02	0.309	0.386
	n5_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 6	167300	836.5	Config 1	24.02	25.00	1.253	-0.06	0.308	0.386
50	n5_Ant 1	20M	BPSK	1	53	Back	10mm	DSI 6	167300	836.5	Config 1	24.03	25.00	1.250	-0.11	0.524	0.655
	n5_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 6	167300	836.5	Config 1	24.02	25.00	1.253	-0.16	0.518	0.649
	n5_Ant 1	20M	BPSK	1	53	Left Side	10mm	DSI 6	167300	836.5	Config 1	24.03	25.00	1.250	-0.1	0.168	0.210
	n5_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 6	167300	836.5	Config 1	24.02	25.00	1.253	-0.07	0.168	0.211
	n5_Ant 1	20M	BPSK	1	53	Right Side	10mm	DSI 6	167300	836.5	Config 1	24.03	25.00	1.250	-0.11	0.188	0.235
	n5_Ant 1	20M	BPSK	50	28	Right Side	10mm	DSI 6	167300	836.5	Config 1	24.02	25.00	1.253	-0.09	0.186	0.233
	n5_Ant 1	20M	BPSK	1	53	Top Side	10mm	DSI 6	167300	836.5	Config 1	24.03	25.00	1.250	-0.01	0.246	0.308
	n5_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 6	167300	836.5	Config 1	24.02	25.00	1.253	-0.01	0.236	0.296
	n12_Ant 0	15M	BPSK	1	1	Front	10mm	DSI 6	141500	707.5	Config 0	23.35	24.70	1.365	-0.04	0.284	0.388
	n12_Ant 0	15M	BPSK	36	22	Front	10mm	DSI 6	141500	707.5	Config 0	23.22	24.70	1.406	-0.03	0.264	0.371
51	n12_Ant 0	15M	BPSK	1	1	Back	10mm	DSI 6	141500	707.5	Config 0	23.35	24.70	1.365	-0.02	0.411	0.561
	n12_Ant 0	15M	BPSK	36	22	Back	10mm	DSI 6	141500	707.5	Config 0	23.22	24.70	1.406	-0.03	0.386	0.543
	n12_Ant 0	15M	BPSK	1	1	Left Side	10mm	DSI 6	141500	707.5	Config 0	23.35	24.70	1.365	-0.08	0.376	0.513
	n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	DSI 6	141500	707.5	Config 0	23.22	24.70	1.406	-0.07	0.360	0.506
	n12_Ant 0	15M	BPSK	1	1	Right Side	10mm	DSI 6	141500	707.5	Config 0	23.35	24.70	1.365	-0.09	0.295	0.403
	n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	DSI 6	141500	707.5	Config 0	23.22	24.70	1.406	-0.15	0.288	0.405
	n12_Ant 0	15M	BPSK	1	1	Bottom Side	10mm	DSI 6	141500	707.5	Config 0	23.35	24.70	1.365	-0.17	0.056	0.076
	n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	DSI 6	141500	707.5	Config 0	23.22	24.70	1.406	-0.07	0.061	0.086
	n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 6	141500	707.5	Config 1	23.55	24.70	1.303	-0.1	0.189	0.246
	n12_Ant 1	15M	BPSK	36	22	Front	10mm	DSI 6	141500	707.5	Config 1	23.42	24.70	1.343	-0.06	0.173	0.232
	n12_Ant 1	15M	BPSK	1	1	Back	10mm	DSI 6	141500	707.5	Config 1	23.55	24.70	1.303	0	0.330	0.430
	n12_Ant 1	15M	BPSK	36	22	Back	10mm	DSI 6	141500	707.5	Config 1	23.42	24.70	1.343	-0.07	0.334	0.448
	n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	DSI 6	141500	707.5	Config 1	23.55	24.70	1.303	-0.08	0.109	0.142
	n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	DSI 6	141500	707.5	Config 1	23.42	24.70	1.343	-0.16	0.119	0.160
	n12_Ant 1	15M	BPSK	1	1	Right Side	10mm	DSI 6	141500	707.5	Config 1	23.55	24.70	1.303	-0.06	0.104	0.136
	n12_Ant 1	15M	BPSK	36	22	Right Side	10mm	DSI 6	141500	707.5	Config 1	23.42	24.70	1.343	-0.04	0.090	0.121
	n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	DSI 6	141500	707.5	Config 1	23.55	24.70	1.303	0.01	0.101	0.132
	n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	DSI 6	141500	707.5	Config 1	23.42	24.70	1.343	-0.12	0.106	0.142



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.18	0.837	0.950
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 6	372000	1860	Config 0	23.94	24.50	1.138	-0.17	0.786	0.894
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 6	381000	1905	Config 0	23.90	24.50	1.148	-0.13	0.689	0.791
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	372000	1860	Config 0	24.02	24.50	1.117	-0.14	0.814	0.909
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	372000	1860	Config 0	23.96	24.50	1.132	-0.12	0.831	0.941
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	381000	1905	Config 0	24.02	24.50	1.117	-0.1	0.725	0.810
	n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.17	0.487	0.553
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.17	0.865	0.982
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 6	372000	1860	Config 0	23.94	24.50	1.138	0	0.841	0.957
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 6	381000	1905	Config 0	23.90	24.50	1.148	-0.16	0.682	0.783
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	372000	1860	Config 0	24.02	24.50	1.117	0	0.812	0.907
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	376000	1880	Config 0	23.96	24.50	1.132	-0.05	0.845	0.957
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	381000	1905	Config 0	24.02	24.50	1.117	-0.17	0.851	0.950
	n25_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.17	0.643	0.730
	n25_Ant 2	20M	BPSK	1	104	Left Side	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.01	0.421	0.478
	n25_Ant 2	20M	BPSK	50	28	Left Side	10mm	DSI 6	372000	1860	Config 0	24.02	24.50	1.117	-0.01	0.402	0.449
	n25_Ant 2	20M	BPSK	1	104	Right Side	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.08	0.780	0.885
	n25_Ant 2	20M	BPSK	1	104	Right Side	10mm	DSI 6	372000	1860	Config 0	23.94	24.50	1.138	-0.13	0.733	0.834
	n25_Ant 2	20M	BPSK	1	104	Right Side	10mm	DSI 6	381000	1905	Config 0	23.90	24.50	1.148	-0.1	0.689	0.791
	n25_Ant 2	20M	BPSK	50	28	Right Side	10mm	DSI 6	372000	1860	Config 0	24.02	24.50	1.117	-0.08	0.769	0.859
	n25_Ant 2	20M	BPSK	50	28	Right Side	10mm	DSI 6	376000	1880	Config 0	23.96	24.50	1.132	-0.08	0.785	0.889
	n25_Ant 2	20M	BPSK	50	28	Right Side	10mm	DSI 6	381000	1905	Config 0	24.02	24.50	1.117	-0.08	0.807	0.901
	n25_Ant 2	20M	BPSK	100	0	Right Side	10mm	DSI 6	376000	1880	Config 0	23.80	24.50	1.175	-0.09	0.742	0.872
	n25_Ant 2	20M	BPSK	1	104	Bottom Side	10mm	DSI 6	376000	1880	Config 0	23.95	24.50	1.135	-0.03	0.579	0.657
	n25_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	372000	1860	Config 0	24.02	24.50	1.117	-0.12	0.543	0.606
	n25_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	372000	1860	Config 1	19.30	19.70	1.096	0.18	0.355	0.389
	n25_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	376000	1880	Config 1	19.43	19.70	1.064	-0.06	0.474	0.504
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	372000	1860	Config 1	19.30	19.70	1.096	-0.06	0.730	0.800
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	376000	1880	Config 1	19.29	19.70	1.099	-0.11	0.857	0.942
52	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	381000	1905	Config 1	19.29	19.70	1.099	-0.08	0.906	0.996
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	376000	1880	Config 1	19.43	19.70	1.064	0.01	0.844	0.898
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	372000	1860	Config 1	19.35	19.70	1.084	-0.07	0.734	0.796
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	381000	1905	Config 1	19.37	19.70	1.079	-0.15	0.856	0.924
	n25_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 6	372000	1860	Config 1	19.23	19.70	1.114	-0.06	0.706	0.787
	n25_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	372000	1860	Config 1	19.30	19.70	1.096	0	0.227	0.249
	n25_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	376000	1880	Config 1	19.43	19.70	1.064	0.15	0.327	0.348
	n25_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	372000	1860	Config 1	19.30	19.70	1.096	-0.17	0.020	0.022
	n25_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	376000	1880	Config 1	19.43	19.70	1.064	-0.07	0.032	0.034
	n25_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	372000	1860	Config 1	19.30	19.70	1.096	0.04	0.549	0.602
	n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	376000	1880	Config 1	19.43	19.70	1.064	0.14	0.731	0.778



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
53	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 6	344000	1720	Config 0	24.57	25.00	1.104	-0.13	0.848	0.936
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 6	349000	1745	Config 0	24.40	25.00	1.148	-0.08	0.837	0.961
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 6	354000	1770	Config 0	24.34	25.00	1.164	-0.17	0.820	0.955
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	344000	1720	Config 0	24.44	25.00	1.138	-0.06	0.878	0.999
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	349000	1745	Config 0	24.37	25.00	1.156	-0.14	0.819	0.947
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 6	354000	1770	Config 0	24.40	25.00	1.148	-0.12	0.749	0.860
	n66_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 6	344000	1720	Config 0	23.86	25.00	1.300	-0.06	0.755	0.982
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	344000	1720	Config 0	24.57	25.00	1.104	-0.06	0.651	0.719
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	349000	1745	Config 0	24.40	25.00	1.148	-0.03	0.690	0.792
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 6	354000	1770	Config 0	24.34	25.00	1.164	-0.13	0.711	0.828
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	344000	1720	Config 0	24.44	25.00	1.138	-0.09	0.607	0.691
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	349000	1745	Config 0	24.37	25.00	1.156	0.01	0.650	0.751
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 6	354000	1770	Config 0	24.40	25.00	1.148	0.04	0.694	0.797
	n66_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 6	344000	1770	Config 0	23.86	25.00	1.300	-0.02	0.592	0.770
	n66_Ant 2	20M	BPSK	1	1	Left Side	10mm	DSI 6	344000	1770	Config 0	24.57	25.00	1.104	-0.02	0.359	0.396
	n66_Ant 2	20M	BPSK	50	28	Left Side	10mm	DSI 6	344000	1770	Config 0	24.44	25.00	1.138	-0.07	0.345	0.392
	n66_Ant 2	20M	BPSK	1	1	Right Side	10mm	DSI 6	344000	1770	Config 0	24.57	25.00	1.104	-0.07	0.565	0.624
	n66_Ant 2	20M	BPSK	50	28	Right Side	10mm	DSI 6	344000	1770	Config 0	24.44	25.00	1.138	0	0.651	0.741
	n66_Ant 2	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	344000	1770	Config 0	24.57	25.00	1.104	-0.09	0.503	0.555
	n66_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	344000	1770	Config 0	24.44	25.00	1.138	-0.14	0.509	0.579
	n66_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	344000	1720	Config 1	19.95	20.40	1.109	0.07	0.312	0.346
	n66_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	344000	1720	Config 1	19.89	20.40	1.125	0.13	0.331	0.372
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	344000	1720	Config 1	19.95	20.40	1.109	0.04	0.891	0.988
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	349000	1745	Config 1	19.93	20.40	1.114	0.08	0.814	0.907
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	354000	1770	Config 1	19.94	20.40	1.112	-0.02	0.723	0.804
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	344000	1720	Config 1	19.89	20.40	1.125	0.05	0.852	0.958
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	349000	1745	Config 1	19.84	20.40	1.138	0.01	0.762	0.867
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	354000	1770	Config 1	19.75	20.40	1.161	0.04	0.658	0.764
	n66_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 6	344000	1720	Config 1	19.71	20.40	1.172	0.01	0.809	0.948
	n66_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	344000	1720	Config 1	19.95	20.40	1.109	0.18	0.105	0.116
	n66_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	344000	1720	Config 1	19.89	20.40	1.125	-0.12	0.079	0.089
	n66_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	344000	1720	Config 1	19.95	20.40	1.109	-0.08	0.059	0.065
	n66_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	344000	1720	Config 1	19.89	20.40	1.125	-0.03	0.062	0.070
	n66_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	344000	1720	Config 1	19.95	20.40	1.109	0.12	0.661	0.733
	n66_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	344000	1720	Config 1	19.89	20.40	1.125	0.19	0.649	0.730
	n71_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 6	136100	680.5	Config 0	24.29	25.70	1.384	-0.14	0.324	0.448
	n71_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 6	136100	680.5	Config 0	24.33	25.70	1.371	-0.19	0.336	0.461
	n71_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 6	136100	680.5	Config 0	24.29	25.70	1.384	-0.12	0.516	0.714
	n71_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 6	136100	680.5	Config 0	24.33	25.70	1.371	-0.17	0.499	0.684
54	n71_Ant 0	20M	BPSK	1	1	Left Side	10mm	DSI 6	136100	680.5	Config 0	24.29	25.70	1.384	-0.1	0.342	0.473
	n71_Ant 0	20M	BPSK	50	28	Left Side	10mm	DSI 6	136100	680.5	Config 0	24.33	25.70	1.371	-0.1	0.388	0.532
	n71_Ant 0	20M	BPSK	1	1	Right Side	10mm	DSI 6	136100	680.5	Config 0	24.29	25.70	1.384	-0.08	0.279	0.386
	n71_Ant 0	20M	BPSK	50	28	Right Side	10mm	DSI 6	136100	680.5	Config 0	24.33	25.70	1.371	-0.11	0.306	0.419
	n71_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	DSI 6	136100	680.5	Config 0	24.29	25.70	1.384	-0.07	0.095	0.131
	n71_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	DSI 6	136100	680.5	Config 0	24.33	25.70	1.371	0.01	0.088	0.121
	n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 6	136100	680.5	Config 1	24.55	25.70	1.303	-0.07	0.225	0.293
	n71_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 6	136100	680.5	Config 1	24.37	25.70	1.358	-0.11	0.258	0.350
	n71_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 6	136100	680.5	Config 1	24.55	25.70	1.303	-0.07	0.420	0.547
	n71_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 6	136100	680.5	Config 1	24.37	25.70	1.358	0	0.494	0.671
	n71_Ant 1	20M	BPSK	1	1	Left Side	10mm	DSI 6	136100	680.5	Config 1	24.55	25.70	1.303	-0.16	0.369	0.481
	n71_Ant 1	20M	BPSK	50	28	Left Side	10mm	DSI 6	136100	680.5	Config 1	24.37	25.70	1.358	-0.02	0.453	0.615
	n71_Ant 1	20M	BPSK	1	1	Right Side	10mm	DSI 6	136100	680.5	Config 1	24.55	25.70	1.303	-0.08	0.139	0.181
	n71_Ant 1	20M	BPSK	50	28	Right Side	10mm	DSI 6	136100	680.5	Config 1	24.37	25.70	1.358	-0.09	0.184	0.250
	n71_Ant 1	20M	BPSK	1	1	Top Side	10mm	DSI 6	136100	680.5	Config 1	24.55	25.70	1.303	-0.02	0.121	0.158
	n71_Ant 1	20M	BPSK	50	28	Top Side	10mm	DSI 6	136100	680.5	Config 1	24.37	25.70	1.358	0.04	0.143	0.194



FCC SAR TEST REPORT

Report No. : FA022521-02A

<TDD 5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Transmission Cycle %	Transmission Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n41_Ant 2	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.02	0.219	0.347
	n41_Ant 2	100M	BPSK	135	69	Front	10mm	DSI 6	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	-0.11	0.214	0.362
	n41_Ant 2	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	0.11	0.254	0.402
	n41_Ant 2	100M	BPSK	135	69	Back	10mm	DSI 6	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	0.08	0.229	0.388
	n41_Ant 2	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.03	0.034	0.054
	n41_Ant 2	100M	BPSK	135	69	Left Side	10mm	DSI 6	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	-0.02	0.032	0.054
	n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	0.16	0.264	0.418
	n41_Ant 2	100M	BPSK	135	69	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	0.14	0.268	0.454
	n41_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.02	0.253	0.401
	n41_Ant 2	100M	BPSK	135	69	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	0.02	0.256	0.433
	n41_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	0.02	0.177	0.279
	n41_Ant 5	100M	BPSK	135	0	Front	10mm	DSI 6	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0.01	0.179	0.300
	n41_Ant 5	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	-0.18	0.307	0.483
	n41_Ant 5	100M	BPSK	135	0	Back	10mm	DSI 6	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0	0.272	0.456
	n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	-0.02	0.241	0.379
	n41_Ant 5	100M	BPSK	135	0	Left Side	10mm	DSI 6	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	-0.01	0.217	0.364
	n41_Ant 5	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	0.04	0.001	0.002
	n41_Ant 5	100M	BPSK	135	0	Right Side	10mm	DSI 6	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0.03	0.001	0.002
	n41_Ant 5	100M	BPSK	1	1	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	-0.02	0.056	0.088
	n41_Ant 5	100M	BPSK	135	0	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0	0.054	0.091
	n41_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	0	0.245	0.412
	n41_HPUE_Ant 5	100M	BPSK	135	0	Front	10mm	DSI 6	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	0.09	0.216	0.395
55	n41_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.05	0.458	0.770
	n41_HPUE_Ant 5	100M	BPSK	135	0	Back	10mm	DSI 6	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.19	0.359	0.657
	n41_HPUE_Ant 5	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.06	0.294	0.494
	n41_HPUE_Ant 5	100M	BPSK	135	0	Left Side	10mm	DSI 6	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	0.17	0.212	0.388
	n41_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.07	0.018	0.030
	n41_HPUE_Ant 5	100M	BPSK	135	0	Right Side	10mm	DSI 6	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.05	0.016	0.029
	n41_HPUE_Ant 5	100M	BPSK	1	1	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.07	0.073	0.123
	n41_HPUE_Ant 5	100M	BPSK	135	0	Bottom Side	10mm	DSI 6	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.02	0.085	0.156
	n41_Ant 0	100M	BPSK	1	1	Front	10mm	DSI 6	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.14	0.112	0.194
	n41_Ant 0	100M	BPSK	135	69	Front	10mm	DSI 6	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	0.11	0.120	0.223
	n41_Ant 0	100M	BPSK	1	1	Back	10mm	DSI 6	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.18	0.296	0.514
	n41_Ant 0	100M	BPSK	135	69	Back	10mm	DSI 6	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.05	0.396	0.737
	n41_Ant 0	100M	BPSK	1	1	Left Side	10mm	DSI 6	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	0.06	0.079	0.137
	n41_Ant 0	100M	BPSK	135	69	Left Side	10mm	DSI 6	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.1	0.123	0.229
	n41_Ant 0	100M	BPSK	1	1	Right Side	10mm	DSI 6	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.04	0.044	0.076
	n41_Ant 0	100M	BPSK	135	69	Right Side	10mm	DSI 6	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	0.18	0.051	0.095
	n41_Ant 0	100M	BPSK	1	1	Bottom Side	10mm	DSI 6	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	0.03	0.259	0.450
	n41_Ant 0	100M	BPSK	135	69	Bottom Side	10mm	DSI 6	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	0.06	0.216	0.402

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.08	0.113	0.117
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.14	0.209	0.217
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	0.01	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	0.06	0.179	0.186
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	0	0.115	0.119
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.14	0.230	0.243
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.11	0.378	0.400
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.16	0.375	0.397
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.03	0.010	0.010
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.12	0.043	0.046
56	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	-0.17	0.239	0.259
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.17	0.216	0.229
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	-0.04	0.436	0.472
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.04	0.335	0.355
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	1	2412	16.70	17.00	1.072	98.92	1.011	-0.19	0.427	0.463
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	1	2412	18.70	19.00	1.072	98.92	1.011	-0.19	0.277	0.300
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	11	2462	16.80	17.00	1.047	98.92	1.011	-0.02	0.380	0.402
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	11	2462	18.70	19.00	1.072	98.92	1.011	-0.02	0.280	0.303
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.02	0.337	0.357
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	0.04	0.385	0.417
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	0.17	0.260	0.282

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.09	0.047	0.067
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.05	0.076	0.108
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	0.01	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.07	0.157	0.222
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.14	0.085	0.120
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	-0.09	0.066	0.070
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	-0.05	0.206	0.220
57	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	0.02	0.444	0.473
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3	3	38	5190	13.00	13.50	1.122	95.96	1.042	0.07	0.384	0.449
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	0	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3	3	46	5230	13.90	14.00	1.023	95.96	1.042	0.08	0.017	0.018
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.09	0.022	0.031
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	-0.09	0.064	0.083
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.05	0.056	0.079
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	-0.05	0.175	0.226
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	0.02	0.364	0.470
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.16	0.121	0.171
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3(4)	3	46	5230	15.20	16.50	1.349	95.34	1.049	-0.05	0.015	0.021
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3(3)	3	46	5230	13.60	14.50	1.230	95.34	1.049	-0.05	0.076	0.098

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.02	0.064	0.067
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.103	0.108
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.03	0.263	0.275
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.19	0.226	0.236
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	-0.15	0.064	0.081
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	-0.08	0.210	0.268
58	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	0.01	0.370	0.473
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	0.01	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	0.01	0.014	0.018
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.027	0.028
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	-0.1	0.068	0.083
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.13	0.100	0.105
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.13	0.182	0.224
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	149	5745	18.30	18.50	1.047	97.83	1.022	-0.04	0.116	0.124
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	149	5745	9.90	10.50	1.148	97.83	1.022	-0.04	0.229	0.269
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	165	5825	18.20	18.50	1.072	97.83	1.022	0.18	0.082	0.090
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	165	5825	9.70	10.50	1.202	97.83	1.022	0.18	0.232	0.285
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.18	0.316	0.388
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	149	5745	9.90	10.50	1.148	97.83	1.022	0.11	0.401	0.470
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	165	5825	9.70	10.50	1.202	97.83	1.022	0.1	0.343	0.421
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.12	0.274	0.287
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.11	0.216	0.226
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.11	0.020	0.078

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	Bluetooth	1Mbps	Front	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	-0.16	0.115	0.124
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	0.16	0.166	0.179
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	0	2402	15.49	15.50	1.002	77.13	1.080	-0.03	0.210	0.227
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	78	2480	15.33	15.50	1.040	77.13	1.080	-0.19	0.197	0.221
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	-0.04	0.141	0.152
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	0.11	0.098	0.106
	Bluetooth	1Mbps	Front	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.13	0.170	0.187
59	Bluetooth	1Mbps	Back	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.03	0.294	0.323
	Bluetooth	1Mbps	Back	10mm	Ant 4	1	39	2441	17.87	18.00	1.030	77.13	1.080	-0.02	0.281	0.313
	Bluetooth	1Mbps	Back	10mm	Ant 4	1	78	2480	17.29	18.00	1.178	77.13	1.080	0	0.233	0.296
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	1	39	2441	17.92	18.00	1.019	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	1	39	2441	17.92	18.00	1.019	77.13	1.080	0.02	0.244	0.268
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	1	39	2441	17.92	18.00	1.019	77.13	1.080	0.04	0.161	0.177

14.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	189	836.4	config 0	27.75	29.50	1.496	-0.15	0.216	0.323
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	189	836.4	config 0	27.75	29.50	1.496	-0.07	0.316	0.473
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	128	824.2	config 0	27.72	29.50	1.507	-0.02	0.338	0.509
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	251	848.8	config 0	27.66	29.50	1.528	-0.01	0.337	0.515
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	128	824.2	config 1	28.09	29.50	1.384	-0.13	0.310	0.429
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	128	824.2	config 1	28.09	29.50	1.384	-0.17	0.399	0.552
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	189	836.4	config 1	28.07	29.50	1.390	-0.13	0.452	0.628
60	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	251	848.8	config 1	27.91	29.50	1.442	-0.14	0.464	0.669
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	512	1850.2	config 0	25.93	27.00	1.279	-0.15	0.540	0.691
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	661	1880	config 0	25.91	27.00	1.285	-0.17	0.597	0.767
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	DSI 4/8	810	1909.8	config 0	25.19	27.00	1.517	-0.17	0.578	0.877
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	DSI 4/8	512	1850.2	config 0	25.93	27.00	1.279	-0.13	0.451	0.577
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 8	512	1850.2	config 1	20.69	22.60	1.552	-0.02	0.254	0.394
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	512	1850.2	config 1	20.69	22.60	1.552	-0.06	0.397	0.616
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	661	1880	config 1	20.61	22.60	1.581	-0.16	0.490	0.775
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 8	810	1909.8	config 1	20.68	22.60	1.556	-0.12	0.557	0.867
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	DSI 4	512	1850.2	config 1	21.80	23.40	1.445	-0.13	0.259	0.374
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4	512	1850.2	config 1	21.80	23.40	1.445	0.16	0.440	0.636
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4	661	1880	config 1	21.79	23.40	1.449	-0.13	0.718	1.040
61	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	DSI 4	810	1909.8	config 1	21.60	23.40	1.514	-0.16	0.719	1.088

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9400	1880	config 0	23.32	24.30	1.253	-0.02	0.718	0.900
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9262	1852.4	config 0	23.31	24.30	1.256	-0.01	0.663	0.833
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	9538	1907.6	config 0	23.23	24.30	1.279	-0.07	0.726	0.929
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	config 0	23.32	24.30	1.253	-0.12	0.709	0.888
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9262	1852.4	config 0	23.32	24.30	1.253	-0.16	0.603	0.756
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	9538	1907.6	config 0	23.32	24.30	1.253	-0.09	0.762	0.955
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9400	1880	config 0	23.32	25.10	1.507	-0.02	0.718	1.082
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9262	1852.4	config 0	23.31	25.10	1.510	-0.01	0.663	1.001
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	9538	1907.6	config 0	23.23	25.10	1.538	-0.07	0.726	1.117
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	config 0	23.32	25.10	1.507	-0.12	0.709	1.068
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9262	1852.4	config 0	23.32	25.10	1.507	-0.16	0.603	0.908
62	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	9538	1907.6	config 0	23.32	25.10	1.507	-0.09	0.762	1.148
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	9400	1880	config 1	20.33	21.30	1.250	-0.01	0.428	0.535
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9400	1880	config 1	20.33	21.30	1.250	-0.14	0.739	0.924
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9262	1852.4	config 1	20.29	21.30	1.262	-0.09	0.748	0.944
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	9538	1907.6	config 1	20.16	21.30	1.300	-0.08	0.684	0.889
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4	9400	1880	config 1	20.33	22.10	1.503	-0.01	0.428	0.643
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	9400	1880	config 1	20.33	22.10	1.503	-0.14	0.739	1.111
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	9262	1852.4	config 1	20.29	22.10	1.517	-0.09	0.748	1.135
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	9538	1907.6	config 1	20.16	22.10	1.563	-0.08	0.684	1.069
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1312	1712.4	config 0	23.95	24.50	1.135	-0.07	0.797	0.905
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1413	1732.6	config 0	23.94	24.50	1.138	-0.01	0.817	0.929
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 8	1513	1752.6	config 0	23.82	24.50	1.169	-0.07	0.792	0.926
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	config 0	23.95	24.50	1.135	-0.13	0.682	0.774
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	1312	1712.4	config 0	23.95	25.30	1.365	-0.07	0.797	1.088
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	1413	1732.6	config 0	23.94	25.30	1.368	-0.01	0.817	1.117
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	DSI 4	1513	1752.6	config 0	23.82	25.30	1.406	-0.07	0.792	1.114
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	config 0	23.95	25.30	1.365	-0.13	0.682	0.931
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	config 0	23.94	25.30	1.368	-0.08	0.697	0.953
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	config 0	23.82	25.30	1.406	-0.11	0.666	0.936
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 8	1312	1712.4	config 1	19.67	20.90	1.327	0.03	0.263	0.349
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1312	1712.4	config 1	19.67	20.90	1.327	-0.18	0.709	0.941
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1413	1732.6	config 1	19.59	20.90	1.352	-0.01	0.705	0.953
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 8	1513	1752.6	config 1	19.50	20.90	1.380	-0.19	0.677	0.935
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4	1312	1712.4	config 1	20.47	21.70	1.327	0.04	0.313	0.415
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1312	1712.4	config 1	20.47	21.70	1.327	-0.1	0.868	1.152
63	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1413	1732.6	config 1	20.41	21.70	1.346	-0.13	0.862	1.160
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4	1513	1752.6	config 1	20.32	21.70	1.374	-0.13	0.835	1.147
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	DSI 4/8	4182	836.4	config 0	24.07	25.00	1.239	-0.07	0.268	0.332
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4/8	4182	836.4	config 0	24.07	25.00	1.239	-0.08	0.405	0.502
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4/8	4132	826.4	config 0	24.02	25.00	1.253	-0.07	0.426	0.534
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	DSI 4/8	4233	846.6	config 0	24.06	25.00	1.242	-0.05	0.429	0.533
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	DSI 4/8	4182	836.4	config 1	24.14	25.00	1.219	-0.03	0.284	0.346
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 4/8	4182	836.4	config 1	24.14	25.00	1.219	-0.16	0.503	0.613
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 4/8	4132	826.4	config 1	24.12	25.00	1.225	-0.11	0.464	0.568
64	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	DSI 4/8	4233	846.6	config 1	24.13	25.00	1.222	-0.14	0.533	0.651

<CDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA BC0_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4/8	384	836.52	config 0	24.31	25.50	1.315	-0.01	0.332	0.437
	CDMA BC0_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	384	836.52	config 0	24.31	25.50	1.315	-0.05	0.480	0.631
	CDMA BC0_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	1013	824.7	config 0	24.25	25.50	1.334	-0.1	0.478	0.637
	CDMA BC0_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	777	848.31	config 0	23.83	25.50	1.469	-0.04	0.536	0.787
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Front	10mm	DSI 4/8	384	836.52	config 1	24.41	25.50	1.285	-0.02	0.309	0.397
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	384	836.52	config 1	24.41	25.50	1.285	-0.12	0.623	0.801
	CDMA BC0_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	1013	824.7	config 1	24.35	25.50	1.303	-0.14	0.534	0.696
65	CDMA BC0_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	777	848.31	config 1	24.25	25.50	1.334	-0.09	0.609	0.812
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	600	1880	config 0	22.86	24.00	1.300	-0.09	0.689	0.896
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	25	1851.25	config 0	22.80	24.00	1.318	-0.16	0.697	0.919
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 8	1175	1908.75	config 0	22.84	24.00	1.306	-0.06	0.664	0.867
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	600	1880	config 0	22.86	24.00	1.300	-0.06	0.674	0.876
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	25	1851.25	config 0	22.80	24.00	1.318	-0.08	0.612	0.807
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 8	1175	1908.75	config 0	22.84	24.00	1.306	-0.05	0.670	0.875
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 4	600	1880	config 0	22.86	24.80	1.563	-0.09	0.689	1.077
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 4	25	1851.25	config 0	22.80	24.80	1.585	-0.16	0.697	1.105
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Front	10mm	DSI 4	1175	1908.75	config 0	22.84	24.80	1.570	-0.06	0.664	1.043
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 4	600	1880	config 0	22.86	24.80	1.563	-0.06	0.674	1.054
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 4	25	1851.25	config 0	22.80	24.80	1.585	-0.08	0.612	0.970
	CDMA BC1_Ant 2	1xRTT RC3 SO32	Back	10mm	DSI 4	1175	1908.75	config 0	22.84	24.80	1.570	-0.05	0.670	1.052
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 8	25	1851.25	config 1	19.63	20.60	1.250	0.02	0.374	0.468
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 8	25	1851.25	config 1	19.63	20.60	1.250	0	0.797	0.996
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 8	600	1880	config 1	19.54	20.60	1.276	0.08	0.743	0.948
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 8	1175	1908.75	config 1	19.42	20.60	1.312	0.07	0.709	0.930
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4	25	1851.25	config 1	19.63	21.40	1.503	0.02	0.374	0.562
66	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4	25	1851.25	config 1	19.63	21.40	1.503	0	0.797	1.198
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4	600	1880	config 1	19.54	21.40	1.535	0.08	0.743	1.140
	CDMA BC1_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4	1175	1908.75	config 1	19.42	21.40	1.578	0.07	0.709	1.119
	CDMA BC10_Ant 0	1xRTT RC3 SO32	Front	10mm	DSI 4/8	580	820.5	config 0	24.28	25.50	1.324	-0.11	0.337	0.446
	CDMA BC10_Ant 0	1xRTT RC3 SO32	Back	10mm	DSI 4/8	580	820.5	config 0	24.28	25.50	1.324	-0.06	0.472	0.625
	CDMA BC10_Ant 1	1xRTT RC3 SO32	Front	10mm	DSI 4/8	580	820.5	config 1	24.41	25.50	1.285	-0.08	0.258	0.332
67	CDMA BC10_Ant 1	1xRTT RC3 SO32	Back	10mm	DSI 4/8	580	820.5	config 1	24.41	25.50	1.285	-0.16	0.532	0.684



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 8	21100	2535	config 0	23.39	24.20	1.205	-0.08	0.218	0.263
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 8	21100	2535	config 0	23.48	24.20	1.180	-0.09	0.227	0.268
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	config 0	23.39	24.20	1.205	-0.19	0.666	0.803
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 8	20850	2510	config 0	23.27	24.20	1.239	-0.13	0.611	0.757
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21350	2560	config 0	23.27	24.20	1.239	-0.1	0.672	0.832
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	21100	2535	config 0	23.48	24.20	1.180	-0.02	0.630	0.744
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	20850	2510	config 0	23.36	24.20	1.213	-0.19	0.581	0.705
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	21350	2560	config 0	23.41	24.20	1.199	-0.03	0.630	0.756
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	21350	2560	config 0	23.37	24.20	1.211	-0.18	0.693	0.839
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	21350+21152	2560	config 0	23.44	24.20	1.191	0.06	0.655	0.780
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	21100	2535	config 0	23.39	25.00	1.449	-0.08	0.218	0.316
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 4	21100	2535	config 0	23.48	25.00	1.419	-0.09	0.227	0.322
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	config 0	23.39	25.00	1.449	-0.19	0.666	0.965
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	config 0	23.27	25.00	1.489	-0.13	0.611	0.910
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21350	2560	config 0	23.27	25.00	1.489	-0.1	0.672	1.001
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	21100	2535	config 0	23.48	25.00	1.419	-0.02	0.630	0.894
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	20850	2510	config 0	23.36	25.00	1.459	-0.19	0.581	0.848
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 4	21350	2560	config 0	23.41	25.00	1.442	-0.03	0.630	0.909
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	21350	2560	config 0	23.37	25.00	1.455	-0.18	0.693	1.009
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	21350+21152	2560	config 0	23.44	25.00	1.432	0.06	0.656	0.940
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 8	21100	2535	config 1	20.91	22.30	1.377	-0.01	0.221	0.304
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 8	21100	2535	config 1	20.99	22.30	1.352	-0.14	0.232	0.314
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	21100	2535	config 1	20.91	22.30	1.377	-0.17	0.563	0.775
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21100	2535	config 1	20.99	22.30	1.352	-0.14	0.578	0.781
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	20850	2510	config 1	20.89	22.30	1.384	-0.17	0.541	0.749
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 8	21350	2560	config 1	20.94	22.30	1.368	-0.13	0.585	0.800
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	21100	2535	config 1	20.89	22.30	1.384	-0.06	0.650	0.899
	LTE Band 7C	20M	QPSK	1	0	Back	10mm	DSI 8	21100+20902	2535	config 1	21.57	22.30	1.183	0.02	0.715	0.846
	LTE Band 7_Ant 0	20M	QPSK	1	99	Front	10mm	DSI 4	21100	2535	config 1	21.72	23.10	1.374	0.03	0.299	0.411
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	DSI 4	21100	2535	config 1	21.82	23.10	1.343	-0.03	0.316	0.424
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21100	2535	config 1	21.72	23.10	1.374	-0.1	0.814	1.118
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	20850	2510	config 1	21.62	23.10	1.406	-0.03	0.772	1.085
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	21350	2560	config 1	21.63	23.10	1.403	-0.12	0.779	1.093
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21100	2535	config 1	21.82	23.10	1.343	-0.12	0.845	1.135
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	20850	2510	config 1	21.73	23.10	1.371	-0.1	0.767	1.051
68	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	DSI 4	21350	2560	config 1	21.76	23.10	1.361	-0.13	0.851	1.159
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	21100	2535	config 1	21.71	23.10	1.377	-0.1	0.833	1.147
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 4	20850+21048	2510	config 1	22.37	23.10	1.183	0.02	0.810	0.958
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	DSI 4/8	23095	707.5	Config 0	24.52	25.70	1.312	-0.14	0.280	0.367
	LTE Band 12_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 4/8	23095	707.5	Config 0	23.69	24.70	1.262	-0.06	0.232	0.293
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4/8	23095	707.5	Config 0	24.52	25.70	1.312	-0.17	0.400	0.525
	LTE Band 12_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 4/8	23095	707.5	Config 0	23.69	24.70	1.262	-0.11	0.350	0.442
	LTE Band 12_Ant 1	10M	QPSK	1	49	Front	10mm	DSI 4/8	23095	707.5	Config 1	24.35	25.70	1.365	0.01	0.232	0.317
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 4/8	23095	707.5	Config 1	23.48	24.70	1.324	0.01	0.191	0.253
69	LTE Band 12_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 4/8	23095	707.5	Config 1	24.35	25.70	1.365	-0.09	0.418	0.570
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 4/8	23095	707.5	Config 1	23.48	24.70	1.324	-0.02	0.343	0.454



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 13_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4/8	23230	782	Config 0	23.99	25.20	1.321	-0.06	0.367	0.485
	LTE Band 13_Ant 0	10M	QPSK	25	12	Front	10mm	DSI 4/8	23230	782	Config 0	23.00	24.20	1.318	-0.05	0.312	0.411
70	LTE Band 13_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4/8	23230	782	Config 0	23.99	25.20	1.321	-0.08	0.530	0.700
	LTE Band 13_Ant 0	10M	QPSK	25	12	Back	10mm	DSI 4/8	23230	782	Config 0	23.00	24.20	1.318	-0.13	0.451	0.595
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23230	782	Config 1	24.05	25.20	1.303	0	0.180	0.235
	LTE Band 13_Ant 1	10M	QPSK	25	12	Front	10mm	DSI 4/8	23230	782	Config 1	23.11	24.20	1.285	-0.01	0.140	0.180
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23230	782	Config 1	24.05	25.20	1.303	-0.13	0.325	0.424
	LTE Band 13_Ant 1	10M	QPSK	25	12	Back	10mm	DSI 4/8	23230	782	Config 1	23.11	24.20	1.285	-0.06	0.253	0.325
	LTE Band 14_Ant 0	10M	QPSK	1	25	Front	10mm	DSI 4/8	23330	793	Config 0	24.53	25.70	1.309	-0.05	0.343	0.449
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4/8	23330	793	Config 0	23.50	24.70	1.318	-0.04	0.289	0.381
	LTE Band 14_Ant 0	10M	QPSK	1	25	Back	10mm	DSI 4/8	23330	793	Config 0	24.53	25.70	1.309	-0.1	0.473	0.619
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4/8	23330	793	Config 0	23.50	24.70	1.318	-0.12	0.400	0.527
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	DSI 4/8	23330	793	Config 1	24.68	25.70	1.265	-0.05	0.311	0.393
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	DSI 4/8	23330	793	Config 1	23.65	24.70	1.274	-0.03	0.244	0.311
71	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	DSI 4/8	23330	793	Config 1	24.68	25.70	1.265	0.02	0.526	0.665
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	DSI 4/8	23330	793	Config 1	23.65	24.70	1.274	-0.01	0.427	0.544
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	26140	1860	config 0	23.20	24.40	1.318	-0.13	0.674	0.889
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	26340	1880	config 0	23.18	24.40	1.324	-0.18	0.704	0.932
	LTE Band 25_Ant 2	20M	QPSK	1	49	Front	10mm	DSI 8	26590	1905	config 0	23.05	24.40	1.365	-0.17	0.638	0.871
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26140	1860	config 0	23.36	24.40	1.271	0.15	0.706	0.897
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 8	26340	1880	config 0	23.32	24.40	1.282	-0.16	0.728	0.934
	LTE Band 25_Ant 2	20M	QPSK	50	50	Front	10mm	DSI 8	26590	1905	config 0	23.21	24.40	1.315	-0.18	0.676	0.889
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	26140	1860	config 0	23.36	24.40	1.271	-0.13	0.710	0.902
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	26140	1860	config 0	23.20	24.40	1.318	-0.04	0.616	0.812
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	26340	1880	config 0	23.18	24.40	1.324	-0.06	0.686	0.908
	LTE Band 25_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 8	26590	1905	config 0	23.05	24.40	1.365	-0.04	0.664	0.906
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	26140	1860	config 0	23.36	24.40	1.271	-0.11	0.666	0.846
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 8	26340	1880	config 0	23.32	24.40	1.282	-0.04	0.723	0.927
	LTE Band 25_Ant 2	20M	QPSK	50	50	Back	10mm	DSI 8	26590	1905	config 0	23.21	24.40	1.315	0.02	0.693	0.911
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	26140	1860	config 0	23.36	24.40	1.271	-0.02	0.666	0.846
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26340	1880	config 0	24.11	25.20	1.285	-0.01	0.849	1.091
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	26140	1860	config 0	24.06	25.20	1.300	-0.14	0.843	1.096
	LTE Band 25_Ant 2	20M	QPSK	1	99	Front	10mm	DSI 4	26590	1905	config 0	23.95	25.20	1.334	-0.06	0.739	0.985
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26140	1860	config 0	23.73	24.20	1.114	-0.02	0.767	0.855
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26340	1880	config 0	23.72	24.20	1.117	-0.08	0.775	0.866
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4	26590	1905	config 0	23.59	24.20	1.151	-0.03	0.703	0.809
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	26140	1860	config 0	23.74	24.20	1.112	-0.03	0.774	0.860
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26340	1880	config 0	24.11	25.20	1.285	0.06	0.796	1.023
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	26140	1860	config 0	24.06	25.20	1.300	-0.14	0.774	1.006
	LTE Band 25_Ant 2	20M	QPSK	1	99	Back	10mm	DSI 4	26590	1905	config 0	23.95	25.20	1.334	-0.08	0.737	0.983
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4	26140	1860	config 0	23.73	24.20	1.114	-0.04	0.707	0.788
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	26140	1860	config 0	23.74	24.20	1.112	-0.05	0.712	0.792
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	26140	1860	config 1	17.45	18.90	1.396	0.13	0.246	0.344
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	26140	1860	config 1	17.56	18.90	1.361	0.12	0.274	0.373
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26140	1860	config 1	17.45	18.90	1.396	-0.1	0.573	0.800
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26340	1880	config 1	17.36	18.90	1.426	-0.09	0.562	0.801
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	26590	1905	config 1	17.21	18.90	1.476	-0.06	0.593	0.875
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26140	1860	config 1	17.56	18.90	1.361	-0.06	0.588	0.801
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26340	1880	config 1	17.53	18.90	1.371	-0.11	0.620	0.850
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	26590	1905	config 1	17.35	18.90	1.429	-0.12	0.589	0.842
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	26140	1860	config 1	17.57	18.90	1.358	-0.08	0.487	0.661
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	26140	1860	config 1	18.23	19.70	1.403	0.09	0.307	0.431
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4	26140	1860	config 1	18.32	19.70	1.374	0.05	0.342	0.470
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26140	1860	config 1	18.23	19.70	1.403	-0.11	0.578	0.811
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26340	1880	config 1	18.17	19.70	1.422	-0.09	0.672	0.956
72	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	26590	1905	config 1	17.97	19.70	1.489	-0.05	0.765	1.139
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26140	1860	config 1	18.32	19.70	1.374	-0.06	0.669	0.919
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26340	1880	config 1	18.27	19.70	1.390	-0.04	0.776	1.079
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4	26590	1905	config 1	18.11	19.70	1.442	-0.02	0.742	1.070
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	26140	1860	config 1	18.34	19.70	1.368	-0.08	0.632	0.864



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Ant 0	15M	QPSK	1	74	Front	10mm	DSI 4/8	26865	831.5	config 0	24.59	25.70	1.291	-0.08	0.289	0.373
	LTE Band 26_Ant 0	15M	QPSK	36	20	Front	10mm	DSI 4/8	26865	831.5	config 0	23.46	24.70	1.330	-0.04	0.250	0.333
	LTE Band 26_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 4/8	26865	831.5	config 0	24.59	25.70	1.291	-0.06	0.416	0.537
	LTE Band 26_Ant 0	15M	QPSK	36	20	Back	10mm	DSI 4/8	26865	831.5	config 0	23.46	24.70	1.330	-0.16	0.360	0.479
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	DSI 4/8	20600+20501	844	config 0	25.61	25.70	1.021	0.06	0.466	0.476
	LTE Band 26_Ant 1	15M	QPSK	1	74	Front	10mm	DSI 4/8	26865	831.5	config 1	24.78	25.70	1.236	-0.12	0.296	0.366
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	DSI 4/8	26865	831.5	config 1	23.66	24.70	1.271	-0.11	0.242	0.307
73	LTE Band 26_Ant 1	15M	QPSK	1	74	Back	10mm	DSI 4/8	26865	831.5	config 1	24.78	25.70	1.236	-0.06	0.534	0.660
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	DSI 4/8	26865	831.5	config 1	23.66	24.70	1.271	-0.04	0.447	0.568
	LTE Band 5B_Ant 1	10M	QPSK	1	49	Back	10mm	DSI 4/8	20450+20549	829	config 1	25.64	25.70	1.014	0.12	0.649	0.658
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	DSI 4/8	27710	2310	config 0	22.93	23.70	1.194	-0.12	0.339	0.405
	LTE Band 30_Ant 2	10M	QPSK	25	25	Front	10mm	DSI 4/8	27710	2310	config 0	21.94	22.70	1.191	-0.07	0.268	0.319
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	DSI 4/8	27710	2310	config 0	22.93	23.70	1.194	-0.04	0.284	0.339
	LTE Band 30_Ant 2	10M	QPSK	25	25	Back	10mm	DSI 4/8	27710	2310	config 0	21.94	22.70	1.191	-0.16	0.223	0.266
	LTE Band 30_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 8	27710	2310	config 1	21.33	22.50	1.309	-0.03	0.347	0.454
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 8	27710	2310	config 1	21.33	22.50	1.309	-0.03	0.362	0.474
	LTE Band 30_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 8	27710	2310	config 1	21.33	22.50	1.309	-0.09	0.638	0.835
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 8	27710	2310	config 1	21.33	22.50	1.309	-0.05	0.697	0.912
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 8	27710	2310	config 1	21.30	22.50	1.318	-0.03	0.702	0.925
	LTE Band 30_Ant 0	10M	QPSK	1	49	Front	10mm	DSI 4	27710	2310	config 1	21.33	23.30	1.574	-0.03	0.347	0.546
	LTE Band 30_Ant 0	10M	QPSK	25	25	Front	10mm	DSI 4	27710	2310	config 1	21.33	22.30	1.250	-0.03	0.362	0.453
74	LTE Band 30_Ant 0	10M	QPSK	1	49	Back	10mm	DSI 4	27710	2310	config 1	21.33	23.30	1.574	-0.09	0.638	1.004
	LTE Band 30_Ant 0	10M	QPSK	25	25	Back	10mm	DSI 4	27710	2310	config 1	21.33	22.30	1.250	-0.05	0.697	0.871
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	DSI 4	27710	2310	config 1	21.30	22.30	1.259	-0.03	0.702	0.884



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132072	1720	config 0	24.18	25.10	1.236	-0.08	0.789	0.975
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132322	1745	config 0	24.12	25.10	1.253	-0.16	0.770	0.965
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	132572	1770	config 0	24.09	25.10	1.262	-0.17	0.727	0.917
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	132072	1720	config 0	23.55	24.10	1.135	-0.19	0.736	0.835
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	132322	1745	config 0	23.33	24.10	1.194	-0.17	0.711	0.849
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	132572	1770	config 0	23.37	24.10	1.183	-0.17	0.681	0.806
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 8	132072	1720	config 0	23.50	24.10	1.148	-0.16	0.749	0.860
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132072	1720	config 0	24.18	25.10	1.236	-0.06	0.636	0.786
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	132072	1720	config 0	23.55	24.10	1.135	-0.08	0.593	0.673
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Back	10mm	DSI 8	132047+132140	1717.5	config 0	24.35	25.10	1.189	0.02	0.786	0.934
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	132322+132124	1745	config 0	24.34	25.10	1.191	0.09	0.770	0.917
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	config 0	24.18	25.70	1.419	-0.08	0.789	1.120
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132322	1745	config 0	24.12	25.70	1.439	-0.16	0.770	1.108
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 4	132572	1770	config 0	24.09	25.70	1.449	-0.17	0.727	1.053
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	132072	1720	config 0	23.55	24.70	1.303	-0.19	0.736	0.959
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	132322	1745	config 0	23.33	24.70	1.371	-0.17	0.711	0.975
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 4	132572	1770	config 0	23.37	24.70	1.358	-0.17	0.681	0.925
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	DSI 4	132072	1720	config 0	23.50	24.70	1.318	-0.16	0.749	0.987
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	config 0	24.18	25.70	1.419	-0.06	0.636	0.903
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	config 0	24.12	25.70	1.439	-0.03	0.631	0.908
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	config 0	24.09	25.70	1.449	0.01	0.626	0.907
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 4	132072	1720	config 0	23.55	24.70	1.303	-0.08	0.593	0.773
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4	132072	1720	config 0	23.50	24.70	1.318	0.06	0.606	0.799
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Back	10mm	DSI 4	132047+132140	1717.5	config 0	24.35	25.70	1.365	0.04	0.810	1.105
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	132322+132124	1745	config 0	24.34	25.70	1.368	0.09	0.801	1.096
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 8	132072	1720	config 1	19.37	20.80	1.390	-0.13	0.261	0.363
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 8	132072	1720	config 1	19.51	20.80	1.346	-0.15	0.266	0.358
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132072	1720	config 1	19.37	20.80	1.390	0.01	0.704	0.979
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132322	1745	config 1	19.31	20.80	1.409	-0.05	0.706	0.995
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	132572	1770	config 1	19.25	20.80	1.429	-0.01	0.699	0.999
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 8	132072	1720	config 1	19.51	20.80	1.346	-0.02	0.724	0.974
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 8	132322	1745	config 1	19.32	20.80	1.406	0.05	0.711	1.000
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 8	132572	1770	config 1	19.34	20.80	1.400	-0.05	0.696	0.974
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	132072	1720	config 1	19.53	20.80	1.340	0.01	0.737	0.987
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 8	132047+132140	1717.5	config 1	20.24	20.80	1.138	0.13	0.698	0.794
	LTE Band 66C_Ant 0	20M	QPSK	1	74	Back	10mm	DSI 8	132072+132270	1720	config 1	20.54	20.80	1.062	0.07	0.709	0.753
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4	132072	1720	config 1	20.26	21.60	1.361	-0.15	0.332	0.452
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	DSI 4	132072	1720	config 1	20.40	21.60	1.318	-0.16	0.340	0.448
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	config 1	20.26	21.60	1.361	-0.02	0.870	1.184
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	config 1	20.23	21.60	1.371	-0.03	0.872	1.195
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	config 1	20.24	21.60	1.368	-0.03	0.875	1.197
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132072	1720	config 1	20.40	21.60	1.318	-0.01	0.907	1.196
75	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132322	1745	config 1	20.33	21.60	1.340	-0.03	0.894	1.198
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132572	1770	config 1	20.26	21.60	1.361	-0.02	0.879	1.197
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	132072	1720	config 1	20.43	21.60	1.309	-0.03	0.914	1.197
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Back	10mm	DSI 4	132047+132140	1717.5	config 1	21.08	21.60	1.127	0.09	0.788	0.888
	LTE Band 66C_Ant 0	20M	QPSK	1	74	Back	10mm	DSI 4	132072+132270	1720	config 1	21.23	21.60	1.089	-0.07	0.823	0.896
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	config 0	24.65	25.70	1.274	0.13	0.137	0.174
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 4/8	133322	683	config 0	23.75	24.70	1.245	0	0.085	0.106
76	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	config 0	24.65	25.70	1.274	-0.01	0.489	0.623
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 4/8	133322	683	config 0	23.75	24.70	1.245	0	0.430	0.535
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	DSI 4/8	133322	683	config 1	24.80	25.70	1.230	-0.04	0.248	0.305
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	DSI 4/8	133322	683	config 1	23.88	24.70	1.208	-0.01	0.202	0.244
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	DSI 4/8	133322	683	config 1	24.80	25.70	1.230	0.01	0.492	0.605
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	DSI 4/8	133322	683	config 1	23.88	24.70	1.208	-0.07	0.384	0.464



FCC SAR TEST REPORT

Report No. : FA022521-02A

<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	49	Front	10mm	DSI 4/8	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	0.05	0.494	0.591
	LTE Band 41_Ant 2	20M	QPSK	50	24	Front	10mm	DSI 4/8	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	0	0.400	0.467
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4/8	41055	2636.5	config 0	24.95	25.70	1.189	62.9	1.006	-0.18	0.668	0.799
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	39750	2506	config 0	24.74	25.70	1.247	62.9	1.006	-0.17	0.544	0.683
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	40185	2549.5	config 0	24.62	25.70	1.282	62.9	1.006	-0.16	0.624	0.805
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	40620	2593	config 0	24.61	25.70	1.285	62.9	1.006	-0.12	0.713	0.922
	LTE Band 41_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4/8	41490	2680	config 0	24.84	25.70	1.219	62.9	1.006	-0.09	0.815	0.999
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	41055	2636.5	config 0	24.05	24.70	1.161	62.9	1.006	-0.16	0.547	0.639
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	39790	2510	config 0	23.85	24.70	1.216	62.9	1.006	-0.1	0.455	0.557
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	39750	2506	config 0	23.87	24.70	1.211	62.9	1.006	-0.02	0.448	0.546
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	40185	2549.5	config 0	23.74	24.70	1.247	62.9	1.006	-0.01	0.532	0.668
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	40620	2593	config 0	23.69	24.70	1.262	62.9	1.006	-0.1	0.592	0.751
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	DSI 4/8	41490	2680	config 0	23.93	24.70	1.194	62.9	1.006	-0.08	0.681	0.818
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 4/8	41055	2636.5	config 0	23.95	24.70	1.189	62.9	1.006	-0.02	0.535	0.640
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	49	Back	10mm	DSI 4/8	41490	2680	config 0	25.95	27.00	1.274	42.9	1.009	-0.19	0.680	0.874
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	41490+41292	2680	config 0	25.70	25.70	1.000	62.9	1.006	0.04	0.979	0.985
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4/8	41490+41292	2680	config 0	26.74	27.00	1.062	42.9	1.009	-0.06	0.678	0.726
	LTE Band 41_Ant 0	20M	QPSK	1	49	Front	10mm	DSI 8	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	-0.04	0.204	0.272
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	DSI 8	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	0.09	0.199	0.266
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41055	2636.5	config 1	21.57	22.80	1.327	62.9	1.006	-0.05	0.691	0.923
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	39750	2506	config 1	21.19	22.80	1.449	62.9	1.006	-0.14	0.394	0.574
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40185	2549.5	config 1	21.13	22.80	1.469	62.9	1.006	0.03	0.447	0.661
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	40620	2593	config 1	21.15	22.80	1.462	62.9	1.006	-0.02	0.491	0.722
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	DSI 8	41490	2680	config 1	21.43	22.80	1.371	62.9	1.006	-0.05	0.672	0.927
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41055	2636.5	config 1	21.56	22.80	1.330	62.9	1.006	-0.01	0.697	0.933
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	39790	2510	config 1	21.29	22.80	1.416	62.9	1.006	-0.04	0.426	0.607
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	39750	2506	config 1	21.32	22.80	1.406	62.9	1.006	-0.02	0.426	0.603
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	40185	2549.5	config 1	21.28	22.80	1.419	62.9	1.006	-0.04	0.474	0.677
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	40620	2593	config 1	21.19	22.80	1.449	62.9	1.006	-0.03	0.530	0.772
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41490	2680	config 1	21.52	22.80	1.343	62.9	1.006	-0.03	0.660	0.892
	LTE Band 41_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 8	41055	2636.5	config 1	21.47	22.80	1.358	62.9	1.006	-0.02	0.679	0.928
	LTE Band 41_HPUE_Ant 0	20M	QPSK	50	24	Back	10mm	DSI 8	41055	2636.5	config 1	23.31	24.60	1.346	42.9	1.009	-0.1	0.652	0.885
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 8	41490+41292	2680	config 1	21.99	22.80	1.205	62.9	1.006	0.03	0.588	0.713
	LTE Band 41C_HPUE_Ant 0	20M	QPSK	1	99	Back	10mm	DSI 8	39750+39948	2506	config 1	23.52	24.60	1.282	42.9	1.009	-0.08	0.521	0.674
	LTE Band 41_Ant 0-	20M	QPSK	1	49	Front	10mm	DSI 4	41055	2636.5	config 1	22.37	23.60	1.327	62.9	1.006	-0.04	0.239	0.319
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Front	10mm	DSI 4	41055	2636.5	config 1	22.38	23.60	1.324	62.9	1.006	-0.01	0.242	0.322
	LTE Band 41_Ant 0-	20M	QPSK	1	49	Back	10mm	DSI 4	41055	2636.5	config 1	22.37	23.60	1.327	62.9	1.006	-0.1	0.707	0.944
	LTE Band 41_Ant 0-	20M	QPSK	1	0	Back	10mm	DSI 4	39750	2506	config 1	22.04	23.60	1.432	62.9	1.006	-0.15	0.474	0.683
	LTE Band 41_Ant 0-	20M	QPSK	1	0	Back	10mm	DSI 4	40185	2549.5	config 1	21.92	23.60	1.472	62.9	1.006	-0.16	0.524	0.776
	LTE Band 41_Ant 0-	20M	QPSK	1	0	Back	10mm	DSI 4	40620	2593	config 1	22.00	23.60	1.445	62.9	1.006	-0.18	0.572	0.832
	LTE Band 41_Ant 0-	20M	QPSK	1	49	Back	10mm	DSI 4	41490	2680	config 1	22.25	23.60	1.365	62.9	1.006	-0.17	0.710	0.975
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Back	10mm	DSI 4	41055	2636.5	config 1	22.38	23.60	1.324	62.9	1.006	-0.18	0.759	1.011
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Back	10mm	DSI 4	39790	2510	config 1	22.14	23.60	1.400	62.9	1.006	-0.19	0.504	0.710
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Back	10mm	DSI 4	39750	2310	config 1	22.14	23.60	1.400	62.9	1.006	-0.13	0.436	0.614
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Back	10mm	DSI 4	40185	2549.5	config 1	22.10	23.60	1.413	62.9	1.006	-0.11	0.547	0.777
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Back	10mm	DSI 4	40620	2593	config 1	22.07	23.60	1.422	62.9	1.006	-0.17	0.610	0.873
	LTE Band 41_Ant 0-	20M	QPSK	50	24	Back	10mm	DSI 4	41490	2680	config 1	22.33	23.60	1.340	62.9	1.006	-0.12	0.738	0.995
77	LTE Band 41_Ant 0-	20M	QPSK	100	0	Back	10mm	DSI 4	41055	2636.5	config 1	22.29	23.60	1.352	62.9	1.006	-0.12	0.780	1.061
	LTE Band 41_HPUE_Ant 0-	20M	QPSK	100	0	Back	10mm	DSI 4	41055	2636.5	config 1	24.04	25.40	1.368	42.9	1.009	-0.1	0.636	0.878
	LTE Band 41C_Ant 0-	20M	QPSK	1	99	Back	10mm	DSI 4	39750+39948	2506	config 1	22.58	23.60	1.265	62.9	1.006	0.09	0.441	0.561
	LTE Band 41C_HPUE_Ant 0-	20M	QPSK	1	99	Back	10mm	DSI 4	39750+39948	2506	config 1	24.28	25.40	1.294	42.9	1.009	0.03	0.456	0.595



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 8	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	-0.06	0.209	0.255
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 8	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	-0.17	0.195	0.228
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55830	3609	config 0	22.57	23.40	1.211	62.9	1.006	-0.02	0.662	0.806
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	55340	3560	config 0	22.52	23.40	1.225	62.9	1.006	-0.14	0.632	0.779
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56150	3641	config 0	22.53	23.40	1.222	62.9	1.006	-0.04	0.693	0.852
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56640	3690	config 0	22.52	23.40	1.225	62.9	1.006	-0.11	0.721	0.888
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	55830	3609	config 0	22.25	22.90	1.161	62.9	1.006	-0.03	0.536	0.626
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	55340	3560	config 0	22.25	22.90	1.161	62.9	1.006	-0.14	0.492	0.575
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	56150	3641	config 0	22.22	22.90	1.169	62.9	1.006	0	0.552	0.649
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 8	56640	3690	config 0	22.19	22.90	1.178	62.9	1.006	-0.07	0.571	0.676
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 8	55340	3560	config 0	22.19	22.90	1.178	62.9	1.006	-0.15	0.508	0.602
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 8	56150+55952	3641	config 0	16.05	17.20	1.303	62.9	1.006	0.05	0.157	0.206
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	DSI 4	56640	3690	config 0	23.07	24.20	1.297	62.9	1.006	-0.08	0.260	0.339
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	DSI 4	56640	3690	config 0	22.10	23.20	1.288	62.9	1.006	-0.08	0.208	0.270
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	config 0	23.07	24.20	1.297	62.9	1.006	-0.15	0.694	0.906
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55340	3560	config 0	22.98	24.20	1.324	62.9	1.006	-0.08	0.634	0.845
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	55830	3609	config 0	23.00	24.20	1.318	62.9	1.006	-0.16	0.616	0.817
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56150	3641	config 0	22.98	24.20	1.324	62.9	1.006	-0.08	0.647	0.862
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	56640	3690	config 0	22.10	23.20	1.288	62.9	1.006	-0.1	0.563	0.730
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	55340	3560	config 0	22.02	23.20	1.312	62.9	1.006	-0.19	0.506	0.668
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	55830	3609	config 0	21.89	23.20	1.352	62.9	1.006	-0.16	0.500	0.680
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	DSI 4	56150	3641	config 0	22.00	23.20	1.318	62.9	1.006	-0.12	0.532	0.706
	LTE Band 48_Ant 7	20M	QPSK	100	0	Back	10mm	DSI 4	56640	3690	config 0	22.01	23.20	1.315	62.9	1.006	-0.12	0.559	0.740
	LTE Band 48C_Ant 7	20M	QPSK	1	0	Back	10mm	DSI 4	56150+55952	3641	config 0	16.03	17.20	1.309	62.9	1.006	-0.09	0.146	0.192
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	DSI 8	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.04	0.304	0.394
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	DSI 8	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.03	0.312	0.404
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	-0.1	0.722	0.936
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55340	3560	config 1	20.17	21.30	1.297	62.9	1.006	-0.02	0.719	0.938
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	56150	3641	config 1	20.17	21.30	1.297	62.9	1.006	0.02	0.649	0.847
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	56640	3690	config 1	20.20	21.30	1.288	62.9	1.006	0.05	0.608	0.788
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	55830	3609	config 1	20.20	21.30	1.288	62.9	1.006	0.02	0.662	0.858
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	55340	3560	config 1	20.20	21.30	1.288	62.9	1.006	0.02	0.721	0.934
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	56150	3641	config 1	20.16	21.30	1.300	62.9	1.006	0.02	0.658	0.861
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	DSI 8	56640	3690	config 1	20.18	21.30	1.294	62.9	1.006	0.03	0.623	0.811
	LTE Band 48_Ant 2	20M	QPSK	100	0	Back	10mm	DSI 8	55340	3560	config 1	20.13	21.30	1.309	62.9	1.006	-0.01	0.719	0.947
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 8	55830+55632	3609	config 1	14.39	15.60	1.321	62.9	1.006	-0.09	0.189	0.251
	LTE Band 48_Ant 2-	20M	QPSK	1	0	Front	10mm	DSI 4	55830	3609	config 1	20.20	22.10	1.549	62.9	1.006	-0.04	0.304	0.474
	LTE Band 48_Ant 2-	20M	QPSK	50	0	Front	10mm	DSI 4	55830	3609	config 1	20.20	21.10	1.230	62.9	1.006	-0.03	0.312	0.386
	LTE Band 48_Ant 2-	20M	QPSK	1	0	Back	10mm	DSI 4	55830	3609	config 1	20.20	22.10	1.549	62.9	1.006	-0.1	0.722	1.125
78	LTE Band 48_Ant 2-	20M	QPSK	1	0	Back	10mm	DSI 4	55340	3560	config 1	20.17	22.10	1.560	62.9	1.006	-0.02	0.719	1.128
	LTE Band 48_Ant 2-	20M	QPSK	1	0	Back	10mm	DSI 4	56150	3641	config 1	20.17	22.10	1.560	62.9	1.006	0.02	0.649	1.018
	LTE Band 48_Ant 2-	20M	QPSK	1	0	Back	10mm	DSI 4	56640	3690	config 1	20.20	22.10	1.549	62.9	1.006	0.05	0.608	0.947
	LTE Band 48_Ant 2-	20M	QPSK	50	0	Back	10mm	DSI 4	55830	3609	config 1	20.20	21.10	1.230	62.9	1.006	0.02	0.662	0.819
	LTE Band 48_Ant 2-	20M	QPSK	50	0	Back	10mm	DSI 4	55340	3560	config 1	20.20	21.10	1.230	62.9	1.006	0.02	0.721	0.892
	LTE Band 48_Ant 2-	20M	QPSK	50	0	Back	10mm	DSI 4	56150	3641	config 1	20.16	21.10	1.242	62.9	1.006	0.02	0.658	0.822
	LTE Band 48_Ant 2-	20M	QPSK	50	0	Back	10mm	DSI 4	56640	3690	config 1	20.18	21.10	1.236	62.9	1.006	0.03	0.623	0.775
	LTE Band 48_Ant 2-	20M	QPSK	100	0	Back	10mm	DSI 4	55340	3560	config 1	20.13	21.10	1.250	62.9	1.006	-0.01	0.719	0.904
	LTE Band 48C_Ant 2	20M	QPSK	1	0	Back	10mm	DSI 4	55830+55632	3609	config 1	14.39	15.60	1.321	62.9	1.006	-0.09	0.189	0.251

<FDD 5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n5_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4/8	167300	836.5	Config 0	23.80	25.00	1.318	0.05	0.088	0.116
	n5_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4/8	167300	836.5	Config 0	23.75	25.00	1.334	-0.11	0.080	0.107
	n5_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	167300	836.5	Config 0	23.80	25.00	1.318	-0.01	0.104	0.137
	n5_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4/8	167300	836.5	Config 0	23.75	25.00	1.334	-0.09	0.093	0.124
	n5_Ant 1	20M	BPSK	1	53	Front	10mm	DSI 4/8	167300	836.5	Config 1	24.03	25.00	1.250	0.02	0.309	0.386
	n5_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 4/8	167300	836.5	Config 1	24.02	25.00	1.253	-0.06	0.308	0.386
79	n5_Ant 1	20M	BPSK	1	53	Back	10mm	DSI 4/8	167300	836.5	Config 1	24.03	25.00	1.250	-0.11	0.524	0.655
	n5_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 4/8	167300	836.5	Config 1	24.02	25.00	1.253	-0.16	0.518	0.649
	n12_Ant 0	15M	BPSK	1	1	Front	10mm	DSI 4/8	141500	707.5	Config 0	23.35	24.70	1.365	-0.04	0.284	0.388
	n12_Ant 0	15M	BPSK	36	22	Front	10mm	DSI 4/8	141500	707.5	Config 0	23.22	24.70	1.406	-0.03	0.264	0.371
80	n12_Ant 0	15M	BPSK	1	1	Back	10mm	DSI 4/8	141500	707.5	Config 0	23.35	24.70	1.365	-0.02	0.411	0.561
	n12_Ant 0	15M	BPSK	36	22	Back	10mm	DSI 4/8	141500	707.5	Config 0	23.22	24.70	1.406	-0.03	0.386	0.543
	n12_Ant 1	15M	BPSK	1	1	Front	10mm	DSI 4/8	141500	707.5	Config 1	23.55	24.70	1.303	-0.1	0.189	0.246
	n12_Ant 1	15M	BPSK	36	22	Front	10mm	DSI 4/8	141500	707.5	Config 1	23.42	24.70	1.343	-0.06	0.173	0.232
	n12_Ant 1	15M	BPSK	1	1	Back	10mm	DSI 4/8	141500	707.5	Config 1	23.55	24.70	1.303	0	0.330	0.430
	n12_Ant 1	15M	BPSK	36	22	Back	10mm	DSI 4/8	141500	707.5	Config 1	23.42	24.70	1.343	-0.07	0.334	0.448



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 8	376000	1880	Config 0	23.95	24.50	1.135	-0.18	0.837	0.950
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 8	372000	1860	Config 0	23.94	24.50	1.138	-0.17	0.786	0.894
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 8	381000	1905	Config 0	23.90	24.50	1.148	-0.13	0.689	0.791
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	372000	1860	Config 0	24.02	24.50	1.117	-0.14	0.814	0.909
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	372000	1860	Config 0	23.96	24.50	1.132	-0.12	0.831	0.941
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	381000	1905	Config 0	24.02	24.50	1.117	-0.1	0.725	0.810
	n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 8	376000	1880	Config 0	23.95	24.50	1.135	-0.17	0.487	0.553
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 8	376000	1880	Config 0	23.95	24.50	1.135	-0.17	0.865	0.982
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 8	372000	1860	Config 0	23.94	24.50	1.138	0	0.841	0.957
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 8	381000	1905	Config 0	23.90	24.50	1.148	-0.16	0.682	0.783
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	372000	1860	Config 0	24.02	24.50	1.117	0	0.812	0.907
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	376000	1880	Config 0	23.96	24.50	1.132	-0.05	0.845	0.957
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	381000	1905	Config 0	24.02	24.50	1.117	-0.17	0.851	0.950
	n25_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 8	376000	1880	Config 0	23.95	24.50	1.135	-0.17	0.643	0.730
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 4	376000	1880	Config 0	23.95	25.30	1.365	-0.18	0.837	1.142
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 4	372000	1860	Config 0	23.94	25.30	1.368	-0.17	0.786	1.075
	n25_Ant 2	20M	BPSK	1	104	Front	10mm	DSI 4	381000	1905	Config 0	23.90	25.30	1.380	-0.13	0.689	0.951
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 4	372000	1860	Config 0	24.02	25.30	1.343	-0.14	0.814	1.093
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 4	372000	1860	Config 0	23.96	25.30	1.361	-0.12	0.831	1.131
	n25_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 4	381000	1905	Config 0	24.02	25.30	1.343	-0.1	0.725	0.974
	n25_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 4	376000	1880	Config 0	23.95	24.80	1.216	-0.17	0.487	0.592
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 4	376000	1880	Config 0	23.95	25.30	1.365	-0.17	0.865	1.180
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 4	372000	1860	Config 0	23.94	25.30	1.368	0	0.841	1.150
	n25_Ant 2	20M	BPSK	1	104	Back	10mm	DSI 4	381000	1905	Config 0	23.90	25.30	1.380	-0.16	0.682	0.941
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 4	372000	1860	Config 0	24.02	25.30	1.343	0	0.812	1.090
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 4	376000	1880	Config 0	23.96	25.30	1.361	-0.05	0.845	1.150
	n25_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 4	381000	1905	Config 0	24.02	25.30	1.343	-0.17	0.851	1.143
	n25_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 4	376000	1880	Config 0	23.95	24.80	1.216	-0.17	0.643	0.782
	n25_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 8	372000	1860	Config 1	19.30	19.70	1.096	0.18	0.355	0.389
	n25_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 8	376000	1880	Config 1	19.43	19.70	1.064	-0.06	0.474	0.504
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	372000	1860	Config 1	19.30	19.70	1.096	-0.06	0.730	0.800
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	376000	1880	Config 1	19.29	19.70	1.099	-0.11	0.857	0.942
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	381000	1905	Config 1	19.29	19.70	1.099	-0.08	0.906	0.996
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	376000	1880	Config 1	19.43	19.70	1.064	0.01	0.844	0.898
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	372000	1860	Config 1	19.35	19.70	1.084	-0.07	0.734	0.796
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	381000	1905	Config 1	19.37	19.70	1.079	-0.15	0.856	0.924
	n25_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 8	372000	1860	Config 1	19.23	19.70	1.114	-0.06	0.706	0.787
	n25_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4	372000	1860	Config 1	19.30	20.50	1.318	0.18	0.355	0.468
	n25_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4	376000	1880	Config 1	19.43	20.50	1.279	-0.06	0.474	0.606
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	372000	1860	Config 1	19.30	20.50	1.318	-0.06	0.730	0.962
	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	376000	1880	Config 1	19.29	20.50	1.321	-0.11	0.857	1.132
81	n25_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	381000	1905	Config 1	19.29	20.50	1.321	-0.08	0.906	1.197
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	376000	1880	Config 1	19.43	20.50	1.279	0.01	0.844	1.080
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	372000	1860	Config 1	19.35	20.50	1.303	-0.07	0.734	0.957
	n25_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	381000	1905	Config 1	19.37	20.50	1.297	-0.15	0.856	1.110
	n25_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 4	372000	1860	Config 1	19.23	20.50	1.340	-0.06	0.706	0.946



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	344000	1720	Config 0	24.57	25.00	1.104	-0.13	0.848	0.936
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	349000	1745	Config 0	24.40	25.00	1.148	-0.08	0.837	0.961
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 8	354000	1770	Config 0	24.34	25.00	1.164	-0.17	0.820	0.955
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	344000	1720	Config 0	24.44	25.00	1.138	-0.06	0.878	0.999
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	349000	1745	Config 0	24.37	25.00	1.156	-0.14	0.819	0.947
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 8	354000	1770	Config 0	24.40	25.00	1.148	-0.12	0.749	0.860
	n66_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 8	344000	1720	Config 0	23.86	25.00	1.300	-0.06	0.755	0.982
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	344000	1720	Config 0	24.57	25.00	1.104	-0.06	0.651	0.719
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	349000	1745	Config 0	24.40	25.00	1.148	-0.03	0.690	0.792
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 8	354000	1770	Config 0	24.34	25.00	1.164	-0.13	0.711	0.828
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	344000	1720	Config 0	24.44	25.00	1.138	-0.09	0.607	0.691
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	349000	1745	Config 0	24.37	25.00	1.156	0.01	0.650	0.751
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 8	354000	1770	Config 0	24.40	25.00	1.148	0.04	0.694	0.797
	n66_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 8	344000	1770	Config 0	23.86	25.00	1.300	-0.02	0.592	0.770
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	344000	1720	Config 0	24.57	25.70	1.297	-0.13	0.848	1.100
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	349000	1745	Config 0	24.40	25.70	1.349	-0.08	0.837	1.129
	n66_Ant 2	20M	BPSK	1	1	Front	10mm	DSI 4	354000	1770	Config 0	24.34	25.70	1.368	-0.17	0.820	1.122
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 4	344000	1720	Config 0	24.44	25.70	1.337	-0.06	0.878	1.174
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 4	349000	1745	Config 0	24.37	25.70	1.358	-0.14	0.819	1.112
	n66_Ant 2	20M	BPSK	50	28	Front	10mm	DSI 4	354000	1770	Config 0	24.40	25.70	1.349	-0.12	0.749	1.010
	n66_Ant 2	20M	BPSK	100	0	Front	10mm	DSI 4	344000	1720	Config 0	23.86	25.70	1.528	-0.06	0.755	1.153
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	344000	1720	Config 0	24.57	25.70	1.297	-0.06	0.651	0.844
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	349000	1745	Config 0	24.40	25.70	1.349	-0.03	0.690	0.931
	n66_Ant 2	20M	BPSK	1	1	Back	10mm	DSI 4	354000	1770	Config 0	24.34	25.70	1.368	-0.13	0.711	0.972
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 4	344000	1720	Config 0	24.44	25.70	1.337	-0.09	0.607	0.811
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 4	349000	1745	Config 0	24.37	25.70	1.358	0.01	0.650	0.883
	n66_Ant 2	20M	BPSK	50	28	Back	10mm	DSI 4	354000	1770	Config 0	24.40	25.70	1.349	0.04	0.694	0.936
	n66_Ant 2	20M	BPSK	100	0	Back	10mm	DSI 4	344000	1770	Config 0	23.86	25.70	1.528	-0.02	0.592	0.904
	n66_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 8	344000	1720	Config 1	19.95	20.40	1.109	0.07	0.312	0.346
	n66_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 8	344000	1720	Config 1	19.89	20.40	1.125	0.13	0.331	0.372
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	344000	1720	Config 1	19.95	20.40	1.109	0.04	0.891	0.988
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	349000	1745	Config 1	19.93	20.40	1.114	0.08	0.814	0.907
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 8	354000	1770	Config 1	19.94	20.40	1.112	-0.02	0.723	0.804
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	344000	1720	Config 1	19.89	20.40	1.125	0.05	0.852	0.958
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	349000	1745	Config 1	19.84	20.40	1.138	0.01	0.762	0.867
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 8	354000	1770	Config 1	19.75	20.40	1.161	0.04	0.658	0.764
	n66_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 6	344000	1720	Config 1	19.71	20.40	1.172	0.01	0.809	0.948
	n66_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4	344000	1720	Config 1	19.95	21.20	1.334	0.07	0.312	0.416
	n66_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4	344000	1720	Config 1	19.89	21.20	1.352	0.13	0.331	0.448
82	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	344000	1720	Config 1	19.95	21.20	1.334	0.04	0.891	1.188
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	349000	1745	Config 1	19.93	21.20	1.340	0.08	0.814	1.090
	n66_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4	354000	1770	Config 1	19.94	21.20	1.337	-0.02	0.723	0.966
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	344000	1720	Config 1	19.89	21.20	1.352	0.05	0.852	1.152
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	349000	1745	Config 1	19.84	21.20	1.368	0.01	0.762	1.042
	n66_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4	354000	1770	Config 1	19.75	21.20	1.396	0.04	0.658	0.919
	n66_Ant 0	20M	BPSK	100	0	Back	10mm	DSI 4	344000	1720	Config 1	19.71	21.20	1.409	0.01	0.809	1.140
	n71_Ant 0	20M	BPSK	1	1	Front	10mm	DSI 4/8	136100	680.5	Config 0	24.29	25.70	1.384	-0.14	0.324	0.448
	n71_Ant 0	20M	BPSK	50	28	Front	10mm	DSI 4/8	136100	680.5	Config 0	24.33	25.70	1.371	-0.19	0.336	0.461
83	n71_Ant 0	20M	BPSK	1	1	Back	10mm	DSI 4/8	136100	680.5	Config 0	24.29	25.70	1.384	-0.12	0.516	0.714
	n71_Ant 0	20M	BPSK	50	28	Back	10mm	DSI 4/8	136100	680.5	Config 0	24.33	25.70	1.371	-0.17	0.499	0.684
	n71_Ant 1	20M	BPSK	1	1	Front	10mm	DSI 4/8	136100	680.5	Config 1	24.55	25.70	1.303	-0.07	0.225	0.293
	n71_Ant 1	20M	BPSK	50	28	Front	10mm	DSI 4/8	136100	680.5	Config 1	24.37	25.70	1.358	-0.11	0.258	0.350
	n71_Ant 1	20M	BPSK	1	1	Back	10mm	DSI 4/8	136100	680.5	Config 1	24.55	25.70	1.303	-0.07	0.420	0.547
	n71_Ant 1	20M	BPSK	50	28	Back	10mm	DSI 4/8	136100	680.5	Config 1	24.37	25.70	1.358	0	0.494	0.671



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Transmission Cycle %	Transmission Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	n41_Ant 2	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	-0.02	0.219	0.347
	n41_Ant 2	100M	BPSK	135	69	Front	10mm	DSI 4/8	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	-0.11	0.214	0.362
	n41_Ant 2	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 0	24.91	25.70	1.199	25	1.320	0.11	0.254	0.402
	n41_Ant 2	100M	BPSK	135	69	Back	10mm	DSI 4/8	518598	2592.99	Config 0	24.62	25.70	1.282	25	1.320	0.08	0.229	0.388
	n41_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	0.02	0.177	0.279
	n41_Ant 5	100M	BPSK	135	0	Front	10mm	DSI 4/8	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0.01	0.179	0.300
	n41_Ant 5	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 0	24.94	25.70	1.191	25	1.320	-0.18	0.307	0.483
	n41_Ant 5	100M	BPSK	135	0	Back	10mm	DSI 4/8	518598	2592.99	Config 0	24.66	25.70	1.271	25	1.320	0	0.272	0.456
	n41_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	0	0.245	0.412
	n41_HPUE_Ant 5	100M	BPSK	135	0	Front	10mm	DSI 4/8	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	0.09	0.216	0.395
84	n41_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 0	26.45	27.50	1.274	25	1.320	-0.05	0.458	0.770
	n41_HPUE_Ant 5	100M	BPSK	135	0	Back	10mm	DSI 4/8	518598	2592.99	Config 0	26.08	27.50	1.387	25	1.320	-0.19	0.359	0.657
	n41_Ant 0	100M	BPSK	1	1	Front	10mm	DSI 4/8	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.14	0.112	0.194
	n41_Ant 0	100M	BPSK	135	69	Front	10mm	DSI 4/8	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	0.11	0.120	0.223
	n41_Ant 0	100M	BPSK	1	1	Back	10mm	DSI 4/8	518598	2592.99	Config 1	24.51	25.70	1.315	25	1.320	-0.18	0.296	0.514
	n41_Ant 0	100M	BPSK	135	69	Back	10mm	DSI 4/8	518598	2592.99	Config 1	24.21	25.70	1.409	25	1.320	-0.05	0.396	0.737

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.08	0.113	0.117
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	3	6	2437	14.40	14.50	1.023	98.72	1.013	-0.14	0.209	0.217
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.14	0.230	0.243
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.11	0.378	0.400
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	-0.17	0.239	0.259
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.17	0.216	0.229
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	6	2437	16.70	17.00	1.072	98.92	1.011	-0.04	0.436	0.472
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	6	2437	18.80	19.00	1.047	98.92	1.011	-0.04	0.335	0.355
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	1	2412	16.70	17.00	1.072	98.92	1.011	-0.19	0.427	0.463
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	1	2412	18.70	19.00	1.072	98.92	1.011	-0.19	0.277	0.300
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	11	2462	16.80	17.00	1.047	98.92	1.011	-0.02	0.380	0.402
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	11	2462	18.70	19.00	1.072	98.92	1.011	-0.02	0.280	0.303
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	1	6	2437	19.30	19.50	1.047	98.72	1.013	-0.13	0.314	0.333
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	1	6	2437	19.30	19.50	1.047	98.72	1.013	-0.18	0.682	0.723
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.02	0.269	0.278
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.05	0.432	0.447
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.07	0.424	0.439
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.07	0.254	0.263
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.03	0.734	0.759
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	1	6	2437	19.40	19.50	1.023	98.92	1.011	-0.03	0.396	0.410
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	1	1	2412	19.40	19.50	1.023	98.92	1.011	-0.02	0.613	0.634
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	1	1	2412	19.10	19.50	1.096	98.92	1.011	-0.02	0.281	0.311
85	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	1	11	2462	19.20	19.50	1.072	98.92	1.011	-0.17	0.703	0.762
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	1	11	2462	19.40	19.50	1.023	98.92	1.011	-0.17	0.411	0.425



FCC SAR TEST REPORT

Report No. : FA022521-02A

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	3	54	5270	17.20	17.50	1.072	95.34	1.049	-0.05	0.081	0.091
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	3	54	5270	17.20	17.50	1.072	95.34	1.049	-0.08	0.112	0.126
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	3	54	5270	13.90	14.00	1.023	95.96	1.042	-0.09	0.076	0.081
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	3	54	5270	13.90	14.00	1.023	95.96	1.042	-0.13	0.274	0.292
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	3	54	5270	17.20	17.50	1.072	95.34	1.049	-0.02	0.074	0.083
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	3	54	5270	14.70	15.00	1.072	95.34	1.049	-0.02	0.098	0.110
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	54	5270	17.20	17.50	1.072	95.34	1.049	-0.13	0.098	0.110
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	54	5270	14.70	15.00	1.072	95.34	1.049	-0.13	0.310	0.348
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	3	62	5310	13.60	14.00	1.096	95.34	1.049	-0.11	0.039	0.045
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	3	62	5310	13.90	14.00	1.023	95.34	1.049	-0.11	0.194	0.208
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	-0.07	0.168	0.201
86	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	-0.04	0.597	0.714
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3	1	62	5310	13.50	14.00	1.122	95.96	1.042	-0.08	0.177	0.207
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.13	0.082	0.087
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.03	0.117	0.125
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.07	0.083	0.089
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	0.07	0.161	0.188
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.07	0.118	0.126
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	-0.07	0.575	0.672
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	3	132	5660	17.30	18.00	1.175	97.69	1.024	0.13	0.067	0.081
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4	3	132	5660	17.30	18.00	1.175	97.69	1.024	0.13	0.081	0.097
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	138	5690	9.40	10.50	1.288	92.00	1.087	0.07	0.034	0.048
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	138	5690	9.40	10.50	1.288	92.00	1.087	-0.13	0.182	0.255
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(4)	3	132	5660	17.30	18.00	1.175	97.69	1.024	-0.1	0.077	0.093
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(3)	3	132	5660	11.30	11.50	1.047	97.69	1.024	-0.1	0.058	0.062
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	3	132	5660	17.30	18.00	1.175	97.69	1.024	-0.14	0.102	0.123
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	3	132	5660	11.30	11.50	1.047	97.69	1.024	-0.14	0.297	0.318
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	3	100	5500	17.40	17.50	1.023	97.69	1.024	-0.14	0.084	0.088
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	3	100	5500	11.20	11.50	1.072	97.69	1.024	-0.14	0.107	0.117
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	3	116	5580	17.20	17.50	1.072	97.69	1.024	-0.18	0.064	0.070
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	3	116	5580	11.10	11.50	1.096	97.69	1.024	-0.18	0.161	0.181
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	3	124	5620	17.10	17.50	1.096	97.69	1.024	-0.02	0.087	0.098
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	3	124	5620	11.10	11.50	1.096	97.69	1.024	-0.02	0.178	0.200
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	3	144	5720	17.10	17.50	1.096	97.69	1.024	-0.17	0.096	0.108
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	3	144	5720	11.50	11.50	1.000	97.69	1.024	-0.17	0.342	0.350
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.13	0.067	0.081
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.13	0.081	0.097
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	-0.15	0.103	0.123
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	0.06	0.527	0.628
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.08	0.065	0.078
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	-0.08	0.156	0.183
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.05	0.111	0.134
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	-0.05	0.690	0.811
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	100	5500	17.40	17.50	1.023	97.69	1.024	-0.19	0.078	0.082
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	100	5500	15.30	16.00	1.175	97.69	1.024	-0.19	0.280	0.337
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	116	5580	17.20	17.50	1.072	97.69	1.024	-0.11	0.066	0.072
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	116	5580	15.30	16.00	1.175	97.69	1.024	-0.11	0.355	0.427
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	124	5620	17.10	17.50	1.096	97.69	1.024	-0.19	0.086	0.097
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	124	5620	15.10	16.00	1.230	97.69	1.024	-0.19	0.407	0.513
87	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	144	5720	17.10	17.50	1.096	97.69	1.024	-0.15	0.107	0.120
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(3)	1	144	5720	15.40	16.00	1.148	97.69	1.024	-0.15	0.957	1.125

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.02	0.057	0.060
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.103	0.108
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	-0.15	0.038	0.049
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	3	155	5775	9.30	10.00	1.175	92	1.087	-0.08	0.210	0.268
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.027	0.028
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	-0.1	0.059	0.072
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	18.40	18.50	1.023	97.83	1.022	0.13	0.100	0.105
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	9.70	10.50	1.202	97.83	1.022	0.13	0.182	0.224
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	149	5745	18.30	18.50	1.047	97.83	1.022	-0.04	0.116	0.124
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	149	5745	9.90	10.50	1.148	97.83	1.022	-0.04	0.229	0.269
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	165	5825	18.20	18.50	1.072	97.83	1.022	0.18	0.082	0.090
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	165	5825	9.70	10.50	1.202	97.83	1.022	0.18	0.232	0.285
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.02	0.057	0.060
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.1	0.103	0.108
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3	1	155	5775	13.30	13.50	1.047	92	1.087	0.18	0.107	0.122
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3	1	155	5775	13.30	13.50	1.047	92	1.087	0	0.673	0.766
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.17	0.053	0.055
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.17	0.176	0.188
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	157	5785	18.40	18.50	1.023	97.83	1.022	-0.03	0.105	0.110
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.03	0.892	0.955
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	149	5745	18.30	18.50	1.047	97.83	1.022	-0.18	0.123	0.132
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	149	5745	15.60	16.00	1.096	97.83	1.022	-0.18	0.963	1.079
88	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	165	5825	18.20	18.50	1.072	97.83	1.022	-0.18	0.092	0.101
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	1	165	5825	15.80	16.00	1.047	97.83	1.022	-0.18	1.060	1.134

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	Bluetooth	1Mbps	Front	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	-0.16	0.115	0.124
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	78	2480	15.48	15.50	1.005	77.13	1.080	-0.19	0.197	0.214
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	0	2402	15.49	15.50	1.002	77.13	1.080	-0.03	0.210	0.227
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	39	2441	15.50	15.50	1.000	77.13	1.080	0.16	0.166	0.179
	Bluetooth	1Mbps	Front	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.13	0.170	0.187
89	Bluetooth	1Mbps	Back	10mm	Ant 4	1	0	2402	17.92	18.00	1.019	77.13	1.080	-0.03	0.294	0.323
	Bluetooth	1Mbps	Back	10mm	Ant 4	1	39	2441	17.87	18.00	1.030	77.13	1.080	-0.02	0.281	0.313
	Bluetooth	1Mbps	Back	10mm	Ant 4	1	78	2480	17.29	18.00	1.178	77.13	1.080	0	0.233	0.296

**14.4 Product Specific SAR****<WLAN SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Table	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)
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.1	0.593	0.632
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.13	0.424	0.452
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.03	0.003	0.003
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.01	0.822	0.876
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.04	0.856	0.913
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0.07	0.601	0.719
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	-0.03	1.260	1.507
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0.07	1.480	1.771
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3	1	54	5270	16.90	17.50	1.148	95.96	1.042	0.14	0.068	0.081
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.02	0.290	0.309
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	-0.02	0.597	0.698
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	-0.07	0.364	0.388
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	-0.07	1.220	1.426
90	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4+3(3)	1	54	5270	17.00	17.50	1.122	95.93	1.042	0.08	1.870	2.186
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 4+3(3)	1	62	5310	13.60	14.00	1.096	95.93	1.042	0.06	0.619	0.707
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	64	5320	16.90	17.50	1.148	97.87	1.022	0.03	1.290	1.514
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.09	0.701	0.747
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 4+3(4)	1	54	5270	17.40	17.50	1.023	95.93	1.042	0.08	0.752	0.802
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.17	0.578	0.695
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.16	0.395	0.475
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.17	0.001	0.001
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.14	0.471	0.567
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.17	0.318	0.383
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	0.15	0.284	0.338
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	0.14	0.802	0.956
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	-0.19	0.990	1.180
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	-0.01	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3	1	138	5690	13.10	13.50	1.096	92	1.087	-0.17	0.025	0.030
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.13	0.473	0.569
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	0.13	0.408	0.480
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	-0.11	0.268	0.322
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	-0.11	1.240	1.458
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3(3)	1	132	5660	15.40	16.00	1.148	97.69	1.024	0.12	1.530	1.799
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3(3)	1	100	5500	15.30	16.00	1.175	97.69	1.024	0.1	0.771	0.928
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3(3)	1	116	5580	15.30	16.00	1.175	97.69	1.024	0.17	0.866	1.042
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3(3)	1	124	5620	15.10	16.00	1.230	97.69	1.024	0.17	0.941	1.185
91	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3(3)	1	144	5720	15.40	16.00	1.148	97.69	1.024	0.15	1.670	1.963
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.15	0.619	0.745
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4+3(4)	1	132	5660	17.30	18.00	1.175	97.69	1.024	0.14	0.776	0.934
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	157	5785	15.80	16.00	1.047	97.83	1.022	-0.04	1.630	1.744
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	149	5745	15.60	16.00	1.096	97.83	1.022	0.14	1.840	2.062
92	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	1	165	5825	15.80	16.00	1.047	97.83	1.022	0.18	1.990	2.130

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132072	1720	config 1	20.26	21.60	1.361	0.03	2.020	2.750
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132322	1745	config 1	20.23	21.60	1.371	0.01	1.960	2.687
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	DSI 4	132572	1770	config 1	20.24	21.60	1.368	0.04	2.090	2.859
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132322	1745	config 1	20.33	21.60	1.340	0.12	2.160	2.894
93	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132072	1720	config 1	20.40	21.60	1.318	0.17	2.270	2.992
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132572	1770	config 1	20.26	21.60	1.361	0.07	1.540	2.097
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	DSI 4	132072	1720	config 1	20.43	21.60	1.309	-0.04	1.960	2.566

14.5 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Output Power State / Table	Ch.	Freq. (MHz)	configure	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 41C	20M_QPSK_1_0	Back	10mm	Ant 2	DSI 4/8	41490+41292	2680	Config 0	25.70	25.70	1.000	62.9	1.006	0.04	0.979	-	0.985
2nd	LTE Band 41C	20M_QPSK_1_0	Back	10mm	Ant 2	DSI 4/8	41490+41292	2680	Config 0	25.70	25.70	1.000	62.9	1.006	0.06	0.961	1.02	0.967
1st	LTE Band 66	20M_QPSK_100_0	Right Cheek	10mm	Ant 0	DSI 4	132072	1720	Config 1	20.43	21.60	1.309			-0.03	0.914	-	1.197
2nd	LTE Band 66	20M_QPSK_100_0	Right Cheek	10mm	Ant 0	DSI 4	132072	1720	Config 1	20.43	21.60	1.309			-0.03	0.900	1.02	1.178
1st	n5	20M_BPSK_50_28	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	Config 1	23.38	24.30	1.236			-0.11	0.959	-	1.185
2nd	n5	20M_BPSK_50_28	Right Cheek	0mm	Ant 1	DSI 2	167300	836.5	Config 1	23.38	24.30	1.236			-0.15	0.941	1.02	1.163
1st	n71	20M_BPSK_50_28	Right Cheek	0mm	Ant 1	DSI 2	136100	680.5	Config 1	24.37	25.70	1.358			-0.13	0.845	-	1.148
2nd	n71	20M_BPSK_50_28	Right Cheek	0mm	Ant 1	DSI 2	136100	680.5	Config 1	24.37	25.70	1.358			-0.12	0.795	1.06	1.080
1st	n25	20M_BPSK_1_1	Back	10mm	Ant 0	DSI 4	381000	1905	Config 1	19.29	20.50	1.321			-0.08	0.906	-	1.197
2nd	n25	20M_BPSK_1_1	Back	10mm	Ant 0	DSI 4	381000	1905	Config 1	19.29	20.50	1.324			-0.07	0.882	1.02	1.168
1st	WLAN5GHz-	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	144	5720		17.10	17.50	1.096	97.69	1.024	-0.15	0.107	-	0.120
	WLAN5GHz-	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	144	5720		15.40	16.00	1.148	97.69	1.024	-0.15	0.957	-	1.125
2nd	WLAN5GHz-	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	144	5720		17.10	17.50	1.096	97.69	1.024	-0.1	0.121	0.89	0.136
	WLAN5GHz-	802.11n-HT20 MCS0	Back	10mm	Ant 4+3(4)	1	144	5720		15.40	16.00	1.148	97.69	1.024	-0.1	0.926	1.03	1.089
1st	WLAN5GHz-	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	165	5825		18.20	18.50	1.072	97.83	1.022	-0.18	0.092	-	0.101
	WLAN5GHz-	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	165	5825		15.80	16.00	1.047	97.83	1.022	-0.18	1.060	-	1.134
2nd	WLAN5GHz-	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	165	5825		18.20	18.50	1.072	97.83	1.022	-0.12	0.090	1.02	0.099
	WLAN5GHz-	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	1	165	5825		15.80	16.00	1.047	97.83	1.022	-0.12	1.030	1.03	1.102

No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power State	Ch.	Freq. (MHz)	configure	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	DSI 4	132072	1720	config 1	20.40	21.60	1.318	0.17	2.270	-	2.992
2nd	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	0mm	DSI 4	132072	1720	config 1	20.40	21.60	1.318	0.07	2.240	1.01	2.953

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
- Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/kg, only one repeated measurement is required.
- Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds. $\Rightarrow$ 10g SAR used
- The ratio is the difference in percentage between original and repeated *measured* SAR.
- All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

14.6 LTE Band 41 Power Class 2 and Power Class 3 Linearity

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

<LTE Band 41 Linearity Data for Head>

Config 0		
Standalone	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27
Reported 1g SAR (W/kg)	0.205	0.178
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	217.01
Linearity SAR(W/kg)	0.19	
% deviation from expected linearity		-5.90%

Config 1		
Standalone	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	0.393	0.376
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	0.41	
% deviation from expected linearity		-7.59%

<LTE Band 41 Linearity Data for Hotspot>

Config 0		
Standalone	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27
Reported 1g SAR (W/kg)	0.999	0.874
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	217.01
Linearity SAR(W/kg)	0.92	
% deviation from expected linearity		-5.19%

Config 1		
Standalone	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	22.8	24.6
Reported 1g SAR (W/kg)	0.933	0.885
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	120.62	124.88
Linearity SAR(W/kg)	0.97	
% deviation from expected linearity		-8.38%

<LTE Band 41 Linearity Data for Body-worn>

Config 0		
Standalone	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27
Reported 1g SAR (W/kg)	0.999	0.874
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	217.01
Linearity SAR(W/kg)	0.92	
% deviation from expected linearity		-5.19%

Config 1		
Standalone	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	22.8	24.6
Reported 1g SAR (W/kg)	0.933	0.885
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	120.62	124.88
Linearity SAR(W/kg)	0.97	
% deviation from expected linearity		-8.38%

15. Simultaneous Transmission Analysis

Config	Mode	Capable TX Configurations
1	WWAN OFF (Cellular off)	WiFi 5G SISO (Chain0) + Bluetooth
2		WiFi 5G SISO (Chain1) + Bluetooth
3		WiFi 5G MIMO + Bluetooth
4		WiFi 5G SISO (Chain1)
5		WiFi 5G SISO (Chain0)
6		WiFi 5G MIMO
7		WiFi 2.4G SISO (Chain1)
8		WiFi 2.4G SISO (Chain0)
9		WiFi 2.4G MIMO/CDD
10		Bluetooth
11		WiFi 2.4G SISO (Chain0) + WiFi 5G SISO (Chain1)
12	WWAN ON + FR1 (Cellular on)	WiFi 5G SISO (Chain0) + Bluetooth
13		WiFi 5G SISO (Chain1) + Bluetooth
14		WiFi 5G MIMO + Bluetooth
15		WiFi 5G SISO (Chain1)
16		WiFi 5G SISO (Chain0)
17		WiFi 5G MIMO
18		WiFi 2.4G SISO (Chain1)
19		WiFi 2.4G SISO (Chain0)
20		WiFi 2.4G MIMO/CDD
21		Bluetooth
22		WiFi 2.4G SISO (Chain0) + WiFi 5G SISO (Chain1)

General Note:

- Simultaneous operation at maximum power levels when the device is neither against the body nor the head (i.e. in a mobile RF exposure condition) is addressed in Sporton's test report FA022521-02B
- This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
- The worst case WLAN reported SAR for each configuration was used for SAR summation, regardless of whether the WLAN channel has WiFi Direct and Hotspot capability. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation < 1.6W/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, if $SPLSR < 0.1$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

**15.1 5G NR + LTE + WLAN + BT Sim-Tx analysis**

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

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

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

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

Where, A is normalized reported time-averaged SAR exposure ratio from LTE, and $A \leq 1.0$; B is normalized reported time-averaged exposure ratio from 5G NR (i.e., PD exposure for 5G FR2 or SAR exposure for 5G FR1), and $B \leq 1.0$.

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

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

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

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

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

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

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

**15.2 Head Exposure Conditions****<Standalone WWAN OFF>**

Exposure Position	1	2	3	4	5	6	7	1+3 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)	5+6 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3				
	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)				
Right Cheek	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.289	0.255	0.289	0.261
Right Tilted	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.097	0.070	0.283	0.298
Left Cheek	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.542	0.474	0.505	0.575
Left Tilted	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.292	0.169	0.538	0.568

**<Simultaneous Transmission is active_WWAN ON>
<Config 0>**

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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)							
GSM850_Ant 0	Right Cheek	0.383	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.831	0.672	0.638	0.672	0.644	0.631	0.440
	Right Tilted	0.209	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.328	0.306	0.279	0.492	0.507	0.252	0.258
	Left Cheek	0.490	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.015	1.032	0.964	0.995	1.065	0.736	0.774
	Left Tilted	0.214	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.610	0.506	0.383	0.752	0.782	0.246	0.367
GSM1900_Ant 2	Right Cheek	0.473	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.921	0.762	0.728	0.762	0.734	0.721	0.530
	Right Tilted	0.325	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.444	0.422	0.395	0.608	0.623	0.368	0.374
	Left Cheek	0.308	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.833	0.850	0.782	0.813	0.883	0.554	0.592
	Left Tilted	0.271	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.667	0.563	0.440	0.809	0.839	0.303	0.424
WCDMA II_Ant 2	Right Cheek	0.857	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.305	1.146	1.112	1.146	1.118	1.105	0.914
	Right Tilted	0.485	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.604	0.582	0.555	0.768	0.783	0.528	0.534
	Left Cheek	0.446	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.971	0.988	0.920	0.951	1.021	0.692	0.730
	Left Tilted	0.456	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.852	0.748	0.625	0.994	1.024	0.488	0.609
WCDMA IV_Ant 2	Right Cheek	0.577	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.025	0.866	0.832	0.866	0.838	0.825	0.634
	Right Tilted	0.377	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.496	0.474	0.447	0.660	0.675	0.420	0.426
	Left Cheek	0.434	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.959	0.976	0.908	0.939	1.009	0.680	0.718
	Left Tilted	0.357	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.753	0.649	0.526	0.895	0.925	0.389	0.510
WCDMA V_Ant 0	Right Cheek	0.387	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.835	0.676	0.642	0.676	0.648	0.635	0.444
	Right Tilted	0.173	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.292	0.270	0.243	0.456	0.471	0.216	0.222
	Left Cheek	0.337	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.862	0.879	0.811	0.842	0.912	0.583	0.621
	Left Tilted	0.176	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.572	0.468	0.345	0.714	0.744	0.208	0.329
CDMA BC0_Ant 0	Right Cheek	0.580	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.028	0.869	0.835	0.869	0.841	0.828	0.637
	Right Tilted	0.247	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.366	0.344	0.317	0.530	0.545	0.290	0.296
	Left Cheek	0.431	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.956	0.973	0.905	0.936	1.006	0.677	0.715
	Left Tilted	0.244	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.640	0.536	0.413	0.782	0.812	0.276	0.397
CDMA BC1_Ant 2	Right Cheek	0.852	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.300	1.141	1.107	1.141	1.113	1.100	0.909
	Right Tilted	0.257	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.376	0.354	0.327	0.540	0.555	0.300	0.306
	Left Cheek	0.134	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.659	0.676	0.608	0.639	0.709	0.380	0.418
	Left Tilted	0.100	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.496	0.392	0.269	0.638	0.668	0.132	0.253
CDMA BC10_Ant 0	Right Cheek	0.433	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.881	0.722	0.688	0.722	0.694	0.681	0.490
	Right Tilted	0.238	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.357	0.335	0.308	0.521	0.536	0.281	0.287
	Left Cheek	0.408	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.933	0.950	0.882	0.913	0.983	0.654	0.692
	Left Tilted	0.240	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.636	0.532	0.409	0.778	0.808	0.272	0.393
LTE Band 7_Ant 2	Right Cheek	0.333	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.781	0.622	0.588	0.622	0.594	0.581	0.390
	Right Tilted	0.125	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.244	0.222	0.195	0.408	0.423	0.168	0.174
	Left Cheek	0.256	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.781	0.798	0.730	0.761	0.831	0.502	0.540
	Left Tilted	0.229	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.625	0.521	0.398	0.767	0.797	0.261	0.382



FCC SAR TEST REPORT

Report No. : FA022521-02A

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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)							
LTE Band 12_Ant 0	Right Cheek	0.312	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.760	0.601	0.567	0.601	0.573	0.560	0.369
	Right Tilted	0.155	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.274	0.252	0.225	0.438	0.453	0.198	0.204
	Left Cheek	0.363	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.888	0.905	0.837	0.868	0.938	0.609	0.647
	Left Tilted	0.169	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.565	0.461	0.338	0.707	0.737	0.201	0.322
LTE Band 13_Ant 0	Right Cheek	0.406	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.854	0.695	0.661	0.695	0.667	0.654	0.463
	Right Tilted	0.233	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.352	0.330	0.303	0.516	0.531	0.276	0.282
	Left Cheek	0.406	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.931	0.948	0.880	0.911	0.981	0.652	0.690
	Left Tilted	0.244	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.640	0.536	0.413	0.782	0.812	0.276	0.397
LTE Band 14_Ant 0	Right Cheek	0.440	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.888	0.729	0.695	0.729	0.701	0.688	0.497
	Right Tilted	0.240	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.359	0.337	0.310	0.523	0.538	0.283	0.289
	Left Cheek	0.432	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.957	0.974	0.906	0.937	1.007	0.678	0.716
	Left Tilted	0.267	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.663	0.559	0.436	0.805	0.835	0.299	0.420
LTE Band 25_Ant 2	Right Cheek	0.821	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.269	1.110	1.076	1.110	1.082	1.069	0.878
	Right Tilted	0.376	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.495	0.473	0.446	0.659	0.674	0.419	0.425
	Left Cheek	0.444	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.969	0.986	0.918	0.949	1.019	0.690	0.728
	Left Tilted	0.318	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.714	0.610	0.487	0.856	0.886	0.350	0.471
LTE Band 26_Ant 0	Right Cheek	0.381	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.829	0.670	0.636	0.670	0.642	0.629	0.438
	Right Tilted	0.207	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.326	0.304	0.277	0.490	0.505	0.250	0.256
	Left Cheek	0.390	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.915	0.932	0.864	0.895	0.965	0.636	0.674
	Left Tilted	0.223	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.619	0.515	0.392	0.761	0.791	0.255	0.376
LTE Band 30_Ant 2	Right Cheek	0.155	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.603	0.444	0.410	0.444	0.416	0.403	0.212
	Right Tilted	0.054	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.173	0.151	0.124	0.337	0.352	0.097	0.103
	Left Cheek	0.100	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.625	0.642	0.574	0.605	0.675	0.346	0.384
	Left Tilted	0.085	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.481	0.377	0.254	0.623	0.653	0.117	0.238
LTE Band 41_Ant 2	Right Cheek	0.205	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.653	0.494	0.460	0.494	0.466	0.453	0.262
	Right Tilted	0.036	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.155	0.133	0.106	0.319	0.334	0.079	0.085
	Left Cheek	0.091	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.616	0.633	0.565	0.596	0.666	0.337	0.375
	Left Tilted	0.074	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.470	0.366	0.243	0.612	0.642	0.106	0.227
LTE Band 48_Ant 7	Right Cheek	0.017	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.465	0.306	0.272	0.306	0.278	0.265	0.074
	Right Tilted	0.081	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.200	0.178	0.151	0.364	0.379	0.124	0.130
	Left Cheek	0.119	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.644	0.661	0.593	0.624	0.694	0.365	0.403
	Left Tilted	0.043	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.439	0.335	0.212	0.581	0.611	0.075	0.196
LTE Band 66_Ant 2	Right Cheek	0.530	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.978	0.819	0.785	0.819	0.791	0.778	0.587
	Right Tilted	0.374	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.493	0.471	0.444	0.657	0.672	0.417	0.423
	Left Cheek	0.488	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.013	1.030	0.962	0.993	1.063	0.734	0.772
	Left Tilted	0.370	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.766	0.662	0.539	0.908	0.938	0.402	0.523
LTE Band 71_Ant 0	Right Cheek	0.293	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.741	0.582	0.548	0.582	0.554	0.541	0.350
	Right Tilted	0.145	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.264	0.242	0.215	0.428	0.443	0.188	0.194
	Left Cheek	0.315	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.840	0.857	0.789	0.820	0.890	0.561	0.599
	Left Tilted	0.157	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.553	0.449	0.326	0.695	0.725	0.189	0.310

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)							
n5_Ant 0	Right Cheek	0.285	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.733	0.574	0.540	0.574	0.546	0.533	0.342
	Right Tilted	0.144	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.263	0.241	0.214	0.427	0.442	0.187	0.193
	Left Cheek	0.295	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.820	0.837	0.769	0.800	0.870	0.541	0.579
	Left Tilted	0.141	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.537	0.433	0.310	0.679	0.709	0.173	0.294
n12_Ant 0	Right Cheek	0.315	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.763	0.604	0.570	0.604	0.576	0.563	0.372
	Right Tilted	0.202	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.321	0.299	0.272	0.485	0.500	0.245	0.251
	Left Cheek	0.366	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.891	0.908	0.840	0.871	0.941	0.612	0.650
	Left Tilted	0.194	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.590	0.486	0.363	0.732	0.762	0.226	0.347
n25_Ant 2	Right Cheek	0.880	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.328	1.169	1.135	1.169	1.141	1.128	0.937
	Right Tilted	0.444	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.563	0.541	0.514	0.727	0.742	0.487	0.493
	Left Cheek	0.392	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.917	0.934	0.866	0.897	0.967	0.638	0.676
	Left Tilted	0.429	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.825	0.721	0.598	0.967	0.997	0.461	0.582
n66_Ant 2	Right Cheek	0.583	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.031	0.872	0.838	0.872	0.844	0.831	0.640
	Right Tilted	0.419	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.538	0.516	0.489	0.702	0.717	0.462	0.468
	Left Cheek	0.612	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.137	1.154	1.086	1.117	1.187	0.858	0.896
	Left Tilted	0.403	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.799	0.695	0.572	0.941	0.971	0.435	0.556
n71_Ant 0	Right Cheek	0.372	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.820	0.661	0.627	0.661	0.633	0.620	0.429
	Right Tilted	0.203	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.322	0.300	0.273	0.486	0.501	0.246	0.252
	Left Cheek	0.414	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.939	0.956	0.888	0.919	0.989	0.660	0.698
	Left Tilted	0.199	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.595	0.491	0.368	0.737	0.767	0.231	0.352
n41_Ant 2	Right Cheek	0.060	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.508	0.349	0.315	0.349	0.321	0.308	0.117
	Right Tilted	0.020	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.139	0.117	0.090	0.303	0.318	0.063	0.069
	Left Cheek	0.054	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.579	0.596	0.528	0.559	0.629	0.300	0.338
	Left Tilted	0.041	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.437	0.333	0.210	0.579	0.609	0.073	0.194
n41_Ant 5	Right Cheek	0.235	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.683	0.524	0.490	0.524	0.496	0.483	0.292
	Right Tilted	0.091	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.210	0.188	0.161	0.374	0.389	0.134	0.140
	Left Cheek	0.712	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.237	1.254	1.186	1.217	1.287	0.958	0.996
	Left Tilted	0.067	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.463	0.359	0.236	0.605	0.635	0.099	0.220
n41_HPUE_Ant 5-	Right Cheek	0.315	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.763	0.604	0.570	0.604	0.576	0.563	0.372
	Right Tilted	0.122	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.241	0.219	0.192	0.405	0.420	0.165	0.171
	Left Cheek	0.949	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.474	1.491	1.423	1.454	1.524	1.195	1.233
	Left Tilted	0.083	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.479	0.375	0.252	0.621	0.651	0.115	0.236



FCC SAR TEST REPORT

Report No. : FA022521-02A

<Config 1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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)							
GSM850_Ant 1	Right Cheek	0.997	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.445	1.286	1.252	1.286	1.258	1.245	1.054
	Right Tilted	0.676	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.795	0.773	0.746	0.959	0.974	0.719	0.725
	Left Cheek	0.577	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.102	1.119	1.051	1.082	1.152	0.823	0.861
	Left Tilted	0.475	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.871	0.767	0.644	1.013	1.043	0.507	0.628
GSM1900_Ant 0	Right Cheek	0.120	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.568	0.409	0.375	0.409	0.381	0.368	0.177
	Right Tilted	0.030	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.149	0.127	0.100	0.313	0.328	0.073	0.079
	Left Cheek	0.227	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.752	0.769	0.701	0.732	0.802	0.473	0.511
	Left Tilted	0.029	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.425	0.321	0.198	0.567	0.597	0.061	0.182
WCDMA II_Ant 0	Right Cheek	0.396	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.844	0.685	0.651	0.685	0.657	0.644	0.453
	Right Tilted	0.060	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.179	0.157	0.130	0.343	0.358	0.103	0.109
	Left Cheek	0.105	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.630	0.647	0.579	0.610	0.680	0.351	0.389
	Left Tilted	0.093	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.489	0.385	0.262	0.631	0.661	0.125	0.246
WCDMA IV_Ant 0	Right Cheek	0.134	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.582	0.423	0.389	0.423	0.395	0.382	0.191
	Right Tilted	0.110	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.229	0.207	0.180	0.393	0.408	0.153	0.159
	Left Cheek	0.084	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.609	0.626	0.558	0.589	0.659	0.330	0.368
	Left Tilted	0.035	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.431	0.327	0.204	0.573	0.603	0.067	0.188
WCDMA V_Ant 1	Right Cheek	0.997	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.445	1.286	1.252	1.286	1.258	1.245	1.054
	Right Tilted	0.648	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.767	0.745	0.718	0.931	0.946	0.691	0.697
	Left Cheek	0.572	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.097	1.114	1.046	1.077	1.147	0.818	0.856
	Left Tilted	0.464	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.860	0.756	0.633	1.002	1.032	0.496	0.617
CDMA BC0_Ant 1	Right Cheek	0.983	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.431	1.272	1.238	1.272	1.244	1.231	1.040
	Right Tilted	0.626	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.745	0.723	0.696	0.909	0.924	0.669	0.675
	Left Cheek	0.489	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.014	1.031	0.963	0.994	1.064	0.735	0.773
	Left Tilted	0.386	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.782	0.678	0.555	0.924	0.954	0.418	0.539
CDMA BC1_Ant 0	Right Cheek	0.202	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.650	0.491	0.457	0.491	0.463	0.450	0.259
	Right Tilted	0.042	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.161	0.139	0.112	0.325	0.340	0.085	0.091
	Left Cheek	0.094	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.619	0.636	0.568	0.599	0.669	0.340	0.378
	Left Tilted	0.057	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.453	0.349	0.226	0.595	0.625	0.089	0.210
CDMA BC10_Ant 1	Right Cheek	0.842	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.290	1.131	1.097	1.131	1.103	1.090	0.899
	Right Tilted	0.569	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.688	0.666	0.639	0.852	0.867	0.612	0.618
	Left Cheek	0.478	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.003	1.020	0.952	0.983	1.053	0.724	0.762
	Left Tilted	0.381	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.777	0.673	0.550	0.919	0.949	0.413	0.534
LTE Band 7_Ant 0	Right Cheek	0.365	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.813	0.654	0.620	0.654	0.626	0.613	0.422
	Right Tilted	0.085	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.204	0.182	0.155	0.368	0.383	0.128	0.134
	Left Cheek	0.644	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.169	1.186	1.118	1.149	1.219	0.890	0.928
	Left Tilted	0.155	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.551	0.447	0.324	0.693	0.723	0.187	0.308
LTE Band 12_Ant 1	Right Cheek	0.907	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.355	1.196	1.162	1.196	1.168	1.155	0.964
	Right Tilted	0.663	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.782	0.760	0.733	0.946	0.961	0.706	0.712
	Left Cheek	0.454	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.979	0.996	0.928	0.959	1.029	0.700	0.738
	Left Tilted	0.329	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.725	0.621	0.498	0.867	0.897	0.361	0.482
LTE Band 13_Ant 1	Right Cheek	0.562	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.010	0.851	0.817	0.851	0.823	0.810	0.619
	Right Tilted	0.373	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.492	0.470	0.443	0.656	0.671	0.416	0.422
	Left Cheek	0.283	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.808	0.825	0.757	0.788	0.858	0.529	0.567
	Left Tilted	0.225	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.621	0.517	0.394	0.763	0.793	0.257	0.378
LTE Band 14_Ant 1	Right Cheek	0.993	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.441	1.282	1.248	1.282	1.254	1.241	1.050
	Right Tilted	0.638	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.757	0.735	0.708	0.921	0.936	0.681	0.687
	Left Cheek	0.573	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.098	1.115	1.047	1.078	1.148	0.819	0.857
	Left Tilted	0.432	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.828	0.724	0.601	0.970	1.000	0.464	0.585



FCC SAR TEST REPORT

Report No. : FA022521-02A

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3	1+2+4	1+4+6	1+5+6	1+6+7	1+8	1+6
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
LTE Band 25_Ant 0	Right Cheek	0.046	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.494	0.335	0.301	0.335	0.307	0.294	0.103
	Right Tilted	0.031	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.150	0.128	0.101	0.314	0.329	0.074	0.080
	Left Cheek	0.111	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.636	0.653	0.585	0.616	0.686	0.357	0.395
	Left Tilted	0.027	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.423	0.319	0.196	0.565	0.595	0.059	0.180
LTE Band 26_Ant 1	Right Cheek	0.875	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.323	1.164	1.130	1.164	1.136	1.123	0.932
	Right Tilted	0.610	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.729	0.707	0.680	0.893	0.908	0.653	0.659
	Left Cheek	0.473	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.998	1.015	0.947	0.978	1.048	0.719	0.757
	Left Tilted	0.388	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.784	0.680	0.557	0.926	0.956	0.420	0.541
LTE Band 30_Ant 0	Right Cheek	0.112	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.560	0.401	0.367	0.401	0.373	0.360	0.169
	Right Tilted	0.043	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.162	0.140	0.113	0.326	0.341	0.086	0.092
	Left Cheek	0.172	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.697	0.714	0.646	0.677	0.747	0.418	0.456
	Left Tilted	0.029	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.425	0.321	0.198	0.567	0.597	0.061	0.182
LTE Band 41_Ant 0	Right Cheek	0.293	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.741	0.582	0.548	0.582	0.554	0.541	0.350
	Right Tilted	0.074	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.193	0.171	0.144	0.357	0.372	0.117	0.123
	Left Cheek	0.393	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.918	0.935	0.867	0.898	0.968	0.639	0.677
	Left Tilted	0.188	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.584	0.480	0.357	0.726	0.756	0.220	0.341
LTE Band 48_Ant 2	Right Cheek	0.193	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.641	0.482	0.448	0.482	0.454	0.441	0.250
	Right Tilted	0.071	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.190	0.168	0.141	0.354	0.369	0.114	0.120
	Left Cheek	0.102	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.627	0.644	0.576	0.607	0.677	0.348	0.386
	Left Tilted	0.135	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.531	0.427	0.304	0.673	0.703	0.167	0.288
LTE Band 66_Ant 0	Right Cheek	0.305	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.753	0.594	0.560	0.594	0.566	0.553	0.362
	Right Tilted	0.243	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.362	0.340	0.313	0.526	0.541	0.286	0.292
	Left Cheek	0.536	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.061	1.078	1.010	1.041	1.111	0.782	0.820
	Left Tilted	0.298	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.694	0.590	0.467	0.836	0.866	0.330	0.451
LTE Band 71_Ant 1	Right Cheek	0.746	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.194	1.035	1.001	1.035	1.007	0.994	0.803
	Right Tilted	0.546	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.665	0.643	0.616	0.829	0.844	0.589	0.595
	Left Cheek	0.344	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.869	0.886	0.818	0.849	0.919	0.590	0.628
	Left Tilted	0.253	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.649	0.545	0.422	0.791	0.821	0.285	0.406

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3	1+2+4	1+4+6	1+5+6	1+6+7	1+8	1+6
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
		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)							
n5_Ant 1	Right Cheek	0.986	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.434	1.275	1.241	1.275	1.247	1.234	1.043
	Right Tilted	0.671	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.790	0.768	0.741	0.954	0.969	0.714	0.720
	Left Cheek	0.500	0.352	0.525	0.190	0.221	0.284	0.291	0.246	1.025	1.042	0.974	1.005	1.075	0.746	0.784
	Left Tilted	0.425	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.821	0.717	0.594	0.963	0.993	0.457	0.578
n12_Ant 1	Right Cheek	0.792	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.240	1.081	1.047	1.081	1.053	1.040	0.849
	Right Tilted	0.506	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.625	0.603	0.576	0.789	0.804	0.549	0.555
	Left Cheek	0.354	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.879	0.896	0.828	0.859	0.929	0.600	0.638
	Left Tilted	0.254	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.650	0.546	0.423	0.792	0.822	0.286	0.407
n25_Ant 0	Right Cheek	0.089	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.537	0.378	0.344	0.378	0.350	0.337	0.146
	Right Tilted	0.019	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.138	0.116	0.089	0.302	0.317	0.062	0.068
	Left Cheek	0.094	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.619	0.636	0.568	0.599	0.669	0.340	0.378
	Left Tilted	0.028	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.424	0.320	0.197	0.566	0.596	0.060	0.181
n66_Ant 0	Right Cheek	0.312	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.760	0.601	0.567	0.601	0.573	0.560	0.369
	Right Tilted	0.151	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.270	0.248	0.221	0.434	0.449	0.194	0.200
	Left Cheek	0.208	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.733	0.750	0.682	0.713	0.783	0.454	0.492
	Left Tilted	0.147	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.543	0.439	0.316	0.685	0.715	0.179	0.300
n71_Ant 1	Right Cheek	1.000	0.091	0.448	0.198	0.232	0.057	0.204	0.248	1.448	1.289	1.255	1.289	1.261	1.248	1.057
	Right Tilted	0.582	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.701	0.679	0.652	0.865	0.880	0.625	0.631
	Left Cheek	0.441	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.966	0.983	0.915	0.946	1.016	0.687	0.725
	Left Tilted	0.344	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.740	0.636	0.513	0.882	0.912	0.376	0.497
n41_Ant 0	Right Cheek	0.149	0.091	0.448	0.198	0.232	0.057	0.204	0.248	0.597	0.438	0.404	0.438	0.410	0.397	0.206
	Right Tilted	0.052	0.076	0.119	0.021	0.234	0.049	0.249	0.043	0.171	0.149	0.122	0.335	0.350	0.095	0.101
	Left Cheek	0.175	0.352	0.525	0.190	0.221	0.284	0.291	0.246	0.700	0.717	0.649	0.680	0.750	0.421	0.459
	Left Tilted	0.100	0.276	0.396	0.016	0.385	0.153	0.415	0.032	0.496	0.392	0.269	0.638	0.668	0.132	0.253



15.3 Hotspot Exposure Conditions

<Simultaneous Transmission is active_WWAN ON>

<Config 0>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3	1+2+4	1+4+6	1+5+6	1+6+7	1+8	1+6
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
GSM850_Ant 0	Front	0.323	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.582	0.521	0.528	0.530	0.514	0.566	0.447
	Back	0.515	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.987	1.000	1.010	1.027	0.850	0.915	0.742
	Left side	0.391	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.748	0.865	0.865	0.862	0.393	0.788	0.392
	Right side	0.376	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.793	0.563	0.529	0.815	0.803	0.386	0.528
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.118								0.118	0.118	0.118	0.118	0.118	0.118	0.118
GSM1900_Ant 2	Front	0.877	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.136	1.075	1.082	1.084	1.068	1.120	1.001
	Back	0.577	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.049	1.062	1.072	1.089	0.912	0.977	0.804
	Left side	0.326	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.683	0.800	0.800	0.797	0.328	0.723	0.327
	Right side	0.585	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.002	0.772	0.738	1.024	1.012	0.595	0.737
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.333								0.333	0.333	0.333	0.333	0.333	0.333	0.333
WCDMA II_Ant 2	Front	0.929	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.188	1.127	1.134	1.136	1.120	1.172	1.053
	Back	0.975	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.447	1.460	1.470	1.487	1.310	1.375	1.202
	Left side	0.575	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.932	1.049	1.049	1.046	0.577	0.972	0.576
	Right side	0.787	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.204	0.974	0.940	1.226	1.214	0.797	0.939
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.435								0.435	0.435	0.435	0.435	0.435	0.435	0.435
WCDMA IV_Ant 2	Front	0.929	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.188	1.127	1.134	1.136	1.120	1.172	1.053
	Back	0.774	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.246	1.259	1.269	1.286	1.109	1.174	1.001
	Left side	0.225	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.582	0.699	0.699	0.696	0.227	0.622	0.226
	Right side	0.610	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.027	0.797	0.763	1.049	1.037	0.620	0.762
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.501								0.501	0.501	0.501	0.501	0.501	0.501	0.501
WCDMA V_Ant 0	Front	0.332	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.591	0.530	0.537	0.539	0.523	0.575	0.456
	Back	0.534	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.006	1.019	1.029	1.046	0.869	0.934	0.761
	Left side	0.387	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.744	0.861	0.861	0.858	0.389	0.784	0.388
	Right side	0.387	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.804	0.574	0.540	0.826	0.814	0.397	0.539
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.131								0.131	0.131	0.131	0.131	0.131	0.131	0.131
CDMA BC0_Ant 0	Front	0.420	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.679	0.618	0.625	0.627	0.611	0.663	0.544
	Back	0.760	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.232	1.245	1.255	1.272	1.095	1.160	0.987
	Left side	0.526	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.883	1.000	1.000	0.997	0.528	0.923	0.527
	Right side	0.475	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.892	0.662	0.628	0.914	0.902	0.485	0.627
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.165								0.165	0.165	0.165	0.165	0.165	0.165	0.165
CDMA BC1_Ant 2	Front	0.847	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.106	1.045	1.052	1.054	1.038	1.090	0.971
	Back	0.973	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.445	1.458	1.468	1.485	1.308	1.373	1.200
	Left side	0.505	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.862	0.979	0.979	0.976	0.507	0.902	0.506
	Right side	0.728	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.145	0.915	0.881	1.167	1.155	0.738	0.880
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.424								0.424	0.424	0.424	0.424	0.424	0.424	0.424



FCC SAR TEST REPORT

Report No. : FA022521-02A

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)							
CDMA BC10_Ant 0	Front	0.453	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.712	0.651	0.658	0.660	0.644	0.696	0.577
	Back	0.673	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.145	1.158	1.168	1.185	1.008	1.073	0.900
	Left side	0.543	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.900	1.017	1.017	1.014	0.545	0.940	0.544
	Right side	0.496	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.913	0.683	0.649	0.935	0.923	0.506	0.648
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.147								0.147	0.147	0.147	0.147	0.147	0.147	0.147
LTE Band 7_Ant 2	Front	0.624	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.883	0.822	0.829	0.831	0.815	0.867	0.748
	Back	0.973	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.445	1.458	1.468	1.485	1.308	1.373	1.200
	Left side	0.159	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.516	0.633	0.633	0.630	0.161	0.556	0.160
	Right side	0.695	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.112	0.882	0.848	1.134	1.122	0.705	0.847
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.727								0.727	0.727	0.727	0.727	0.727	0.727	0.727
LTE Band 12_Ant 0	Front	0.367	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.626	0.565	0.572	0.574	0.558	0.610	0.491
	Back	0.525	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.997	1.010	1.020	1.037	0.860	0.925	0.752
	Left side	0.366	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.723	0.840	0.840	0.837	0.368	0.763	0.367
	Right side	0.340	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.757	0.527	0.493	0.779	0.767	0.350	0.492
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.114								0.114	0.114	0.114	0.114	0.114	0.114	0.114
LTE Band 13_Ant 0	Front	0.485	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.744	0.683	0.690	0.692	0.676	0.728	0.609
	Back	0.700	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.172	1.185	1.195	1.212	1.035	1.100	0.927
	Left side	0.617	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.974	1.091	1.091	1.088	0.619	1.014	0.618
	Right side	0.592	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.009	0.779	0.745	1.031	1.019	0.602	0.744
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.133								0.133	0.133	0.133	0.133	0.133	0.133	0.133
LTE Band 14_Ant 0	Front	0.449	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.708	0.647	0.654	0.656	0.640	0.692	0.573
	Back	0.619	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.091	1.104	1.114	1.131	0.954	1.019	0.846
	Left side	0.461	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.818	0.935	0.935	0.932	0.463	0.858	0.462
	Right side	0.524	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.941	0.711	0.677	0.963	0.951	0.534	0.676
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.157								0.157	0.157	0.157	0.157	0.157	0.157	0.157
LTE Band 25_Ant 2	Front	0.934	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.193	1.132	1.139	1.141	1.125	1.177	1.058
	Back	0.927	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.399	1.412	1.422	1.439	1.262	1.327	1.154
	Left side	0.333	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.690	0.807	0.807	0.804	0.335	0.730	0.334
	Right side	0.878	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.295	1.065	1.031	1.317	1.305	0.888	1.030
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.720								0.720	0.720	0.720	0.720	0.720	0.720	0.720
LTE Band 26_Ant 0	Front	0.373	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.632	0.571	0.578	0.580	0.564	0.616	0.497
	Back	0.537	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.009	1.022	1.032	1.049	0.872	0.937	0.764
	Left side	0.413	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.770	0.887	0.887	0.884	0.415	0.810	0.414
	Right side	0.421	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.838	0.608	0.574	0.860	0.848	0.431	0.573
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.161								0.161	0.161	0.161	0.161	0.161	0.161	0.161
LTE Band 30_Ant 2	Front	0.405	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.664	0.603	0.610	0.612	0.596	0.648	0.529
	Back	0.339	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.811	0.824	0.834	0.851	0.674	0.739	0.566
	Left side	0.068	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.425	0.542	0.542	0.539	0.070	0.465	0.069
	Right side	0.291	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.708	0.478	0.444	0.730	0.718	0.301	0.443
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.358								0.358	0.358	0.358	0.358	0.358	0.358	0.358

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)							
LTE Band 41_Ant 2	Front	0.591	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.850	0.789	0.796	0.798	0.782	0.834	0.715
	Back	0.999	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.471	1.484	1.494	1.511	1.334	1.399	1.226
	Left side	0.075	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.432	0.549	0.549	0.546	0.077	0.472	0.076
	Right side	0.593	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.010	0.780	0.746	1.032	1.020	0.603	0.745
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.536								0.536	0.536	0.536	0.536	0.536	0.536	0.536
LTE Band 48_Ant 7	Front	0.255	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.514	0.453	0.460	0.462	0.446	0.498	0.379
	Back	0.888	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.360	1.373	1.383	1.400	1.223	1.288	1.115
	Left side	0.674	0.001	0.357	0.473	0.470	0.001	0.001	0.397	1.031	1.148	1.148	1.145	0.676	1.071	0.675
	Right side	0.022	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.439	0.209	0.175	0.461	0.449	0.032	0.174
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.135								0.135	0.135	0.135	0.135	0.135	0.135	0.135
LTE Band 66_Ant 2	Front	0.975	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.234	1.173	1.180	1.182	1.166	1.218	1.099
	Back	0.751	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.223	1.236	1.246	1.263	1.086	1.151	0.978
	Left side	0.287	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.644	0.761	0.761	0.758	0.289	0.684	0.288
	Right side	0.598	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.015	0.785	0.751	1.037	1.025	0.608	0.750
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.419								0.419	0.419	0.419	0.419	0.419	0.419	0.419
LTE Band 71_Ant 0	Front	0.174	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.433	0.372	0.379	0.381	0.365	0.417	0.298
	Back	0.623	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.095	1.108	1.118	1.135	0.958	1.023	0.850
	Left side	0.391	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.748	0.865	0.865	0.862	0.393	0.788	0.392
	Right side	0.336	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.753	0.523	0.489	0.775	0.763	0.346	0.488
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.112								0.112	0.112	0.112	0.112	0.112	0.112	0.112



FCC SAR TEST REPORT

Report No. : FA022521-02A

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3	1+2+4	1+4+6	1+5+6	1+6+7	1+8	1+6
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
n5_Ant 0	Front	0.116	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.375	0.314	0.321	0.323	0.307	0.359	0.240
	Back	0.137	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.609	0.622	0.632	0.649	0.472	0.537	0.364
	Left side	0.163	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.520	0.637	0.637	0.634	0.165	0.560	0.164
	Right side	0.162	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.579	0.349	0.315	0.601	0.589	0.172	0.314
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
n12_Ant 0	Bottom side	0.061								0.061	0.061	0.061	0.061	0.061	0.061	0.061
	Front	0.388	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.647	0.586	0.593	0.595	0.579	0.631	0.512
	Back	0.561	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.033	1.046	1.056	1.073	0.896	0.961	0.788
	Left side	0.513	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.870	0.987	0.987	0.984	0.515	0.910	0.514
	Right side	0.405	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.822	0.592	0.558	0.844	0.832	0.415	0.557
n25_Ant 2	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.086								0.086	0.086	0.086	0.086	0.086	0.086	0.086
	Front	0.950	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.209	1.148	1.155	1.157	1.141	1.193	1.074
	Back	0.982	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.454	1.467	1.477	1.494	1.317	1.382	1.209
	Left side	0.478	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.835	0.952	0.952	0.949	0.480	0.875	0.479
n66_Ant 2	Right side	0.901	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.318	1.088	1.054	1.340	1.328	0.911	1.053
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.657								0.657	0.657	0.657	0.657	0.657	0.657	0.657
	Front	0.999	0.117	0.259	0.081	0.083	0.124	0.067	0.243	1.258	1.197	1.204	1.206	1.190	1.242	1.123
	Back	0.828	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.300	1.313	1.323	1.340	1.163	1.228	1.055
n71_Ant 0	Left side	0.396	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.753	0.870	0.870	0.867	0.398	0.793	0.397
	Right side	0.741	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.158	0.928	0.894	1.180	1.168	0.751	0.893
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.579								0.579	0.579	0.579	0.579	0.579	0.579	0.579
	Front	0.461	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.720	0.659	0.666	0.668	0.652	0.704	0.585
n41_Ant 2	Back	0.714	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.186	1.199	1.209	1.226	1.049	1.114	0.941
	Left side	0.532	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.889	1.006	1.006	1.003	0.534	0.929	0.533
	Right side	0.419	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.836	0.606	0.572	0.858	0.846	0.429	0.571
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.131								0.131	0.131	0.131	0.131	0.131	0.131	0.131
n41_Ant 5	Front	0.362	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.621	0.560	0.567	0.569	0.553	0.605	0.486
	Back	0.402	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.874	0.887	0.897	0.914	0.737	0.802	0.629
	Left side	0.054	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.411	0.528	0.528	0.525	0.056	0.451	0.055
	Right side	0.454	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.871	0.641	0.607	0.893	0.881	0.464	0.606
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
n41_HPUE_Ant 5-	Bottom side	0.433								0.433	0.433	0.433	0.433	0.433	0.433	0.433
	Front	0.300	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.559	0.498	0.505	0.507	0.491	0.543	0.424
	Back	0.483	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.955	0.968	0.978	0.995	0.818	0.883	0.710
	Left side	0.379	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.736	0.853	0.853	0.850	0.381	0.776	0.380
	Right side	0.002	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.419	0.189	0.155	0.441	0.429	0.012	0.154
n41_HPUE_Ant 5-	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.091								0.091	0.091	0.091	0.091	0.091	0.091	0.091
	Front	0.412	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.671	0.610	0.617	0.619	0.603	0.655	0.536
	Back	0.770	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.242	1.255	1.265	1.282	1.105	1.170	0.997
	Left side	0.494	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.851	0.968	0.968	0.965	0.496	0.891	0.495
n41_HPUE_Ant 5-	Right side	0.030	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.447	0.217	0.183	0.469	0.457	0.040	0.182
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.156								0.156	0.156	0.156	0.156	0.156	0.156	0.156



FCC SAR TEST REPORT

Report No. : FA022521-02A

<Config 1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
GSM850_Ant 1	Front	0.429	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.688	0.627	0.634	0.636	0.620	0.672	0.553
	Back	0.669	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.141	1.154	1.164	1.181	1.004	1.069	0.896
	Left side	0.195	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.552	0.669	0.669	0.666	0.197	0.592	0.196
	Right side	0.221	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.638	0.408	0.374	0.660	0.648	0.231	0.373
	Top side	0.342	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.624	0.479	0.466	0.674	0.684	0.388	0.448
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
GSM1900_Ant 0	Front	0.394	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.653	0.592	0.599	0.601	0.585	0.637	0.518
	Back	0.867	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.339	1.352	1.362	1.379	1.202	1.267	1.094
	Left side	0.397	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.754	0.871	0.871	0.868	0.399	0.794	0.398
	Right side	0.023	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.440	0.210	0.176	0.462	0.450	0.033	0.175
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.666								0.666	0.666	0.666	0.666	0.666	0.666	0.666
WCDMA II_Ant 0	Front	0.535	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.794	0.733	0.740	0.742	0.726	0.778	0.659
	Back	0.944	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.416	1.429	1.439	1.456	1.279	1.344	1.171
	Left side	0.310	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.667	0.784	0.784	0.781	0.312	0.707	0.311
	Right side	0.058	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.475	0.245	0.211	0.497	0.485	0.068	0.210
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.934								0.934	0.934	0.934	0.934	0.934	0.934	0.934
WCDMA IV_Ant 0	Front	0.349	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.608	0.547	0.554	0.556	0.540	0.592	0.473
	Back	0.953	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.425	1.438	1.448	1.465	1.288	1.353	1.180
	Left side	0.264	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.621	0.738	0.738	0.735	0.266	0.661	0.265
	Right side	0.009	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.426	0.196	0.162	0.448	0.436	0.019	0.161
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.684								0.684	0.684	0.684	0.684	0.684	0.684	0.684
WCDMA V_Ant 1	Front	0.346	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.605	0.544	0.551	0.553	0.537	0.589	0.470
	Back	0.651	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.123	1.136	1.146	1.163	0.986	1.051	0.878
	Left side	0.167	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.524	0.641	0.641	0.638	0.169	0.564	0.168
	Right side	0.199	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.616	0.386	0.352	0.638	0.626	0.209	0.351
	Top side	0.299	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.581	0.436	0.423	0.631	0.641	0.345	0.405
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
CDMA BC0_Ant 1	Front	0.392	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.651	0.590	0.597	0.599	0.583	0.635	0.516
	Back	0.807	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.279	1.292	1.302	1.319	1.142	1.207	1.034
	Left side	0.205	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.562	0.679	0.679	0.676	0.207	0.602	0.206
	Right side	0.233	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.650	0.420	0.386	0.672	0.660	0.243	0.385
	Top side	0.337	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.619	0.474	0.461	0.669	0.679	0.383	0.443
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
CDMA BC1_Ant 0	Front	0.431	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.690	0.629	0.636	0.638	0.622	0.674	0.555
	Back	0.988	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.460	1.473	1.483	1.500	1.323	1.388	1.215
	Left side	0.334	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.691	0.808	0.808	0.805	0.336	0.731	0.335
	Right side	0.035	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.452	0.222	0.188	0.474	0.462	0.045	0.187
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.743								0.743	0.743	0.743	0.743	0.743	0.743	0.743
CDMA BC10_Ant 1	Front	0.362	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.621	0.560	0.567	0.569	0.553	0.605	0.486
	Back	0.646	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.118	1.131	1.141	1.158	0.981	1.046	0.873
	Left side	0.232	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.589	0.706	0.706	0.703	0.234	0.629	0.233
	Right side	0.239	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.656	0.426	0.392	0.678	0.666	0.249	0.391
	Top side	0.297	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.579	0.434	0.421	0.629	0.639	0.343	0.403
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.314	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.573	0.512	0.519	0.521	0.505	0.557	0.438
	Back	0.901	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.373	1.386	1.396	1.413	1.236	1.301	1.128
	Left side	0.218	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.575	0.692	0.692	0.689	0.220	0.615	0.219
	Right side	0.070	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.487	0.257	0.223	0.509	0.497	0.080	0.222
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.899								0.899	0.899	0.899	0.899	0.899	0.899	0.899



FCC SAR TEST REPORT

Report No. : FA022521-02A

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)							
LTE Band 12_Ant 1	Front	0.317	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.576	0.515	0.522	0.524	0.508	0.560	0.441
	Back	0.570	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.042	1.055	1.065	1.082	0.905	0.970	0.797
	Left side	0.397	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.754	0.871	0.871	0.868	0.399	0.794	0.398
	Right side	0.349	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.766	0.536	0.502	0.788	0.776	0.359	0.501
	Top side	0.205	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.487	0.342	0.329	0.537	0.547	0.251	0.311
LTE Band 13_Ant 1	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Front	0.235	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.494	0.433	0.440	0.442	0.426	0.478	0.359
	Back	0.424	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.896	0.909	0.919	0.936	0.759	0.824	0.651
	Left side	0.224	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.581	0.698	0.698	0.695	0.226	0.621	0.225
	Right side	0.216	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.633	0.403	0.369	0.655	0.643	0.226	0.368
LTE Band 14_Ant 1	Top side	0.166	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.448	0.303	0.290	0.498	0.508	0.212	0.272
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Front	0.393	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.652	0.591	0.598	0.600	0.584	0.636	0.517
	Back	0.665	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.137	1.150	1.160	1.177	1.000	1.065	0.892
	Left side	0.278	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.635	0.752	0.752	0.749	0.280	0.675	0.279
LTE Band 25_Ant 0	Right side	0.334	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.751	0.521	0.487	0.773	0.761	0.344	0.486
	Top side	0.282	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.564	0.419	0.406	0.614	0.624	0.328	0.388
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Front	0.373	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.632	0.571	0.578	0.580	0.564	0.616	0.497
	Back	0.875	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.347	1.360	1.370	1.387	1.210	1.275	1.102
LTE Band 26_Ant 1	Left side	0.237	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.594	0.711	0.711	0.708	0.239	0.634	0.238
	Right side	0.025	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.442	0.212	0.178	0.464	0.452	0.035	0.177
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.614								0.614	0.614	0.614	0.614	0.614	0.614	0.614
	Front	0.366	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.625	0.564	0.571	0.573	0.557	0.609	0.490
LTE Band 30_Ant 0	Back	0.660	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.132	1.145	1.155	1.172	0.995	1.060	0.887
	Left side	0.162	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.519	0.636	0.636	0.633	0.164	0.559	0.163
	Right side	0.159	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.576	0.346	0.312	0.598	0.586	0.169	0.311
	Top side	0.287	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.569	0.424	0.411	0.619	0.629	0.333	0.393
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 41_Ant 0	Front	0.474	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.733	0.672	0.679	0.681	0.665	0.717	0.598
	Back	0.925	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.397	1.410	1.420	1.437	1.260	1.325	1.152
	Left side	0.124	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.481	0.598	0.598	0.595	0.126	0.521	0.125
	Right side	0.105	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.522	0.292	0.258	0.544	0.532	0.115	0.257
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
LTE Band 48_Ant 2	Bottom side	0.948								0.948	0.948	0.948	0.948	0.948	0.948	0.948
	Front	0.272	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.531	0.470	0.477	0.479	0.463	0.515	0.396
	Back	0.933	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.405	1.418	1.428	1.445	1.268	1.333	1.160
	Left side	0.260	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.617	0.734	0.734	0.731	0.262	0.657	0.261
	Right side	0.090	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.507	0.277	0.243	0.529	0.517	0.100	0.242
LTE Band 66_Ant 0	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.643								0.643	0.643	0.643	0.643	0.643	0.643	0.643
	Front	0.404	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.663	0.602	0.609	0.611	0.595	0.647	0.528
	Back	0.947	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.419	1.432	1.442	1.459	1.282	1.347	1.174
	Left side	0.001	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.358	0.475	0.475	0.472	0.003	0.398	0.002
LTE Band 71_Ant 1	Right side	0.896	0.186	0.417	0.001	0.287	0.152	0.275	0.010	1.313	1.083	1.049	1.335	1.323	0.906	1.048
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.515								0.515	0.515	0.515	0.515	0.515	0.515	0.515
	Front	0.363	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.622	0.561	0.568	0.570	0.554	0.606	0.487
	Back	1.000	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.472	1.485	1.495	1.512	1.335	1.400	1.227
LTE Band 71_Ant 1	Left side	0.349	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.706	0.823	0.823	0.820	0.351	0.746	0.350
	Right side	0.011	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.428	0.198	0.164	0.450	0.438	0.021	0.163
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.793								0.793	0.793	0.793	0.793	0.793	0.793	0.793
	Front	0.305	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.564	0.503	0.510	0.512	0.496	0.548	0.429
LTE Band 71_Ant 1	Back	0.605	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.077	1.090	1.100	1.117	0.940	1.005	0.832
	Left side	0.550	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.907	1.024	1.024	1.021	0.552	0.947	0.551
	Right side	0.250	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.667	0.437	0.403	0.689	0.677	0.260	0.402
	Top side	0.165	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.447	0.302	0.289	0.497	0.507	0.211	0.271
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000



FCC SAR TEST REPORT

Report No. : FA022521-02A

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3	1+2+4	1+4+6	1+5+6	1+6+7	1+8	1+6
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
n5_Ant 1	Front	0.386	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.645	0.584	0.591	0.593	0.577	0.629	0.510
	Back	0.655	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.127	1.140	1.150	1.167	0.990	1.055	0.882
	Left side	0.211	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.568	0.685	0.685	0.682	0.213	0.608	0.212
	Right side	0.235	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.652	0.422	0.388	0.674	0.662	0.245	0.387
	Top side	0.308	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.590	0.445	0.432	0.640	0.650	0.354	0.414
n12_Ant 1	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Front	0.246	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.505	0.444	0.451	0.453	0.437	0.489	0.370
	Back	0.448	0.217	0.472	0.268	0.285	0.227	0.108	0.400	0.920	0.933	0.943	0.960	0.783	0.848	0.675
	Left side	0.160	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.517	0.634	0.634	0.631	0.162	0.557	0.161
	Right side	0.136	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.553	0.323	0.289	0.575	0.563	0.146	0.288
n25_Ant 0	Top side	0.142	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.424	0.279	0.266	0.474	0.484	0.188	0.248
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Front	0.504	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.763	0.702	0.709	0.711	0.695	0.747	0.628
	Back	0.996	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.468	1.481	1.491	1.508	1.331	1.396	1.223
	Left side	0.348	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.705	0.822	0.822	0.819	0.350	0.745	0.349
n66_Ant 0	Right side	0.034	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.451	0.221	0.187	0.473	0.461	0.044	0.186
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.778								0.778	0.778	0.778	0.778	0.778	0.778	0.778
	Front	0.372	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.631	0.570	0.577	0.579	0.563	0.615	0.496
	Back	0.988	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.460	1.473	1.483	1.500	1.323	1.388	1.215
n71_Ant 1	Left side	0.116	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.473	0.590	0.590	0.587	0.118	0.513	0.117
	Right side	0.070	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.487	0.257	0.223	0.509	0.497	0.080	0.222
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
	Bottom side	0.733								0.733	0.733	0.733	0.733	0.733	0.733	0.733
	Front	0.350	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.609	0.548	0.555	0.557	0.541	0.593	0.474
n41_Ant 0	Back	0.671	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.143	1.156	1.166	1.183	1.006	1.071	0.898
	Left side	0.615	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.972	1.089	1.089	1.086	0.617	1.012	0.616
	Right side	0.250	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.667	0.437	0.403	0.689	0.677	0.260	0.402
	Top side	0.194	0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.476	0.331	0.318	0.526	0.536	0.240	0.300
	Bottom side									0.000	0.000	0.000	0.000	0.000	0.000	0.000
n41_Ant 0	Front	0.223	0.117	0.259	0.081	0.083	0.124	0.067	0.243	0.482	0.421	0.428	0.430	0.414	0.466	0.347
	Back	0.737	0.217	0.472	0.268	0.285	0.227	0.108	0.400	1.209	1.222	1.232	1.249	1.072	1.137	0.964
	Left side	0.229	0.001	0.357	0.473	0.470	0.001	0.001	0.397	0.586	0.703	0.703	0.700	0.231	0.626	0.230
	Right side	0.095	0.186	0.417	0.001	0.287	0.152	0.275	0.010	0.512	0.282	0.248	0.534	0.522	0.105	0.247
	Top side		0.119	0.282	0.018	0.226	0.106	0.236	0.046	0.282	0.137	0.124	0.332	0.342	0.046	0.106
n41_Ant 0	Bottom side	0.450								0.450	0.450	0.450	0.450	0.450	0.450	0.450

<Simultaneous Transmission is active_WLAN OFF>
<Config 0>

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 0	Front	0.323	0.187	0.510
	Back	0.515	0.323	0.838
	Left side	0.391	0.001	0.392
	Right side	0.376	0.268	0.644
	Top side		0.177	0.177
	Bottom side	0.118		0.118
GSM1900_Ant 2	Front	0.877	0.187	1.064
	Back	0.577	0.323	0.900
	Left side	0.326	0.001	0.327
	Right side	0.585	0.268	0.853
	Top side		0.177	0.177
	Bottom side	0.333		0.333
WCDMA II_Ant 2	Front	0.929	0.187	1.116
	Back	0.975	0.323	1.298
	Left side	0.575	0.001	0.576
	Right side	0.787	0.268	1.055
	Top side		0.177	0.177
	Bottom side	0.435		0.435
WCDMA IV_Ant 2	Front	0.929	0.187	1.116
	Back	0.774	0.323	1.097
	Left side	0.225	0.001	0.226
	Right side	0.610	0.268	0.878
	Top side		0.177	0.177
	Bottom side	0.501		0.501
WCDMA V_Ant 0	Front	0.332	0.187	0.519
	Back	0.534	0.323	0.857
	Left side	0.387	0.001	0.388
	Right side	0.387	0.268	0.655
	Top side		0.177	0.177
	Bottom side	0.131		0.131
CDMA BC0_Ant 0	Front	0.420	0.187	0.607
	Back	0.760	0.323	1.083
	Left side	0.526	0.001	0.527
	Right side	0.475	0.268	0.743
	Top side		0.177	0.177
	Bottom side	0.165		0.165
CDMA BC1_Ant 2	Front	0.847	0.187	1.034
	Back	0.973	0.323	1.296
	Left side	0.505	0.001	0.506
	Right side	0.728	0.268	0.996
	Top side		0.177	0.177
	Bottom side	0.424		0.424
CDMA BC10_Ant 0	Front	0.453	0.187	0.640
	Back	0.673	0.323	0.996
	Left side	0.543	0.001	0.544
	Right side	0.496	0.268	0.764
	Top side		0.177	0.177
	Bottom side	0.147		0.147
LTE Band 7_Ant 2	Front	0.624	0.187	0.811
	Back	0.973	0.323	1.296
	Left side	0.159	0.001	0.160
	Right side	0.695	0.268	0.963
	Top side		0.177	0.177
	Bottom side	0.727		0.727



WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 12_Ant 0	Front	0.367	0.187	0.554
	Back	0.525	0.323	0.848
	Left side	0.366	0.001	0.367
	Right side	0.340	0.268	0.608
	Top side		0.177	0.177
	Bottom side	0.114		0.114
LTE Band 13_Ant 0	Front	0.485	0.187	0.672
	Back	0.700	0.323	1.023
	Left side	0.617	0.001	0.618
	Right side	0.592	0.268	0.860
	Top side		0.177	0.177
	Bottom side	0.133		0.133
LTE Band 14_Ant 0	Front	0.449	0.187	0.636
	Back	0.619	0.323	0.942
	Left side	0.461	0.001	0.462
	Right side	0.524	0.268	0.792
	Top side		0.177	0.177
	Bottom side	0.157		0.157
LTE Band 25_Ant 2	Front	0.934	0.187	1.121
	Back	0.927	0.323	1.250
	Left side	0.333	0.001	0.334
	Right side	0.878	0.268	1.146
	Top side		0.177	0.177
	Bottom side	0.720		0.720
LTE Band 26_Ant 0	Front	0.373	0.187	0.560
	Back	0.537	0.323	0.860
	Left side	0.413	0.001	0.414
	Right side	0.421	0.268	0.689
	Top side		0.177	0.177
	Bottom side	0.161		0.161
LTE Band 30_Ant 2	Front	0.405	0.187	0.592
	Back	0.339	0.323	0.662
	Left side	0.068	0.001	0.069
	Right side	0.291	0.268	0.559
	Top side		0.177	0.177
	Bottom side	0.358		0.358
LTE Band 41_Ant 2	Front	0.591	0.187	0.778
	Back	0.999	0.323	1.322
	Left side	0.075	0.001	0.076
	Right side	0.593	0.268	0.861
	Top side		0.177	0.177
	Bottom side	0.536		0.536
LTE Band 48_Ant 7	Front	0.255	0.187	0.442
	Back	0.888	0.323	1.211
	Left side	0.674	0.001	0.675
	Right side	0.022	0.268	0.290
	Top side		0.177	0.177
	Bottom side	0.135		0.135
LTE Band 66_Ant 2	Front	0.975	0.187	1.162
	Back	0.751	0.323	1.074
	Left side	0.287	0.001	0.288
	Right side	0.598	0.268	0.866
	Top side		0.177	0.177
	Bottom side	0.419		0.419
LTE Band 71_Ant 0	Front	0.174	0.187	0.361
	Back	0.623	0.323	0.946
	Left side	0.391	0.001	0.392
	Right side	0.336	0.268	0.604
	Top side		0.177	0.177
	Bottom side	0.112		0.112

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
n5_Ant 0	Front	0.116	0.187	0.303
	Back	0.137	0.323	0.460
	Left side	0.163	0.001	0.164
	Right side	0.162	0.268	0.430
	Top side		0.177	0.177
	Bottom side	0.061		0.061
n12_Ant 0	Front	0.388	0.187	0.575
	Back	0.561	0.323	0.884
	Left side	0.513	0.001	0.514
	Right side	0.405	0.268	0.673
	Top side		0.177	0.177
	Bottom side	0.086		0.086
n25_Ant 2	Front	0.950	0.187	1.137
	Back	0.982	0.323	1.305
	Left side	0.478	0.001	0.479
	Right side	0.901	0.268	1.169
	Top side		0.177	0.177
	Bottom side	0.657		0.657
n66_Ant 2	Front	0.999	0.187	1.186
	Back	0.828	0.323	1.151
	Left side	0.396	0.001	0.397
	Right side	0.741	0.268	1.009
	Top side		0.177	0.177
	Bottom side	0.579		0.579
n71_Ant 0	Front	0.461	0.187	0.648
	Back	0.714	0.323	1.037
	Left side	0.532	0.001	0.533
	Right side	0.419	0.268	0.687
	Top side		0.177	0.177
	Bottom side	0.131		0.131
n41_Ant 2	Front	0.362	0.187	0.549
	Back	0.402	0.323	0.725
	Left side	0.054	0.001	0.055
	Right side	0.454	0.268	0.722
	Top side		0.177	0.177
	Bottom side	0.433		0.433
n41_Ant 5	Front	0.300	0.187	0.487
	Back	0.483	0.323	0.806
	Left side	0.379	0.001	0.380
	Right side	0.002	0.268	0.270
	Top side		0.177	0.177
	Bottom side	0.091		0.091
n41_HPUE_Ant 5	Front	0.412	0.187	0.599
	Back	0.770	0.323	1.093
	Left side	0.494	0.001	0.495
	Right side	0.030	0.268	0.298
	Top side		0.177	0.177
	Bottom side	0.156		0.156

<Config 1>

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Front	0.429	0.187	0.616
	Back	0.669	0.323	0.992
	Left side	0.195	0.001	0.196
	Right side	0.221	0.268	0.489
	Top side	0.342	0.177	0.519
	Bottom side			0.000
GSM1900_Ant 0	Front	0.394	0.187	0.581
	Back	0.867	0.323	1.190
	Left side	0.397	0.001	0.398
	Right side	0.023	0.268	0.291
	Top side		0.177	0.177
	Bottom side	0.666		0.666
WCDMA II_Ant 0	Front	0.535	0.187	0.722
	Back	0.944	0.323	1.267
	Left side	0.310	0.001	0.311
	Right side	0.058	0.268	0.326
	Top side		0.177	0.177
	Bottom side	0.934		0.934
WCDMA IV_Ant 0	Front	0.349	0.187	0.536
	Back	0.953	0.323	1.276
	Left side	0.264	0.001	0.265
	Right side	0.009	0.268	0.277
	Top side		0.177	0.177
	Bottom side	0.684		0.684
WCDMA V_Ant 1	Front	0.346	0.187	0.533
	Back	0.651	0.323	0.974
	Left side	0.167	0.001	0.168
	Right side	0.199	0.268	0.467
	Top side	0.299	0.177	0.476
	Bottom side			0.000
CDMA BC0_Ant 1	Front	0.392	0.187	0.579
	Back	0.807	0.323	1.130
	Left side	0.205	0.001	0.206
	Right side	0.233	0.268	0.501
	Top side	0.337	0.177	0.514
	Bottom side			0.000
CDMA BC1_Ant 0	Front	0.431	0.187	0.618
	Back	0.988	0.323	1.311
	Left side	0.334	0.001	0.335
	Right side	0.035	0.268	0.303
	Top side		0.177	0.177
	Bottom side	0.743		0.743
CDMA BC10_Ant 1	Front	0.362	0.187	0.549
	Back	0.646	0.323	0.969
	Left side	0.232	0.001	0.233
	Right side	0.239	0.268	0.507
	Top side	0.297	0.177	0.474
	Bottom side			0.000
LTE Band 7_Ant 0	Front	0.314	0.187	0.501
	Back	0.901	0.323	1.224
	Left side	0.218	0.001	0.219
	Right side	0.070	0.268	0.338
	Top side		0.177	0.177
	Bottom side	0.899		0.899
LTE Band 12_Ant 1	Front	0.317	0.187	0.504
	Back	0.570	0.323	0.893
	Left side	0.397	0.001	0.398
	Right side	0.349	0.268	0.617
	Top side	0.205	0.177	0.382
	Bottom side			0.000
LTE Band 13_Ant 1	Front	0.235	0.187	0.422
	Back	0.424	0.323	0.747
	Left side	0.224	0.001	0.225
	Right side	0.216	0.268	0.484
	Top side	0.166	0.177	0.343
	Bottom side			0.000



WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 14_Ant 1	Front	0.393	0.187	0.580
	Back	0.665	0.323	0.988
	Left side	0.278	0.001	0.279
	Right side	0.334	0.268	0.602
	Top side	0.282	0.177	0.459
	Bottom side			0.000
LTE Band 25_Ant 0	Front	0.373	0.187	0.560
	Back	0.875	0.323	1.198
	Left side	0.237	0.001	0.238
	Right side	0.025	0.268	0.293
	Top side		0.177	0.177
	Bottom side	0.614		0.614
LTE Band 26_Ant 1	Front	0.366	0.187	0.553
	Back	0.660	0.323	0.983
	Left side	0.162	0.001	0.163
	Right side	0.159	0.268	0.427
	Top side	0.287	0.177	0.464
	Bottom side			0.000
LTE Band 30_Ant 0	Front	0.474	0.187	0.661
	Back	0.925	0.323	1.248
	Left side	0.124	0.001	0.125
	Right side	0.105	0.268	0.373
	Top side		0.177	0.177
	Bottom side	0.948		0.948
LTE Band 41_Ant 0	Front	0.272	0.187	0.459
	Back	0.933	0.323	1.256
	Left side	0.260	0.001	0.261
	Right side	0.090	0.268	0.358
	Top side		0.177	0.177
	Bottom side	0.643		0.643
LTE Band 48_Ant 2	Front	0.404	0.187	0.591
	Back	0.947	0.323	1.270
	Left side	0.001	0.001	0.002
	Right side	0.896	0.268	1.164
	Top side		0.177	0.177
	Bottom side	0.515		0.515
LTE Band 66_Ant 0	Front	0.363	0.187	0.550
	Back	1.000	0.323	1.323
	Left side	0.349	0.001	0.350
	Right side	0.011	0.268	0.279
	Top side		0.177	0.177
	Bottom side	0.793		0.793
LTE Band 71_Ant 1	Front	0.305	0.187	0.492
	Back	0.605	0.323	0.928
	Left side	0.550	0.001	0.551
	Right side	0.250	0.268	0.518
	Top side	0.165	0.177	0.342
	Bottom side			0.000

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
n5_Ant 1	Front	0.386	0.187	0.573
	Back	0.655	0.323	0.978
	Left side	0.211	0.001	0.212
	Right side	0.235	0.268	0.503
	Top side	0.308	0.177	0.485
	Bottom side			0.000
n12_Ant 1	Front	0.246	0.187	0.433
	Back	0.448	0.323	0.771
	Left side	0.160	0.001	0.161
	Right side	0.136	0.268	0.404
	Top side	0.142	0.177	0.319
	Bottom side			0.000
n25_Ant 0	Front	0.504	0.187	0.691
	Back	0.996	0.323	1.319
	Left side	0.348	0.001	0.349
	Right side	0.034	0.268	0.302
	Top side		0.177	0.177
	Bottom side	0.778		0.778
n66_Ant 0	Front	0.372	0.187	0.559
	Back	0.988	0.323	1.311
	Left side	0.116	0.001	0.117
	Right side	0.070	0.268	0.338
	Top side		0.177	0.177
	Bottom side	0.733		0.733
n71_Ant 1	Front	0.350	0.187	0.537
	Back	0.671	0.323	0.994
	Left side	0.615	0.001	0.616
	Right side	0.250	0.268	0.518
	Top side	0.194	0.177	0.371
	Bottom side			0.000
n41_Ant 0	Front	0.223	0.187	0.410
	Back	0.737	0.323	1.060
	Left side	0.229	0.001	0.230
	Right side	0.095	0.268	0.363
	Top side		0.177	0.177
	Bottom side	0.450		0.450

15.4 Body-Worn Accessory Exposure Conditions

<Standalone_WWAN OFF>

Exposure Position	1	2	3	4	5	6	7	1+3 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)	5+6 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)				
Front	0.333	0.439	0.201	0.188	0.187	0.123	0.278	0.534	0.388	0.375	0.310
Back	0.723	0.762	0.714	1.134	0.323	0.766	0.447	1.437	1.037	1.457	1.089

<Simultaneous Transmission is active_WWAN ON>

<Config 0>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)							
GSM850_Ant 0	Front	0.323	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.582	0.521	0.528	0.557	0.538	0.566	0.447
	Back	0.515	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.987	1.024	1.034	1.092	0.868	0.915	0.742
GSM1900_Ant 2	Front	0.877	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.136	1.075	1.082	1.111	1.092	1.120	1.001
	Back	0.577	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.049	1.086	1.096	1.154	0.930	0.977	0.804
WCDMA II_Ant 2	Front	0.929	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.188	1.127	1.134	1.163	1.144	1.172	1.053
	Back	0.955	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.427	1.464	1.474	1.532	1.308	1.355	1.182
WCDMA IV_Ant 2	Front	0.929	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.188	1.127	1.134	1.163	1.144	1.172	1.053
	Back	0.774	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.246	1.283	1.293	1.351	1.127	1.174	1.001
WCDMA V_Ant 0	Front	0.332	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.591	0.530	0.537	0.566	0.547	0.575	0.456
	Back	0.534	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.006	1.043	1.053	1.111	0.887	0.934	0.761
CDMA BC0_Ant 0	Front	0.437	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.696	0.635	0.642	0.671	0.652	0.680	0.561
	Back	0.787	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.259	1.296	1.306	1.364	1.140	1.187	1.014
CDMA BC1_Ant 2	Front	0.919	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.178	1.117	1.124	1.153	1.134	1.162	1.043
	Back	0.876	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.348	1.385	1.395	1.453	1.229	1.276	1.103
CDMA BC10_Ant 0	Front	0.446	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.705	0.644	0.651	0.680	0.661	0.689	0.570
	Back	0.625	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.097	1.134	1.144	1.202	0.978	1.025	0.852
LTE Band 7_Ant 2	Front	0.268	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.527	0.466	0.473	0.502	0.483	0.511	0.392
	Back	0.839	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.311	1.348	1.358	1.416	1.192	1.239	1.066
LTE Band 12_Ant 0	Front	0.367	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.626	0.565	0.572	0.601	0.582	0.610	0.491
	Back	0.525	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.997	1.034	1.044	1.102	0.878	0.925	0.752
LTE Band 13_Ant 0	Front	0.485	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.744	0.683	0.690	0.719	0.700	0.728	0.609
	Back	0.700	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.172	1.209	1.219	1.277	1.053	1.100	0.927
LTE Band 14_Ant 0	Front	0.449	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.708	0.647	0.654	0.683	0.664	0.692	0.573
	Back	0.619	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.091	1.128	1.138	1.196	0.972	1.019	0.846
LTE Band 25_Ant 2	Front	0.934	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.193	1.132	1.139	1.168	1.149	1.177	1.058
	Back	0.927	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.399	1.436	1.446	1.504	1.280	1.327	1.154
LTE Band 26_Ant 0	Front	0.373	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.632	0.571	0.578	0.607	0.588	0.616	0.497
	Back	0.537	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.009	1.046	1.056	1.114	0.890	0.937	0.764
LTE Band 30_Ant 2	Front	0.405	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.664	0.603	0.610	0.639	0.620	0.648	0.529
	Back	0.339	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.811	0.848	0.858	0.916	0.692	0.739	0.566
LTE Band 41_Ant 2	Front	0.591	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.850	0.789	0.796	0.825	0.806	0.834	0.715
	Back	0.999	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.471	1.508	1.518	1.576	1.352	1.399	1.226
LTE Band 48_Ant 7	Front	0.255	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.514	0.453	0.460	0.489	0.470	0.498	0.379
	Back	0.888	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.360	1.397	1.407	1.465	1.241	1.288	1.115
LTE Band 66_Ant 2	Front	0.975	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.234	1.173	1.180	1.209	1.190	1.218	1.099
	Back	0.786	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.258	1.295	1.305	1.363	1.139	1.186	1.013
LTE Band 71_Ant 0	Front	0.174	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.433	0.372	0.379	0.408	0.389	0.417	0.298
	Back	0.623	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.095	1.132	1.142	1.200	0.976	1.023	0.850

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3	1+2+4	1+4+6	1+5+6	1+6+7	1+8	1+6
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	5GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
n5_Ant 0	Front	0.116	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.375	0.314	0.321	0.350	0.331	0.359	0.240
	Back	0.137	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.609	0.646	0.656	0.714	0.490	0.537	0.364
n12_Ant 0	Front	0.388	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.647	0.586	0.593	0.622	0.603	0.631	0.512
	Back	0.561	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.033	1.070	1.080	1.138	0.914	0.961	0.788
n25_Ant 2	Front	0.950	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.209	1.148	1.155	1.184	1.165	1.193	1.074
	Back	0.982	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.454	1.491	1.501	1.559	1.335	1.382	1.209
n66_Ant 2	Front	0.999	0.117	0.259	0.081	0.110	0.124	0.091	0.243	1.258	1.197	1.204	1.233	1.214	1.242	1.123
	Back	0.828	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.300	1.337	1.347	1.405	1.181	1.228	1.055
n71_Ant 0	Front	0.461	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.720	0.659	0.666	0.695	0.676	0.704	0.585
	Back	0.714	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.186	1.223	1.233	1.291	1.067	1.114	0.941
n41_Ant 2	Front	0.362	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.621	0.560	0.567	0.596	0.577	0.605	0.486
	Back	0.402	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.874	0.911	0.921	0.979	0.755	0.802	0.629
n41_Ant 5	Front	0.300	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.559	0.498	0.505	0.534	0.515	0.543	0.424
	Back	0.483	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.955	0.992	1.002	1.060	0.836	0.883	0.710
n41_HPUE_Ant 5-	Front	0.412	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.671	0.610	0.617	0.646	0.627	0.655	0.536
	Back	0.770	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.242	1.279	1.289	1.347	1.123	1.170	0.997



FCC SAR TEST REPORT

Report No. : FA022521-02A

<Config 1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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)							
GSM850_Ant 1	Front	0.429	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.688	0.627	0.634	0.663	0.644	0.672	0.553
	Back	0.669	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.141	1.178	1.188	1.246	1.022	1.069	0.896
GSM1900_Ant 0	Front	0.394	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.653	0.592	0.599	0.628	0.609	0.637	0.518
	Back	0.867	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.339	1.376	1.386	1.444	1.220	1.267	1.094
WCDMA II_Ant 0	Front	0.535	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.794	0.733	0.740	0.769	0.750	0.778	0.659
	Back	0.944	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.416	1.453	1.463	1.521	1.297	1.344	1.171
WCDMA IV_Ant 0	Front	0.349	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.608	0.547	0.554	0.583	0.564	0.592	0.473
	Back	0.953	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.425	1.462	1.472	1.530	1.306	1.353	1.180
WCDMA V_Ant 1	Front	0.346	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.605	0.544	0.551	0.580	0.561	0.589	0.470
	Back	0.651	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.123	1.160	1.170	1.228	1.004	1.051	0.878
CDMA BC0_Ant 1	Front	0.397	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.656	0.595	0.602	0.631	0.612	0.640	0.521
	Back	0.812	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.284	1.321	1.331	1.389	1.165	1.212	1.039
CDMA BC1_Ant 0	Front	0.468	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.727	0.666	0.673	0.702	0.683	0.711	0.592
	Back	0.996	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.468	1.505	1.515	1.573	1.349	1.396	1.223
CDMA BC10_Ant 1	Front	0.332	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.591	0.530	0.537	0.566	0.547	0.575	0.456
	Back	0.684	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.156	1.193	1.203	1.261	1.037	1.084	0.911
LTE Band 7_Ant 0	Front	0.314	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.573	0.512	0.519	0.548	0.529	0.557	0.438
	Back	0.899	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.371	1.408	1.418	1.476	1.252	1.299	1.126
LTE Band 12_Ant 1	Front	0.317	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.576	0.515	0.522	0.551	0.532	0.560	0.441
	Back	0.570	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.042	1.079	1.089	1.147	0.923	0.970	0.797
LTE Band 13_Ant 1	Front	0.235	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.494	0.433	0.440	0.469	0.450	0.478	0.359
	Back	0.424	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.896	0.933	0.943	1.001	0.777	0.824	0.651
LTE Band 14_Ant 1	Front	0.393	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.652	0.591	0.598	0.627	0.608	0.636	0.517
	Back	0.665	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.137	1.174	1.184	1.242	1.018	1.065	0.892
LTE Band 25_Ant 0	Front	0.373	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.632	0.571	0.578	0.607	0.588	0.616	0.497
	Back	0.875	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.347	1.384	1.394	1.452	1.228	1.275	1.102
LTE Band 26_Ant 1	Front	0.366	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.625	0.564	0.571	0.600	0.581	0.609	0.490
	Back	0.660	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.132	1.169	1.179	1.237	1.013	1.060	0.887
LTE Band 30_Ant 0	Front	0.474	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.733	0.672	0.679	0.708	0.689	0.717	0.598
	Back	0.925	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.397	1.434	1.444	1.502	1.278	1.325	1.152
LTE Band 41_Ant 0	Front	0.272	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.531	0.470	0.477	0.506	0.487	0.515	0.396
	Back	0.933	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.405	1.442	1.452	1.510	1.286	1.333	1.160
LTE Band 48_Ant 2	Front	0.404	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.663	0.602	0.609	0.638	0.619	0.647	0.528
	Back	0.947	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.419	1.456	1.466	1.524	1.300	1.347	1.174
LTE Band 66_Ant 0	Front	0.363	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.622	0.561	0.568	0.597	0.578	0.606	0.487
	Back	1.000	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.472	1.509	1.519	1.577	1.353	1.400	1.227
LTE Band 71_Ant 1	Front	0.305	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.564	0.503	0.510	0.539	0.520	0.548	0.429
	Back	0.605	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.077	1.114	1.124	1.182	0.958	1.005	0.832

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+3 Summed 1g SAR (W/kg)	1+2+4 Summed 1g SAR (W/kg)	1+4+6 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 3	5GHz WLAN Ant 4+3	Bluetooth Ant 4	5GHz WLAN Ant 4	2.4GHz WLAN Ant 3							
		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)							
n5_Ant 1	Front	0.386	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.645	0.584	0.591	0.620	0.601	0.629	0.510
	Back	0.655	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.127	1.164	1.174	1.232	1.008	1.055	0.882
n12_Ant 1	Front	0.246	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.505	0.444	0.451	0.480	0.461	0.489	0.370
	Back	0.448	0.217	0.472	0.292	0.350	0.227	0.126	0.400	0.920	0.957	0.967	1.025	0.801	0.848	0.675
n25_Ant 0	Front	0.504	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.763	0.702	0.709	0.738	0.719	0.747	0.628
	Back	0.996	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.468	1.505	1.515	1.573	1.349	1.396	1.223
n66_Ant 0	Front	0.372	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.631	0.570	0.577	0.606	0.587	0.615	0.496
	Back	0.988	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.460	1.497	1.507	1.565	1.341	1.388	1.215
n71_Ant 1	Front	0.350	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.609	0.548	0.555	0.584	0.565	0.593	0.474
	Back	0.671	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.143	1.180	1.190	1.248	1.024	1.071	0.898
n41_Ant 0	Front	0.223	0.117	0.259	0.081	0.110	0.124	0.091	0.243	0.482	0.421	0.428	0.457	0.438	0.466	0.347
	Back	0.737	0.217	0.472	0.292	0.350	0.227	0.126	0.400	1.209	1.246	1.256	1.314	1.090	1.137	0.964

<Simultaneous Transmission is active_WLAN OFF>

<Config 0>

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 0	Front	0.323	0.187	0.510
	Back	0.515	0.323	0.838
GSM1900_Ant 2	Front	0.877	0.187	1.064
	Back	0.577	0.323	0.900
WCDMA II_Ant 2	Front	0.929	0.187	1.116
	Back	0.955	0.323	1.278
WCDMA IV_Ant 2	Front	0.929	0.187	1.116
	Back	0.774	0.323	1.097
WCDMA V_Ant 0	Front	0.332	0.187	0.519
	Back	0.534	0.323	0.857
CDMA BC0_Ant 0	Front	0.437	0.187	0.624
	Back	0.787	0.323	1.110
CDMA BC1_Ant 2	Front	0.919	0.187	1.106
	Back	0.876	0.323	1.199
CDMA BC10_Ant 0	Front	0.446	0.187	0.633
	Back	0.625	0.323	0.948
LTE Band 7_Ant 2	Front	0.268	0.187	0.455
	Back	0.839	0.323	1.162
LTE Band 12_Ant 0	Front	0.367	0.187	0.554
	Back	0.525	0.323	0.848
LTE Band 13_Ant 0	Front	0.485	0.187	0.672
	Back	0.700	0.323	1.023
LTE Band 14_Ant 0	Front	0.449	0.187	0.636
	Back	0.619	0.323	0.942
LTE Band 25_Ant 2	Front	0.934	0.187	1.121
	Back	0.927	0.323	1.250
LTE Band 26_Ant 0	Front	0.373	0.187	0.560
	Back	0.537	0.323	0.860
LTE Band 30_Ant 2	Front	0.405	0.187	0.592
	Back	0.339	0.323	0.662
LTE Band 41_Ant 2	Front	0.591	0.187	0.778
	Back	0.999	0.323	1.322
LTE Band 48_Ant 7	Front	0.255	0.187	0.442
	Back	0.888	0.323	1.211
LTE Band 66_Ant 2	Front	0.975	0.187	1.162
	Back	0.786	0.323	1.109
LTE Band 71_Ant 0	Front	0.174	0.187	0.361
	Back	0.623	0.323	0.946

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
n5_Ant 0	Front	0.116	0.187	0.303
	Back	0.137	0.323	0.460
n12_Ant 0	Front	0.388	0.187	0.575
	Back	0.561	0.323	0.884
25_Ant 2	Front	0.950	0.187	1.137
	Back	0.982	0.323	1.305
n66_Ant 2	Front	0.999	0.187	1.186
	Back	0.828	0.323	1.151
n71_Ant 0	Front	0.461	0.187	0.648
	Back	0.714	0.323	1.037
n41_Ant 2	Front	0.347	0.187	0.534
	Back	0.362	0.323	0.685
n41_Ant 5	Front	0.300	0.187	0.487
	Back	0.483	0.323	0.806
n41_HPUE_Ant 5	Front	0.412	0.187	0.599
	Back	0.770	0.323	1.093

<Config 1>

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Front	0.429	0.187	0.616
	Back	0.669	0.323	0.992
GSM1900_Ant 0	Front	0.394	0.187	0.581
	Back	0.867	0.323	1.190
WCDMA II_Ant 0	Front	0.535	0.187	0.722
	Back	0.944	0.323	1.267
WCDMA IV_Ant 0	Front	0.349	0.187	0.536
	Back	0.953	0.323	1.276
WCDMA V_Ant 1	Front	0.346	0.187	0.533
	Back	0.651	0.323	0.974
CDMA BC0_Ant 1	Front	0.397	0.187	0.584
	Back	0.812	0.323	1.135
CDMA BC1_Ant 0	Front	0.468	0.187	0.655
	Back	0.996	0.323	1.319
CDMA BC10_Ant 1	Front	0.332	0.187	0.519
	Back	0.684	0.323	1.007
LTE Band 7_Ant 0	Front	0.314	0.187	0.501
	Back	0.899	0.323	1.222
LTE Band 12_Ant 1	Front	0.317	0.187	0.504
	Back	0.570	0.323	0.893
LTE Band 13_Ant 1	Front	0.235	0.187	0.422
	Back	0.424	0.323	0.747
LTE Band 14_Ant 1	Front	0.393	0.187	0.580
	Back	0.665	0.323	0.988
LTE Band 25_Ant 0	Front	0.373	0.187	0.560
	Back	0.875	0.323	1.198
LTE Band 26_Ant 1	Front	0.366	0.187	0.553
	Back	0.660	0.323	0.983
LTE Band 30_Ant 0	Front	0.474	0.187	0.661
	Back	0.925	0.323	1.248
LTE Band 41_Ant 0	Front	0.272	0.187	0.459
	Back	0.933	0.323	1.256
LTE Band 48_Ant 2	Front	0.404	0.187	0.591
	Back	0.947	0.323	1.270
LTE Band 66_Ant 0	Front	0.363	0.187	0.550
	Back	1.000	0.323	1.323
LTE Band 71_Ant 1	Front	0.305	0.187	0.492
	Back	0.605	0.323	0.928

WWAN Band	Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	
		1g SAR (W/kg)	1g SAR (W/kg)	
n5_Ant 1	Front	0.386	0.187	0.573
	Back	0.655	0.323	0.978
n12_Ant 1	Front	0.246	0.187	0.433
	Back	0.448	0.323	0.771
n25_Ant 0	Front	0.504	0.187	0.691
	Back	0.996	0.323	1.319
n66_Ant 0	Front	0.372	0.187	0.559
	Back	0.988	0.323	1.311
n71_Ant 1	Front	0.350	0.187	0.537
	Back	0.671	0.323	0.994
n41_Ant 0	Front	0.223	0.187	0.410
	Back	0.737	0.323	1.060

16. Supplemental Antenna tuner tests results

General Note:

1. This device implements antenna tuning techniques in the antenna0 for LTE 5, 12, 13, 17, 14, 26, 71. SAR test proposal was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing and this design will provide the highest power at different user scenarios and would not influence to the antenna characteristics other than impedance matching.
2. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values.
3. To evaluate all of the tuner states, the 33 tuner states are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination.
4. The device supports LTE B5/B26/B12/B17. Since the supported frequency span for LTE B5/B17 falls completely within the supported frequency span for LTE B26/B12, and both bands have the same target power and both LTE bands share the same transmission path, therefore standalone SAR was only assessed for LTE B26/B12. The single point SAR time-sweep measurements were treated independently for each supported ACL frequency band. For the LTE B5/B17 single point SAR measurement selected the highest measured SAR configuration and exposure condition of LTE B26/B12.
5. The tuner state was established remotely through Wi-Fi so that the device is not moved for the entire series of single point SAR for the tuner states in each combination (band, mode, exposure conditions).

16.1 Supplemental Head SAR results

WWAN Head (Ant 0)	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	0	10	20	30	7	17	27
	LTE Band 12	10M_QPSK_1_0	23095	Left Cheek	0.277	0.298	0.289	0.208	0.185	0.085	0.212	0.189	0.103
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	1	11	21	31	8	18	28
	LTE Band 13	10M_QPSK_1_49	23230	Left Cheek	0.307	0.324	0.285	0.225	0.155	0.044	0.277	0.247	0.148
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	2	12	22	32	9	19	29
	LTE Band 14	10M_QPSK_1_25	23330	Right Cheek	0.336	0.365	0.287	0.216	0.165	0.001	0.232	0.191	0.071
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	3	13	23	0	10	20	30
	LTE Band 26	15M_QPSK_1_74	26865	Left Cheek	0.302	0.318	0.281	0.251	0.199	0.306	0.222	0.197	0.091
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	4	14	24	1	11	21	31
	LTE Band 71	20M_QPSK_1_0	133322	Left Cheek	0.247	0.261	0.242	0.177	0.119	0.211	0.181	0.124	0.035

16.2 Supplemental Body SAR results

WWAN Body (Ant 0)	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	5	15	25	2	12	22	32
	LTE Band 12	10M_QPSK_1_0	23095	Back	0.400	0.423	0.332	0.308	0.218	0.342	0.251	0.191	0.002
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	6	16	26	3	13	23	0
	LTE Band 13	10M_QPSK_1_49	23230	Back	0.530	0.558	0.388	0.341	0.223	0.399	0.44	0.349	0.538
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	7	17	27	4	14	24	1
	LTE Band 14	10M_QPSK_1_25	23330	Back	0.473	0.501	0.358	0.319	0.174	0.368	0.339	0.228	0.411
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	8	18	28	5	15	25	2
	LTE Band 26	15M_QPSK_1_74	26865	Back	0.416	0.448	0.383	0.342	0.205	0.395	0.326	0.23	0.352
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State 0)	9	19	29	6	16	26	3
	LTE Band 71	20M_QPSK_1_0	133322	Back	0.489	0.589	0.375	0.309	0.116	0.385	0.361	0.235	0.52

Test Engineer : Jack Yang, Ginger Chiang, Tommy Chen, Ray Sun, Jerry Hsu, Peter Hsieh, Wilson Lin, White Huang, Charles Shen, Andy Chiang, Willy Yu and Iran Wang



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 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [9] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [10] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [11] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [12] FCC KDB 941225 D07 v01r02, " SAR Evaluation Procedures for UMPC Mini-Tablet Devices", Oct 2015.
- [13] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [14] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.