

# FCC SAR TEST REPORT

FCC ID : A4RG8V0U  
Equipment : Phone  
Model Name : G8V0U, GF5KQ  
Applicant : Google LLC  
1600 Amphitheatre Parkway,  
Mountain View, California, 94043 USA  
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Jun 11, 2021 and testing was started from Jul 03, 2021 and completed on Aug 10, 2021. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

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



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Table of Contents

**1. Statement of Compliance** ..... 4

**2. Equipment Under Test (EUT) Information** ..... 5

    2.1 General Information ..... 5

    2.2 Maximum Tune-up Limit ..... 6

    2.3 General LTE SAR Test and Reporting Considerations ..... 62

    2.4 General 5G NR SAR Test and Reporting Considerations ..... 65

**3. TAS feature for RF Exposure compliance** ..... 67

    3.1 SAR Characterization – Power Table ..... 68

**4. Guidance Applied** ..... 71

**5. RF Exposure Limits** ..... 71

    5.1 Uncontrolled Environment ..... 71

    5.2 Controlled Environment ..... 71

    5.3 RF Exposure limit for above 6GHz ..... 72

**6. Specific Absorption Rate (SAR)** ..... 72

    6.1 Introduction ..... 72

    6.2 SAR Definition ..... 72

**7. System Description and Setup** ..... 73

    7.1 Test Site Location ..... 73

    7.2 E-Field Probe ..... 73

    7.3 Data Acquisition Electronics (DAE) ..... 74

    7.4 Phantom ..... 75

    7.5 Device Holder ..... 76

**8. Measurement Procedures** ..... 77

    8.1 Spatial Peak SAR Evaluation ..... 77

    8.2 Power Reference Measurement ..... 78

    8.3 Area Scan ..... 78

    8.4 Zoom Scan ..... 79

    8.5 Volume Scan Procedures ..... 79

    8.6 Power Drift Monitoring ..... 79

**9. Test Equipment List** ..... 80

**10. System Verification** ..... 82

    10.1 Tissue Verification ..... 82

    10.2 System Performance Check Results ..... 84

    10.3 PD System Performance Check Results ..... 86

**11. RF Exposure Positions** ..... 87

    11.1 Ear and handset reference point ..... 87

    11.2 Definition of the cheek position ..... 88

    11.3 Definition of the tilt position ..... 89

    11.4 Body Worn Accessory ..... 89

    11.5 Product Specific Exposure ..... 90

    11.6 Wireless Router ..... 90

**12. Measurement procedure for output power and SAR** ..... 91

**13. DL/UL carrier aggregation** ..... 99

**14. RF Exposure position consideration** ..... 105

**15. SAR Test Results** ..... 106

    15.1 Head SAR ..... 109

    15.2 Hotspot SAR ..... 126

    15.3 Body Worn Accessory SAR ..... 143

    15.4 Product Specific SAR ..... 155

    15.5 6GHz PD Test Result ..... 157

    15.6 Repeated SAR Measurement ..... 158

    15.7 LTE Band 41 Power Class 2 and Power Class 3 Linearity ..... 159

    15.8 FR1 n41/n77 Power Class 2 and Power Class 3 Linearity ..... 161

**16. Simultaneous Transmission Analysis** ..... 164

    16.1 5G NR + LTE + WLAN + BT Sim-Tx analysis ..... 166

    16.2 Head Exposure Conditions ..... 166

    16.3 Hotspot Exposure Conditions ..... 175

    16.4 Body-Worn Accessory Exposure Conditions ..... 199

    16.5 Product Specific Exposure Conditions ..... 208

**17. Supplemental Antenna tuner tests results** ..... 209

    17.1 Supplemental Head SAR results ..... 210

    17.2 Supplemental Body SAR results ..... 211

**18. Uncertainty Assessment** ..... 212

**19. References** ..... 212

**Appendix A. Plots of SAR and PD System Performance Check**

**Appendix B. Plots of High SAR and PD Measurement**

**Appendix C. DASy Calibration Certificate**

**Appendix D. Output Power Measurement**

**Appendix E. Test Setup Photos and Antenna Location**





### 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, G8V0U, GF5KQ, 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	1.05	0.50	0.50		1.56		
	GSM1900	0.22	0.69	0.91				
	WCDMA II	0.30	0.90	0.90				
	WCDMA IV	0.32	0.97	0.89				
	WCDMA V	1.10	0.37	0.37				
	LTE Band 7	0.37	1.19	0.91				
	LTE Band 12 / 17	0.34	0.31	0.31				
	LTE Band 13	0.43	0.34	0.34				
	LTE Band 14	0.67	0.33	0.33				
	LTE Band 2 / 25	0.38	1.14	0.91				
	LTE Band 5 / 26	0.53	0.38	0.38				
	LTE Band 30	0.24	1.19	0.90				
	LTE Band 38 / 41	0.21	1.18	0.90				
	LTE Band 48	0.35	0.96	0.89				
	LTE Band 4 / 66	0.31	0.89	0.89	2.97			
	LTE Band 71	0.31	0.32	0.32				
	FR1 n5	0.72	0.40	0.40				
	FR1 n7	0.56	1.18	0.90				
	FR1 n12	0.53	0.29	0.29				
	FR1 n25 / n2	0.44	1.19	0.90				
FR1 n30	0.35	1.18	0.90					
FR1 n41 / n38	1.11	1.15	0.89	2.72				
FR1 n66	0.31	0.87	0.86					
FR1 n71	0.40	0.29	0.29					
FR1 n77	0.62	0.84	0.89					
DTS	2.4GHz WLAN	1.11	0.82	0.61		1.55		
NII	5GHz WLAN	0.96	1.13	0.54	2.04	1.56		
DSS	Bluetooth	0.18	0.26	0.33		1.56		
Equipment Class	Frequency Band	Head		Body		Product Specific		Highest Reported PD (W/m^2)
		Reported 1g SAR (W/kg)	APD (W/m^2)	Reported 1g SAR (W/kg)	APD (W/m^2)	Reported 1g SAR (W/kg)	APD (W/m^2)	
6XD	6GHz WLAN	0.20	1.05	0.14	0.78	0.18	3.68	6.95
Date of Testing:		2021/7/3 ~ 2021/8/10						

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 (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications

Reviewed by: **Jason Wang**  
 Report Producer: **Carlie Tsai**



## 2. Equipment Under Test (EUT) Information

### 2.1 General Information

Product Feature & Specification	
Equipment Name	Phone
Model Name	G8V0U, GF5KQ
FCC ID	A4RG8V0U
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77 : 3450MHz ~ 3550MHz, 3700 MHz ~ 3980 MHz 5G NR n258 : 24.25 GHz~24.45 GHz, 24.75GHz ~25.25GHz 5G NR n260 : 37 GHz~40 GHz 5G NR n261 : 27.5 GHz~28.35 GHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz WPT: 110KHz ~ 148.5KHz UWB: 6489.6 MHz, 7987.2 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA, HSUPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC:ASK WPT ASK UWB: BPM-BPSK
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark:	<ol style="list-style-type: none"> <li>Dynamic antenna tuning mechanism is available at Ant. 0 and for its &lt;1GHz band, details are illustrated in the operational description</li> <li>The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) and the TAS feature 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.</li> <li>This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications</li> <li>The UWB output power is -17 dBm according to 201810 TCBC workshops the UWB output power is less than 1mW and exempt from power density testing.</li> </ol>



2.2 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 for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity), the power selection is determined by the user cases as tested in Section 15 of this report, and TAS feature will manage to ensure the average power level not exceeding the associated power table. Full details about the proprietary power management decision are illustrated in the operational description.
3. The following table shows maximum output power configurations for various exposure conditions (output power index) with tune-up tolerance accounted. For TAS enabled bands, the values associate with Plimit plus the total uncertainty, or Pmax plus total uncertainty when the derived Plimit is higher than Pmax. In some frequency bands, for some power indexes which associate with the same power level, conducted power measurement for those only need to perform at once.
4. For the mobile condition, the compliance is demonstrated in Sporton's test report FA121931-04A.
5. SAR compliance for the scenario, when device in next-to-ear voice call with hotspot enabled, is justified via head SAR test at Power Index 3

Table with 2 columns: Transmit switching diversity configuration, Support transmit antenna and band. Rows include TX0 and TX1 configurations with antenna details.



Maximum Transmit Burst Average Power (dBm)									
Band	Config	Antenna	duty cycle	Mobile Condition	Head Standalone	Head Simultaneous	Hotspot Simultaneous	Body-worn Extremity Standalone	Body-worn Extremity Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GPRS 1TX	TX0	0	12.50%	34.0	34.0	34.0	34.0	34.0	34.0
GSM850 GPRS 2TX	TX0	0	25.00%	32.5	32.5	32.5	32.5	32.5	32.5
GSM850 GPRS 3TX	TX0	0	37.50%	31.5	31.5	31.5	31.5	31.5	31.5
GSM850 GPRS 4TX	TX0	0	50.00%	30.5	30.5	30.5	30.5	30.5	30.5
GSM850 EDGE 1TX	TX0	0	12.50%	28.0	28.0	28.0	28.0	28.0	28.0
GSM850 EDGE 2TX	TX0	0	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	TX0	0	37.50%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 4TX	TX0	0	50.00%	25.5	25.5	25.5	25.5	25.5	25.5
GSM1900 GPRS 1TX	TX0	2	12.50%	31.0	31.0	31.0	31.0	31.0	31.0
GSM1900 GPRS 2TX	TX0	2	25.00%	29.5	29.5	29.5	28.1	28.1	28.1
GSM1900 GPRS 3TX	TX0	2	37.50%	29.0	29.0	29.0	26.3	26.3	26.3
GSM1900 GPRS 4TX	TX0	2	50.00%	28.0	28.0	28.0	25.1	26.3	26.3
GSM1900 EDGE 1TX	TX0	2	12.50%	26.0	26.0	26.0	22.8	22.8	22.8
GSM1900 EDGE 2TX	TX0	2	25.00%	25.0	25.0	25.0	22.3	22.3	22.3
GSM1900 EDGE 3TX	TX0	2	37.50%	25.0	25.0	25.0	22.3	22.3	22.3
GSM1900 EDGE 4TX	TX0	2	50.00%	24.0	24.0	24.0	20.3	20.3	20.3
WCDMA B2	TX0	2	100.00%	25.25	25.25	25.25	23.4	24.6	23.4
WCDMA B4	TX0	2	100.00%	25.25	25.25	25.25	23.0	24.2	23.8
WCDMA B5	TX0	0	100.00%	25.4	25.4	25.4	25.4	25.4	25.4
LTE B7	TX0	2	100.00%	25.5	25.5	25.5	21.1	22.3	21.1
LTE B12/17	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
LTE B13	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
LTE B14	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
LTE B25/2	TX0	2	100.00%	25.5	25.5	25.5	22.0	23.2	23.2
LTE B26/5	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
LTE B30	TX0	2	100.00%	25.5	25.5	25.5	21.8	23.0	21.8
LTE B41/B38 PC3	TX0	2	63.30%	25.5	25.5	25.5	24.3	25.5	24.3
LTE B38 PC2	TX0	2	43.30%	27	27	27	25.9	27	25.9
LTE B41 PC2	TX0	2	43.30%	27.5	27.5	27.5	25.9	27.1	25.9
LTE B48	TX0	6	63.30%	25.5	25.5	25.5	24.3	25.5	25.2
LTE B66/4	TX0	2	100.00%	25.5	25.5	25.5	21.7	23.8	23.8
LTE B71	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
FR1 n25/2	TX0	2	100.00%	25.5	25.5	25.5	21.9	23.1	23.1
FR1 n5	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
FR1 n7	TX0	2	100.00%	25.5	25.5	25.5	21.4	22.6	21.4
FR1 n12	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
FR1 n30	TX0	2	100.00%	25.5	25.5	25.5	22.2	23.4	22.2
FR1 n41/38 PC3	TX0	1	100.00%	25.5	18.5	17.3	20.9	23.5	22.3
FR1 n41/38 PC2	TX0	1	50.00%	27.0	21.5	20.3	23.9	26.5	25.3
FR1 n66	TX0	2	100.00%	25.5	25.5	25.5	22.2	23.4	23.4
FR1 n71	TX0	0	100.00%	25.5	25.5	25.5	25.5	25.5	25.5
FR1 n77 PC3	TX0	6	100.00%	25.3	25.3	25.3	22.1	23.3	23.3
FR1 n77 PC2	TX0	6	50.00%	27.0	27.0	27.0	25.1	26.3	26.3



Maximum Transmit Burst Average Power (dBm)									
Band	Config	Antenna	duty cycle	Mobile Condition	Head Standalone	Head Simultaneous	Hotspot Simultaneous	Body-worn Extremity Standalone	Body-worn Extremity Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GPRS 1TX	TX1	1	12.50%	34.0	34.0	34.0	34.0	34.0	34.0
GSM850 GPRS 2TX	TX1	1	25.00%	32.0	32.0	31.7	32.0	32.0	32.0
GSM850 GPRS 3TX	TX1	1	37.50%	30.7	30.7	29.8	30.7	30.7	30.7
GSM850 GPRS 4TX	TX1	1	50.00%	29.5	29.5	28.8	29.5	29.5	29.5
GSM850 EDGE 1TX	TX0	1	12.50%	27.7	27.7	27.0	27.7	27.7	27.7
GSM850 EDGE 2TX	TX0	1	25.00%	27.3	27.3	26.6	27.3	27.3	27.3
GSM850 EDGE 3TX	TX0	1	37.50%	27.2	27.2	26.5	27.2	27.2	27.2
GSM850 EDGE 4TX	TX0	1	50.00%	24.9	24.9	24.2	24.9	24.9	24.9
GSM1900 GPRS 1TX	TX1	0	12.50%	30.8	30.8	30.8	30.8	30.8	30.8
GSM1900 GPRS 2TX	TX1	0	25.00%	28.7	28.7	28.7	28.7	28.7	28.7
GSM1900 GPRS 3TX	TX1	0	37.50%	27.5	27.5	27.5	27.5	27.5	27.5
GSM1900 GPRS 4TX	TX1	0	50.00%	26.2	26.2	26.2	26.2	26.2	26.2
GSM1900 EDGE 1TX	TX0	0	12.50%	25.4	25.4	25.4	25.4	25.4	25.4
GSM1900 EDGE 2TX	TX0	0	25.00%	24.3	24.3	24.3	24.3	24.3	24.3
GSM1900 EDGE 3TX	TX0	0	37.50%	24.1	24.1	24.1	24.1	24.1	24.1
GSM1900 EDGE 4TX	TX0	0	50.00%	22.8	22.8	22.8	22.8	22.8	22.8
WCDMA B2	TX1	0	100.00%	24.3	24.3	24.3	23.1	23.1	23.1
WCDMA B4	TX1	0	100.00%	24.5	24.5	24.5	24.5	24.5	24.5
WCDMA B5	TX1	1	100.00%	25.2	25.2	24.3	25.2	25.2	25.2
LTE B7	TX1	0	100.00%	24.1	24.1	24.1	22.0	23.2	23.2
LTE B12/17	TX1	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B13	TX1	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B14	TX1	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B25/2	TX1	0	100.00%	24.6	24.6	24.6	23.6	24.6	23.6
LTE B26/5	TX1	1	100.00%	25.0	25.0	25.0	25.0	25.0	25.0
LTE B30	TX1	0	100.00%	24.4	24.4	24.4	24.4	24.4	24.4
LTE B41/38 PC3	TX1	0	63.30%	24.5	24.5	24.5	23.4	24.5	24.5
LTE B38 PC2	TX1	0	43.30%	25.7	25.7	25.7	25.0	25.7	25.7
LTE B41 PC2	TX1	0	43.30%	26.6	26.6	26.6	25.0	26.6	26.6
LTE B48	TX1	2	63.30%	22.9	22.9	22.9	22.9	22.9	22.9
LTE B66/4	TX1	0	100.00%	24.4	24.4	24.4	24.4	24.4	24.4
LTE B71	TX1	1	100.00%	25.0	25.0	25.0	25.0	25.0	25.0
FR1 n25/2	TX1	0	100.00%	24.6	24.6	24.6	23.3	24.5	23.3
FR1 n5	TX1	1	100.00%	25.1	25.1	25.1	25.1	25.1	25.1
FR1 n7	TX1	0	100.00%	24.7	24.7	24.7	21.8	23.0	23.0
FR1 n12	TX1	1	100.00%	25.1	25.1	25.1	25.1	25.1	25.1
FR1 n30	TX1	0	100.00%	24.5	24.5	24.5	24.5	24.5	24.5
FR1 n38 PC3	TX1	5	100.00%	25.2	22.4	21.2	21.8	23.0	23.0
FR1 n41 PC3	TX1	5	100.00%	25.0	22.4	21.2	21.8	23.0	23.0
FR1 n41/38 PC2	TX1	5	50.00%	26.4	25.4	24.2	24.8	26.0	26.0
FR1 n66	TX1	0	100.00%	24.2	24.2	24.2	24.1	24.2	24.1
FR1 n71	TX1	1	100.00%	25.1	25.1	25.1	25.1	25.1	25.1
FR1 n77 PC3	TX1	2	100.00%	23.3	23.3	23.3	23.3	23.3	23.3
FR1 n77 PC2	TX1	2	50.00%	25.0	25.0	25.0	25.0	25.0	25.0





**<WLAN Maximum Power>**

**General Note:**

1. The device implements the power management for WLAN SAR compliance for different exposure conditions and user cases. When the device is operated against the user's head, power index 1-4 are used; when the device is operated in the body-worn or extremity condition, power index 5-9 are used. In each exposure condition, the power selection is based on the user cases as described in Section 15 of this report. Full details about the proprietary power management decision are illustrated in the operational description.
2. 4+3(4): power level on antenna 4, when device operated in MIMO mode (4+3)

**<Mobile Condition – Power index 0 >**

**<2.4GHz WLAN>**

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	23.00	23.00	26.0
		6	2437	22.00	22.00	25.0
		11	2462	22.50	22.50	25.5
		12	2467	22.50	22.50	25.5
		13	2472	21.00	21.00	24.0
	802.11g 6Mbps	1	2412	21.00	21.00	24.0
		6	2437	21.00	21.00	24.0
		11	2462	21.00	21.00	24.0
		12	2467	21.00	21.00	24.0
		13	2472	21.00	21.00	24.0
	802.11n-HT20 MCS0	1	2412	21.00	21.00	24.0
		6	2437	21.00	21.00	24.0
		11	2462	21.00	21.00	24.0
		12	2467	21.00	21.00	24.0
		13	2472	21.00	21.00	24.0
	802.11ac-VHT20 MCS0	1	2412	21.00	21.00	24.0
		6	2437	21.00	21.00	24.0
		11	2462	21.00	21.00	24.0
		12	2467	21.00	21.00	24.0
		13	2472	21.00	21.00	24.0
802.11ax-HE20 MCS0	1	2412	21.00	21.00	24.0	
	6	2437	21.00	21.00	24.0	
	11	2462	21.00	21.00	24.0	
	12	2467	21.00	21.00	24.0	
	13	2472	21.00	21.00	24.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	18.00	18.00	21.0
		40	5200	18.00	18.00	21.0
		44	5220	18.50	18.50	21.5
		48	5240	18.50	18.50	21.5
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11n-HT40 MCS0	38	5190	21.00	21.00	24.0
		46	5230	20.50	20.50	23.5
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.5
		40	5200	18.00	18.00	21.0
		44	5220	18.50	18.50	21.5
		48	5240	19.00	19.00	22.0
	802.11ac-VHT40 MCS0	38	5190	21.00	21.00	24.0
		46	5230	20.50	20.50	23.5
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.0
	802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.5
		40	5200	18.50	18.50	21.5
		44	5220	18.50	18.50	21.5
48		5240	19.00	19.00	22.0	
802.11ax-HE40 MCS0	38	5190	20.00	20.00	23.0	
	46	5230	19.50	19.50	22.5	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	21.00	21.00	24.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	21.00	21.00	24.00
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	20.00	20.00	23.00
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50
802.11ax-HE160 MCS0		50	5250	18.50	18.50	21.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.50	16.50	19.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	17.00	17.00	20.00
	802.11n-HT20 MCS0	100	5500	18.50	18.50	21.50
		116	5580	17.50	17.50	20.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	18.50	18.50	21.50
		126	5630	17.00	17.00	20.00
		134	5670	21.00	21.00	24.00
		142	5710	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	100	5500	21.00	21.00	24.00
		116	5580	21.00	21.00	24.00
		124	5620	17.00	17.00	20.00
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	102	5510	18.50	18.50	21.50
		110	5550	17.00	17.00	20.00
		126	5630	18.50	18.50	21.50
		134	5670	17.00	17.00	20.00
		142	5710	21.00	21.00	24.00
	802.11ac-VHT80 MCS0	106	5530	21.00	21.00	24.00
		122	5610	21.00	21.00	24.00
		138	5690	21.00	21.00	24.00
	802.11ac-VHT160 MCS0	114	5570	16.00	16.00	19.00
	802.11ax-HE20 MCS0	100	5500	21.00	21.00	24.00
		116	5580	21.00	21.00	24.00
		124	5620	16.00	16.00	19.00
132		5660	17.00	17.00	20.00	
144		5720	18.50	18.50	21.50	
802.11ax-HE40 MCS0	102	5510	18.50	18.50	21.50	
	110	5550	18.50	18.50	21.50	
	126	5630	17.00	17.00	20.00	
	134	5670	18.50	18.50	21.50	
	142	5710	17.00	17.00	20.00	
802.11ax-HE80 MCS0	106	5530	20.00	20.00	23.00	
	122	5610	20.00	20.00	23.00	
	138	5690	20.00	20.00	23.00	
802.11ax-HE160 MCS0	114	5570	20.00	20.00	23.00	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
802.11a 6Mbps		149	5745	18.50	18.50	21.50
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
802.11n-HT20 MCS0		149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
802.11n-HT40 MCS0		151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
802.11ac-VHT20 MCS0		149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
802.11ac-VHT40 MCS0		151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
802.11ac-VHT80 MCS0		155	5775	21.00	21.00	24.00
802.11ax-HE20 MCS0		149	5745	19.50	19.50	22.50
		157	5785	20.00	20.00	23.00
		165	5825	19.50	19.50	22.50
802.11ax-HE40 MCS0		151	5755	20.00	20.00	23.00
		159	5795	20.00	20.00	23.00
802.11ax-HE80 MCS0		155	5775	20.00	20.00	23.00



<Power Index 1>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
		12	2467	17.50	17.50	20.5
		13	2472	17.50	17.50	20.5
	802.11g 6Mbps	1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
		12	2467	17.50	17.50	20.5
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
		12	2467	17.50	17.50	20.5
		13	2472	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
		12	2467	17.50	17.50	20.5
		13	2472	17.50	17.50	20.5
802.11ax-HE20 MCS0	1	2412	17.50	17.50	20.5	
	6	2437	17.50	17.50	20.5	
	11	2462	17.50	17.50	20.5	
	12	2467	17.50	17.50	20.5	
	13	2472	17.50	17.50	20.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	18.00	18.00	21.00
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.00	18.00	21.00
	802.11n-HT40 MCS0	38	5190	21.00	21.00	24.00
		46	5230	20.50	20.50	23.50
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	38	5190	21.00	21.00	24.00
		46	5230	20.50	20.50	23.50
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	19.00	19.00	22.00
802.11ax-HE40 MCS0	38	5190	20.00	20.00	23.00	
	46	5230	19.50	19.50	22.50	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	21.00	21.00	24.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	21.00	21.00	24.00
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	20.00	20.00	23.00
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50





Burst Average Power (dBm)							
5.5GHz WLAN	Transmit Antenna			MIMO			
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit	
802.11a 6Mbps	802.11a 6Mbps	100	5500	16.50	16.50	19.50	
		116	5580	18.50	18.50	21.50	
		124	5620	18.50	18.50	21.50	
		132	5660	18.50	18.50	21.50	
		140	5700	17.00	17.00	20.00	
		144	5720	18.50	18.50	21.50	
	802.11n-HT20 MCS0	802.11n-HT20 MCS0	100	5500	17.50	17.50	20.50
			116	5580	18.50	18.50	21.50
			124	5620	18.50	18.50	21.50
			132	5660	18.50	18.50	21.50
802.11n-HT40 MCS0	802.11n-HT40 MCS0	140	5700	17.00	17.00	20.00	
		144	5720	18.50	18.50	21.50	
		102	5510	17.00	17.00	20.00	
		110	5550	21.00	21.00	24.00	
802.11ac-VHT20 MCS0	802.11ac-VHT20 MCS0	126	5630	21.00	21.00	24.00	
		134	5670	21.00	21.00	24.00	
		142	5710	21.00	21.00	24.00	
		100	5500	17.00	17.00	20.00	
802.11ac-VHT40 MCS0	802.11ac-VHT40 MCS0	116	5580	18.50	18.50	21.50	
		124	5620	18.50	18.50	21.50	
		132	5660	18.50	18.50	21.50	
		140	5700	17.00	17.00	20.00	
802.11ac-VHT80 MCS0	802.11ac-VHT80 MCS0	144	5720	18.50	18.50	21.50	
		102	5510	17.00	17.00	20.00	
		110	5550	21.00	21.00	24.00	
		126	5630	21.00	21.00	24.00	
802.11ac-VHT160 MCS0	802.11ac-VHT160 MCS0	134	5670	21.00	21.00	24.00	
		142	5710	21.00	21.00	24.00	
		106	5530	16.00	16.00	19.00	
802.11ax-HE20 MCS0	802.11ax-HE20 MCS0	122	5610	21.00	21.00	24.00	
		138	5690	21.00	21.00	24.00	
		114	5570	16.00	16.00	19.00	
		100	5500	17.00	17.00	20.00	
		116	5580	18.50	18.50	21.50	
		124	5620	18.50	18.50	21.50	
802.11ax-HE40 MCS0	802.11ax-HE40 MCS0	132	5660	18.50	18.50	21.50	
		140	5700	17.00	17.00	20.00	
		144	5720	18.50	18.50	21.50	
		102	5510	17.00	17.00	20.00	
		110	5550	20.00	20.00	23.00	
802.11ax-HE80 MCS0	802.11ax-HE80 MCS0	126	5630	20.00	20.00	23.00	
		134	5670	20.00	20.00	23.00	
		142	5710	20.00	20.00	23.00	
802.11ax-HE160 MCS0	802.11ax-HE160 MCS0	106	5530	16.00	16.00	19.00	
		122	5610	20.00	20.00	23.00	
		138	5690	20.00	20.00	23.00	
802.11ax-HE160 MCS0	114	5570	16.00	16.00	19.00		



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.50	18.50	21.50
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
	802.11n-HT40 MCS0	151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
	802.11ac-VHT80 MCS0	155	5775	21.00	21.00	24.00
	802.11ax-HE20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	20.00	20.00	23.00
		165	5825	19.50	19.50	22.50
	802.11ax-HE40 MCS0	151	5755	20.00	20.00	23.00
159		5795	20.00	20.00	23.00	
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.00	



<Power Index 2>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	17.00	17.00	20.00
		6	2437	17.00	17.00	20.00
		11	2462	17.00	17.00	20.00
		12	2467	17.00	17.00	20.00
		13	2472	17.00	17.00	20.00
	802.11g 6Mbps	1	2412	17.00	17.00	20.00
		6	2437	17.00	17.00	20.00
		11	2462	17.00	17.00	20.00
		12	2467	17.00	17.00	20.00
		13	2472	17.00	17.00	20.00
	802.11n-HT20 MCS0	1	2412	17.00	17.00	20.00
		6	2437	17.00	17.00	20.00
		11	2462	17.00	17.00	20.00
		12	2467	17.00	17.00	20.00
		13	2472	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	1	2412	17.00	17.00	20.00
		6	2437	17.00	17.00	20.00
		11	2462	17.00	17.00	20.00
		12	2467	17.00	17.00	20.00
		13	2472	17.00	17.00	20.00
802.11ax-HE20 MCS0	1	2412	17.00	17.00	20.00	
	6	2437	17.00	17.00	20.00	
	11	2462	17.00	17.00	20.00	
	12	2467	17.00	17.00	20.00	
	13	2472	17.00	17.00	20.00	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	18.00	18.00	21.00
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.00	18.00	21.00
	802.11n-HT40 MCS0	38	5190	21.00	21.00	24.00
		46	5230	20.50	20.50	23.50
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	38	5190	21.00	21.00	24.00
		46	5230	20.50	20.50	23.50
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	19.00	19.00	22.00
802.11ax-HE40 MCS0	38	5190	20.00	20.00	23.00	
	46	5230	19.50	19.50	22.50	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	21.00	21.00	24.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	21.00	21.00	24.00
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	20.00	20.00	23.00
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.50	16.50	19.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
	802.11n-HT20 MCS0	144	5720	18.50	18.50	21.50
		100	5500	17.50	17.50	20.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
	802.11n-HT40 MCS0	140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
		102	5510	17.00	17.00	20.00
		110	5550	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	126	5630	21.00	21.00	24.00
		134	5670	21.00	21.00	24.00
		142	5710	21.00	21.00	24.00
		100	5500	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11ac-VHT80 MCS0	102	5510	17.00	17.00	20.00
		110	5550	21.00	21.00	24.00
		126	5630	21.00	21.00	24.00
		134	5670	21.00	21.00	24.00
	802.11ac-VHT160 MCS0	142	5710	21.00	21.00	24.00
		106	5530	16.00	16.00	19.00
	802.11ax-HE20 MCS0	122	5610	21.00	21.00	24.00
		138	5690	21.00	21.00	24.00
		114	5570	16.00	16.00	19.00
100		5500	17.00	17.00	20.00	
116		5580	18.50	18.50	21.50	
802.11ax-HE40 MCS0	124	5620	18.50	18.50	21.50	
	132	5660	18.50	18.50	21.50	
	140	5700	17.00	17.00	20.00	
	144	5720	18.50	18.50	21.50	
	102	5510	17.00	17.00	20.00	
802.11ax-HE80 MCS0	110	5550	20.00	20.00	23.00	
	126	5630	20.00	20.00	23.00	
	134	5670	20.00	20.00	23.00	
	142	5710	20.00	20.00	23.00	
802.11ax-HE160 MCS0	106	5530	16.00	16.00	19.00	
	122	5610	20.00	20.00	23.00	
		138	5690	20.00	20.00	23.00
		114	5570	16.00	16.00	19.00



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
802.11a 6Mbps		149	5745	18.50	18.50	21.50
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
802.11n-HT20 MCS0		149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
802.11n-HT40 MCS0		151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
802.11ac-VHT20 MCS0		149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
802.11ac-VHT40 MCS0		151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
802.11ac-VHT80 MCS0		155	5775	21.00	21.00	24.00
802.11ax-HE20 MCS0		149	5745	19.50	19.50	22.50
		157	5785	20.00	20.00	23.00
		165	5825	19.50	19.50	22.50
802.11ax-HE40 MCS0		151	5755	20.00	20.00	23.00
		159	5795	20.00	20.00	23.00
802.11ax-HE80 MCS0		155	5775	20.00	20.00	23.00



<Power Index 3>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
		802.11b 1Mbps	1	2412	15.00	15.00
6			2437	15.00	15.00	18.00
11			2462	15.00	15.00	18.00
12			2467	15.00	15.00	18.00
13			2472	15.00	15.00	18.00
802.11g 6Mbps		1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
802.11n-HT20 MCS0		1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
802.11ac-VHT20 MCS0		1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
802.11ax-HE20 MCS0	1	2412	15.00	15.00	18.00	
	6	2437	15.00	15.00	18.00	
	11	2462	15.00	15.00	18.00	
	12	2467	15.00	15.00	18.00	
	13	2472	15.00	15.00	18.00	





<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.50
		46	5230	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.50
		46	5230	17.50	17.50	20.50
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
48		5240	17.50	17.50	20.50	
802.11ax-HE40 MCS0	38	5190	17.50	17.50	20.50	
	46	5230	17.50	17.50	20.50	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
802.11a 6Mbps		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11n-HT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11n-HT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ac-VHT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ax-HE40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
.5GHz WLAN	802.11a 6Mbps	100	5500	16.50	16.50	19.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11n-HT20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	19.50	19.50	22.50
		126	5630	19.50	19.50	22.50
		134	5670	19.50	19.50	22.50
		142	5710	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.00
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	19.50	19.50	22.50
		126	5630	19.50	19.50	22.50
		134	5670	19.50	19.50	22.50
		142	5710	19.50	19.50	22.50
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	19.00
		122	5610	19.50	19.50	22.50
		138	5690	19.50	19.50	22.50
	802.11ac-VHT160 MCS0	114	5570	16.00	16.00	19.00
	802.11ax-HE20 MCS0	100	5500	17.00	17.00	20.00
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	19.50	19.50	22.50
		126	5630	19.50	19.50	22.50
		134	5670	19.50	19.50	22.50
142		5710	19.50	19.50	22.50	
802.11ax-HE80 MCS0	106	5530	16.00	16.00	19.00	
	122	5610	19.50	19.50	22.50	
	138	5690	19.50	19.50	22.50	
802.11ax-HE160 MCS0	114	5570	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	149	5745	18.50	18.50	21.50
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
	802.11n-HT40 MCS0	151	5755	19.50	19.50	22.50
		159	5795	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	151	5755	19.50	19.50	22.50
		159	5795	19.50	19.50	22.50
	802.11ac-VHT80 MCS0	155	5775	19.50	19.50	22.50
802.11ax-HE20 MCS0	149	5745	19.50	19.50	22.50	
	157	5785	19.50	19.50	22.50	
	165	5825	19.50	19.50	22.50	
802.11ax-HE40 MCS0	151	5755	19.50	19.50	22.50	
	159	5795	19.50	19.50	22.50	
802.11ax-HE80 MCS0	155	5775	19.50	19.50	22.50	



<Power Index 4>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	10.50	10.50	13.50
		6	2437	10.50	10.50	13.50
		11	2462	10.50	10.50	13.50
		12	2467	10.50	10.50	13.50
		13	2472	10.50	10.50	13.50
	802.11g 6Mbps	1	2412	10.50	10.50	13.50
		6	2437	10.50	10.50	13.50
		11	2462	10.50	10.50	13.50
		12	2467	10.50	10.50	13.50
		13	2472	10.50	10.50	13.50
	802.11n-HT20 MCS0	1	2412	10.50	10.50	13.50
		6	2437	10.50	10.50	13.50
		11	2462	10.50	10.50	13.50
		12	2467	10.50	10.50	13.50
		13	2472	10.50	10.50	13.50
	802.11ac-VHT20 MCS0	1	2412	10.50	10.50	13.50
		6	2437	10.50	10.50	13.50
		11	2462	10.50	10.50	13.50
		12	2467	10.50	10.50	13.50
		13	2472	10.50	10.50	13.50
802.11ax-HE20 MCS0	1	2412	10.50	10.50	13.50	
	6	2437	10.50	10.50	13.50	
	11	2462	10.50	10.50	13.50	
	12	2467	10.50	10.50	13.50	
	13	2472	10.50	10.50	13.50	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.50
		46	5230	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.50
		46	5230	17.50	17.50	20.50
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
802.11ax-HE40 MCS0	38	5190	17.50	17.50	20.50	
	46	5230	17.50	17.50	20.50	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	17.50	17.50
56			5280	17.50	17.50	20.50
60			5300	17.50	17.50	20.50
64			5320	17.50	17.50	20.50
802.11n-HT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11n-HT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ac-VHT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ax-HE40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.50	16.50	19.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
	802.11n-HT20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
		134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.00
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		140	5700	17.00	17.00	20.00
		144	5720	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
		134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	19.00
		122	5610	18.50	18.50	21.50
		138	5690	18.50	18.50	21.50
	802.11ac-VHT160 MCS0	114	5570	16.00	16.00	19.00
802.11ax-HE20 MCS0	100	5500	17.00	17.00	20.00	
	116	5580	18.50	18.50	21.50	
	124	5620	18.50	18.50	21.50	
	132	5660	18.50	18.50	21.50	
	140	5700	17.00	17.00	20.00	
	144	5720	18.50	18.50	21.50	
802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.00	
	110	5550	18.50	18.50	21.50	
	126	5630	18.50	18.50	21.50	
	134	5670	18.50	18.50	21.50	
	142	5710	18.50	18.50	21.50	
802.11ax-HE80 MCS0	106	5530	16.00	16.00	19.00	
	122	5610	18.50	18.50	21.50	
	138	5690	18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570	16.00	16.00	19.00	





Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	149	5745	19.50	19.50	21.50
		157	5785	19.50	19.50	22.00
		165	5825	19.50	19.50	22.00
	802.11n-HT20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
	802.11n-HT40 MCS0	151	5755	19.50	19.50	22.50
		159	5795	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	149	5745	19.50	19.50	22.50
		157	5785	19.50	19.50	22.50
		165	5825	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	151	5755	19.50	19.50	22.50
		159	5795	19.50	19.50	22.50
	802.11ac-VHT80 MCS0	155	5775	19.50	19.50	22.50
802.11ax-HE20 MCS0	149	5745	19.50	19.50	22.50	
	157	5785	19.50	19.50	22.50	
	165	5825	19.50	19.50	22.50	
802.11ax-HE40 MCS0	151	5755	19.50	19.50	22.50	
	159	5795	19.50	19.50	22.50	
802.11ax-HE80 MCS0	155	5775	19.50	19.50	22.50	



<Power Index 5>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	23.00	23.00	26.00
		6	2437	23.00	23.00	26.00
		11	2462	23.00	23.00	26.00
		12	2467	23.00	23.00	26.00
		13	2472	21.00	21.00	24.00
	802.11g 6Mbps	1	2412	21.00	21.00	24.00
		6	2437	21.00	21.00	24.00
		11	2462	21.00	21.00	24.00
		12	2467	21.00	21.00	24.00
		13	2472	21.00	21.00	24.00
	802.11n-HT20 MCS0	1	2412	21.00	21.00	24.00
		6	2437	21.00	21.00	24.00
		11	2462	21.00	21.00	24.00
		12	2467	21.00	21.00	24.00
		13	2472	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	1	2412	21.00	21.00	24.00
		6	2437	21.00	21.00	24.00
		11	2462	21.00	21.00	24.00
		12	2467	21.00	21.00	24.00
		13	2472	21.00	21.00	24.00
802.11ax-HE20 MCS0	1	2412	21.00	21.00	24.00	
	6	2437	21.00	21.00	24.00	
	11	2462	21.00	21.00	24.00	
	12	2467	21.00	21.00	24.00	
	13	2472	21.00	21.00	24.00	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.00	18.00	21.00
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.00	18.00	21.00
	802.11n-HT40 MCS0	38	5190	20.00	20.00	23.00
		46	5230	20.00	20.00	23.00
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
48		5240	19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190	20.00	20.00	23.00	
	46	5230	20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50	
	40	5200	18.50	18.50	21.50	
	44	5220	18.50	18.50	21.50	
	48	5240	19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190	20.00	20.00	23.00	
	46	5230	19.50	19.50	22.50	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	20.00	20.00	23.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	20.00	20.00	23.00
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	20.00	20.00	23.00
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.50	16.50	19.50
		116	5580	18.00	18.00	21.00
		124	5620	18.00	18.00	21.00
		132	5660	18.00	18.00	21.00
		140	5700	17.00	17.00	20.00
		144	5720	18.00	18.00	21.00
	802.11n-HT20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	18.00	18.00	21.00
		124	5620	18.00	18.00	21.00
		132	5660	18.00	18.00	21.00
		140	5700	17.00	17.00	20.00
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.00
		116	5580	18.00	18.00	21.00
		124	5620	18.00	18.00	21.00
		132	5660	18.00	18.00	21.00
		140	5700	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	19.00
		122	5610	18.00	18.00	21.00
		138	5690	18.00	18.00	21.00
		114	5570	16.00	16.00	19.00
	802.11ac-VHT160 MCS0	100	5500	17.00	17.00	20.00
		116	5580	18.00	18.00	21.00
		124	5620	18.00	18.00	21.00
		132	5660	18.00	18.00	21.00
		140	5700	17.00	17.00	20.00
	802.11ax-HE20 MCS0	116	5580	18.00	18.00	21.00
		124	5620	18.00	18.00	21.00
		132	5660	18.00	18.00	21.00
140		5700	17.00	17.00	20.00	
802.11ax-HE40 MCS0	144	5720	18.00	18.00	21.00	
	102	5510	17.00	17.00	20.00	
	110	5550	18.00	18.00	21.00	
	126	5630	18.00	18.00	21.00	
	134	5670	18.00	18.00	21.00	
802.11ax-HE80 MCS0	142	5710	18.00	18.00	21.00	
	106	5530	16.00	16.00	19.00	
	122	5610	18.00	18.00	21.00	
	138	5690	18.00	18.00	21.00	
802.11ax-HE160 MCS0	114	5570	16.00	16.00	19.00	
	114	5570	16.00	16.00	19.00	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
802.11a 6Mbps		149	5745	18.50	18.50	21.50
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
802.11n-HT20 MCS0		149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
802.11n-HT40 MCS0		151	5755	19.00	19.00	22.00
		159	5795	19.00	19.00	22.00
802.11ac-VHT20 MCS0		149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
802.11ac-VHT40 MCS0		151	5755	19.00	19.00	22.00
		159	5795	19.00	19.00	22.00
802.11ac-VHT80 MCS0		155	5775	19.00	19.00	22.00
802.11ax-HE20 MCS0		149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
802.11ax-HE40 MCS0		151	5755	19.00	19.00	22.00
		159	5795	19.00	19.00	22.00
802.11ax-HE80 MCS0		155	5775	19.00	19.00	22.00



<Power Index 6>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	19.50	19.50	22.50
		6	2437	19.50	19.50	22.50
		11	2462	19.50	19.50	22.50
		12	2467	19.50	19.50	22.50
		13	2472	19.50	19.50	22.50
	802.11g 6Mbps	1	2412	19.50	19.50	22.50
		6	2437	19.50	19.50	22.50
		11	2462	19.50	19.50	22.50
		12	2467	19.50	19.50	22.50
		13	2472	19.50	19.50	22.50
	802.11n-HT20 MCS0	1	2412	19.50	19.50	22.50
		6	2437	19.50	19.50	22.50
		11	2462	19.50	19.50	22.50
		12	2467	19.50	19.50	22.50
		13	2472	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	1	2412	19.50	19.50	22.50
		6	2437	19.50	19.50	22.50
		11	2462	19.50	19.50	22.50
		12	2467	19.50	19.50	22.50
		13	2472	19.50	19.50	22.50
802.11ax-HE20 MCS0	1	2412	19.50	19.50	22.50	
	6	2437	19.50	19.50	22.50	
	11	2462	19.50	19.50	22.50	
	12	2467	19.50	19.50	22.50	
	13	2472	19.50	19.50	22.50	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.00	18.00	21.00
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.00	18.00	21.00
	802.11n-HT40 MCS0	38	5190	19.00	19.00	22.00
		46	5230	19.00	19.00	22.00
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.00	18.00	21.00
		44	5220	18.50	18.50	21.50
		48	5240	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	38	5190	19.00	19.00	22.00
		46	5230	19.00	19.00	22.00
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	19.00	19.00	22.00
802.11ax-HE40 MCS0	38	5190	19.00	19.00	22.00	
	46	5230	19.00	19.00	22.00	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	





Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	19.00	19.00	22.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	19.00	19.00	22.00
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	19.00	19.00	22.00
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.50	16.50	19.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
		140	5700	17.00	17.00	20.00
	802.11n-HT20 MCS0	144	5720	17.50	17.50	20.50
		100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
	802.11n-HT40 MCS0	140	5700	17.00	17.00	20.00
		144	5720	17.50	17.50	20.50
		102	5510	17.00	17.00	20.00
		110	5550	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
		142	5710	17.50	17.50	20.50
		100	5500	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
		140	5700	17.00	17.00	20.00
		144	5720	17.50	17.50	20.50
	802.11ac-VHT80 MCS0	102	5510	17.00	17.00	20.00
		110	5550	17.50	17.50	20.50
		126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
	802.11ac-VHT160 MCS0	142	5710	17.50	17.50	20.50
		106	5530	16.00	16.00	19.00
		122	5610	17.50	17.50	20.50
	802.11ax-HE20 MCS0	138	5690	17.50	17.50	20.50
		114	5570	16.00	16.00	19.00
		100	5500	17.00	17.00	20.00
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
	802.11ax-HE40 MCS0	132	5660	17.50	17.50	20.50
140		5700	17.00	17.00	20.00	
144		5720	17.50	17.50	20.50	
102		5510	17.00	17.00	20.00	
110		5550	17.50	17.50	20.50	
802.11ax-HE80 MCS0	126	5630	17.50	17.50	20.50	
	134	5670	17.50	17.50	20.50	
	142	5710	17.50	17.50	20.50	
802.11ax-HE160 MCS0	106	5530	16.00	16.00	19.00	
	122	5610	17.50	17.50	20.50	
	138	5690	17.50	17.50	20.50	
		114	5570	16.00	16.00	19.00



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	149	5745	18.50	18.50	21.50
		157	5785	18.50	18.50	21.50
		165	5825	18.50	18.50	21.50
	802.11n-HT20 MCS0	149	5745	18.50	18.50	21.50
		157	5785	18.50	18.50	21.50
		165	5825	18.50	18.50	21.50
	802.11n-HT40 MCS0	151	5755	18.50	18.50	21.50
		159	5795	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	149	5745	18.50	18.50	21.50
		157	5785	18.50	18.50	21.50
		165	5825	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	151	5755	18.50	18.50	21.50
		159	5795	18.50	18.50	21.50
	802.11ac-VHT80 MCS0	155	5775	18.50	18.50	21.50
802.11ax-HE20 MCS0	149	5745	18.50	18.50	21.50	
	157	5785	18.50	18.50	21.50	
	165	5825	18.50	18.50	21.50	
802.11ax-HE40 MCS0	151	5755	18.50	18.50	21.50	
	159	5795	18.50	18.50	21.50	
802.11ax-HE80 MCS0	155	5775	18.50	18.50	21.50	



<Power Index 7>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	18.00	18.00	21.00
		6	2437	18.00	18.00	21.00
		11	2462	18.00	18.00	21.00
		12	2467	18.00	18.00	21.00
		13	2472	18.00	18.00	21.00
	802.11g 6Mbps	1	2412	18.00	18.00	21.00
		6	2437	18.00	18.00	21.00
		11	2462	18.00	18.00	21.00
		12	2467	18.00	18.00	21.00
		13	2472	18.00	18.00	21.00
	802.11n-HT20 MCS0	1	2412	18.00	18.00	21.00
		6	2437	18.00	18.00	21.00
		11	2462	18.00	18.00	21.00
		12	2467	18.00	18.00	21.00
		13	2472	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	1	2412	18.00	18.00	21.00
		6	2437	18.00	18.00	21.00
		11	2462	18.00	18.00	21.00
		12	2467	18.00	18.00	21.00
		13	2472	18.00	18.00	21.00
802.11ax-HE20 MCS0	1	2412	18.00	18.00	21.00	
	6	2437	18.00	18.00	21.00	
	11	2462	18.00	18.00	21.00	
	12	2467	18.00	18.00	21.00	
	13	2472	18.00	18.00	21.00	



<5 GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.50
		46	5230	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.50
		46	5230	17.50	17.50	20.50
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.50
		40	5200	17.50	17.50	20.50
		44	5220	17.50	17.50	20.50
		48	5240	17.50	17.50	20.50
802.11ax-HE40 MCS0	38	5190	17.50	17.50	20.50	
	46	5230	17.50	17.50	20.50	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	16.50	16.50
56			5280	16.50	16.50	19.50
60			5300	16.50	16.50	19.50
64			5320	16.50	16.50	19.50
802.11n-HT20 MCS0		52	5260	16.50	16.50	19.50
		56	5280	16.50	16.50	19.50
		60	5300	16.50	16.50	19.50
		64	5320	16.50	16.50	19.50
802.11n-HT40 MCS0		54	5270	16.50	16.50	19.50
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	16.50	16.50	19.50
		56	5280	16.50	16.50	19.50
		60	5300	16.50	16.50	19.50
		64	5320	16.50	16.50	19.50
802.11ac-VHT40 MCS0		54	5270	16.50	16.50	19.50
		62	5310	16.50	16.50	19.50
802.11ac-VHT80 MCS0		58	5290	16.50	16.50	19.50
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	16.50	16.50	19.50
		56	5280	16.50	16.50	19.50
		60	5300	16.50	16.50	19.50
		64	5320	16.50	16.50	19.50
802.11ax-HE40 MCS0		54	5270	16.50	16.50	19.50
		62	5310	16.50	16.50	19.50
802.11ax-HE80 MCS0		58	5290	16.50	16.50	19.50



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		140	5700	15.00	15.00	18.00
		144	5720	15.00	15.00	18.00
	802.11n-HT20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		140	5700	15.00	15.00	18.00
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
	802.11ac-VHT20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		140	5700	15.00	15.00	18.00
	802.11ac-VHT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
	802.11ac-VHT80 MCS0	106	5530	15.00	15.00	18.00
		122	5610	15.00	15.00	18.00
		138	5690	15.00	15.00	18.00
	802.11ac-VHT160 MCS0	114	5570	15.00	15.00	18.00
	802.11ax-HE20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		140	5700	15.00	15.00	18.00
	802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
134		5670	15.00	15.00	18.00	
802.11ax-HE80 MCS0	106	5530	15.00	15.00	18.00	
	122	5610	15.00	15.00	18.00	
	138	5690	15.00	15.00	18.00	
802.11ax-HE160 MCS0	114	5570	15.00	15.00	18.00	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11n-HT20 MCS0	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11n-HT40 MCS0	151	5755	16.50	16.50	19.50
		159	5795	16.50	16.50	19.50
	802.11ac-VHT20 MCS0	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11ac-VHT40 MCS0	151	5755	16.50	16.50	19.50
		159	5795	16.50	16.50	19.50
	802.11ac-VHT80 MCS0	155	5775	16.50	16.50	19.50
	802.11ax-HE20 MCS0	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11ax-HE40 MCS0	151	5755	16.50	16.50	19.50
159		5795	16.50	16.50	19.50	
802.11ax-HE80 MCS0	155	5775	16.50	16.50	19.50	





<Power Index 8>

<2.4 GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
	802.11g 6Mbps	1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
	802.11n-HT20 MCS0	1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
	802.11ac-VHT20 MCS0	1	2412	15.00	15.00	18.00
		6	2437	15.00	15.00	18.00
		11	2462	15.00	15.00	18.00
		12	2467	15.00	15.00	18.00
		13	2472	15.00	15.00	18.00
802.11ax-HE20 MCS0	1	2412	15.00	15.00	18.00	
	6	2437	15.00	15.00	18.00	
	11	2462	15.00	15.00	18.00	
	12	2467	15.00	15.00	18.00	
	13	2472	15.00	15.00	18.00	



<5 GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
		48	5240	17.00	17.00	20.00
	802.11n-HT20 MCS0	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
		48	5240	17.00	17.00	20.00
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
		48	5240	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	17.00	17.00	20.00
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
48		5240	17.00	17.00	20.00	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00	
	46	5230	17.00	17.00	20.00	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	16.00	16.00
56			5280	16.00	16.00	19.00
60			5300	16.00	16.00	19.00
64			5320	16.00	16.00	19.00
802.11n-HT20 MCS0		52	5260	16.00	16.00	19.00
		56	5280	16.00	16.00	19.00
		60	5300	16.00	16.00	19.00
		64	5320	16.00	16.00	19.00
802.11n-HT40 MCS0		54	5270	16.00	16.00	19.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	16.00	16.00	19.00
		56	5280	16.00	16.00	19.00
		60	5300	16.00	16.00	19.00
		64	5320	16.00	16.00	19.00
802.11ac-VHT40 MCS0		54	5270	16.00	16.00	19.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.00
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	16.00	16.00	19.00
		56	5280	16.00	16.00	19.00
		60	5300	16.00	16.00	19.00
		64	5320	16.00	16.00	19.00
802.11ax-HE40 MCS0		54	5270	16.00	16.00	19.00
		62	5310	16.00	16.00	19.00
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
		140	5700	14.50	14.50	17.50
		144	5720	14.50	14.50	17.50
	802.11n-HT20 MCS0	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
		140	5700	14.50	14.50	17.50
	802.11n-HT40 MCS0	102	5510	14.50	14.50	17.50
		110	5550	14.50	14.50	17.50
		126	5630	14.50	14.50	17.50
		134	5670	14.50	14.50	17.50
	802.11ac-VHT20 MCS0	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
		140	5700	14.50	14.50	17.50
	802.11ac-VHT40 MCS0	102	5510	14.50	14.50	17.50
		110	5550	14.50	14.50	17.50
		126	5630	14.50	14.50	17.50
		134	5670	14.50	14.50	17.50
	802.11ac-VHT80 MCS0	106	5530	14.50	14.50	17.50
		122	5610	14.50	14.50	17.50
		138	5690	14.50	14.50	17.50
	802.11ac-VHT160 MCS0	114	5570	14.50	14.50	17.50
	802.11ax-HE20 MCS0	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
140		5700	14.50	14.50	17.50	
802.11ax-HE40 MCS0	102	5510	14.50	14.50	17.50	
	110	5550	14.50	14.50	17.50	
	126	5630	14.50	14.50	17.50	
	134	5670	14.50	14.50	17.50	
802.11ax-HE80 MCS0	106	5530	14.50	14.50	17.50	
	122	5610	14.50	14.50	17.50	
	138	5690	14.50	14.50	17.50	
802.11ax-HE160 MCS0	114	5570	14.50	14.50	17.50	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11n-HT20 MCS0	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11n-HT40 MCS0	151	5755	15.50	15.50	18.50
		159	5795	15.50	15.50	18.50
	802.11ac-VHT20 MCS0	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11ac-VHT40 MCS0	151	5755	15.50	15.50	18.50
		159	5795	15.50	15.50	18.50
	802.11ac-VHT80 MCS0	155	5775	15.50	15.50	18.50
	802.11ax-HE20 MCS0	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11ax-HE40 MCS0	151	5755	15.50	15.50	18.50
159		5795	15.50	15.50	18.50	
802.11ax-HE80 MCS0	155	5775	15.50	15.50	18.50	



<Power index 9>

<5 GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
		48	5240	17.00	17.00	20.00
	802.11n-HT20 MCS0	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
		48	5240	17.00	17.00	20.00
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
		48	5240	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	17.00	17.00	20.00
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00
	802.11ax-HE20 MCS0	36	5180	17.00	17.00	20.00
		40	5200	17.00	17.00	20.00
		44	5220	17.00	17.00	20.00
48		5240	17.00	17.00	20.00	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00	
	46	5230	17.00	17.00	20.00	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	16.00	16.00
56			5280	16.00	16.00	19.00
60			5300	16.00	16.00	19.00
64			5320	16.00	16.00	19.00
802.11n-HT20 MCS0		52	5260	16.00	16.00	19.00
		56	5280	16.00	16.00	19.00
		60	5300	16.00	16.00	19.00
		64	5320	16.00	16.00	19.00
802.11n-HT40 MCS0		54	5270	16.00	16.00	19.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT20 MCS0		52	5260	16.00	16.00	19.00
		56	5280	16.00	16.00	19.00
		60	5300	16.00	16.00	19.00
		64	5320	16.00	16.00	19.00
802.11ac-VHT40 MCS0		54	5270	16.00	16.00	19.00
		62	5310	16.00	16.00	19.00
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.00
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	16.00	16.00	19.00
		56	5280	16.00	16.00	19.00
		60	5300	16.00	16.00	19.00
		64	5320	16.00	16.00	19.00
802.11ax-HE40 MCS0		54	5270	16.00	16.00	19.00
		62	5310	16.00	16.00	19.00
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
		140	5700	14.50	14.50	17.50
		144	5720	14.50	14.50	17.50
	802.11n-HT20 MCS0	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
		140	5700	14.50	14.50	17.50
	802.11n-HT40 MCS0	102	5510	14.50	14.50	17.50
		110	5550	14.50	14.50	17.50
		126	5630	14.50	14.50	17.50
		134	5670	14.50	14.50	17.50
	802.11ac-VHT20 MCS0	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
		140	5700	14.50	14.50	17.50
	802.11ac-VHT40 MCS0	102	5510	14.50	14.50	17.50
		110	5550	14.50	14.50	17.50
		126	5630	14.50	14.50	17.50
		134	5670	14.50	14.50	17.50
	802.11ac-VHT80 MCS0	106	5530	14.50	14.50	17.50
		122	5610	14.50	14.50	17.50
		138	5690	14.50	14.50	17.50
	802.11ac-VHT160 MCS0	114	5570	14.50	14.50	17.50
	802.11ax-HE20 MCS0	100	5500	14.50	14.50	17.50
		116	5580	14.50	14.50	17.50
		124	5620	14.50	14.50	17.50
		132	5660	14.50	14.50	17.50
140		5700	14.50	14.50	17.50	
802.11ax-HE40 MCS0	102	5510	14.50	14.50	17.50	
	110	5550	14.50	14.50	17.50	
	126	5630	14.50	14.50	17.50	
	134	5670	14.50	14.50	17.50	
802.11ax-HE80 MCS0	106	5530	14.50	14.50	17.50	
	122	5610	14.50	14.50	17.50	
	138	5690	14.50	14.50	17.50	
802.11ax-HE160 MCS0	114	5570	14.50	14.50	17.50	





Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11n-HT20 MCS0	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11n-HT40 MCS0	151	5755	15.50	15.50	18.50
		159	5795	15.50	15.50	18.50
	802.11ac-VHT20 MCS0	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11ac-VHT40 MCS0	151	5755	15.50	15.50	18.50
		159	5795	15.50	15.50	18.50
	802.11ac-VHT80 MCS0	155	5775	15.50	15.50	18.50
	802.11ax-HE20 MCS0	149	5745	15.50	15.50	18.50
		157	5785	15.50	15.50	18.50
		165	5825	15.50	15.50	18.50
	802.11ax-HE40 MCS0	151	5755	15.50	15.50	18.50
159		5795	15.50	15.50	18.50	
802.11ax-HE80 MCS0	155	5775	15.50	15.50	18.50	



<6GHz WLAN Maximum Power>

<Mobile Condition - Power Index 0>

Burst Average Power (dBm)							
WiFi 6 GHz	Transmit Antenna			MIMO			
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit	
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00	
		57	6235	6.00	6.00	9.00	
		113	6515	4.00	4.00	7.00	
		173	6815	6.00	6.00	9.00	
		233	7115	6.00	6.00	9.00	
	802.11ax-HE40 MCS0	3	5965	9.00	9.00	12.00	
		59	6245	9.00	9.00	12.00	
		107	6485	7.00	7.00	10.00	
		171	6805	9.00	9.00	12.00	
	802.11ax-HE80 MCS0	227	7085	9.00	10.00	12.54	
		7	5985	12.00	12.00	15.00	
		71	6305	12.00	12.00	15.00	
		119	6545	12.00	12.00	15.00	
	802.11ax-HE160 MCS0	167	6785	12.00	12.00	15.00	
		215	7025	12.00	12.00	15.00	
		15	6025	15.00	15.00	18.00	
		47	6185	15.00	15.00	18.00	
		111	6505	13.50	13.50	16.50	
			175	6825	15.00	15.00	18.00
			207	6985	16.50	16.50	19.50



<Power Index 1 / Power index 2 / Power index 3 / Power index 4>

Burst Average Power (dBm)						
WiFi 6 GHz	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00
		57	6235	6.00	6.00	9.00
		113	6515	4.00	4.00	7.00
		173	6815	6.00	6.00	9.00
		233	7115	6.00	6.00	9.00
	802.11ax-HE40 MCS0	3	5965	9.00	9.00	12.00
		59	6245	9.00	9.00	12.00
		107	6485	7.00	7.00	10.00
		171	6805	9.00	9.00	12.00
		227	7085	9.00	10.00	12.54
	802.11ax-HE80 MCS0	7	5985	12.00	12.00	15.00
		71	6305	12.00	12.00	15.00
		119	6545	12.00	12.00	15.00
		167	6785	12.00	12.00	15.00
		215	7025	12.00	12.00	15.00
	802.11ax-HE160 MCS0	15	6025	15.00	15.00	18.00
		47	6185	15.00	15.00	18.00
		111	6505	13.50	13.50	16.50
		175	6825	15.00	15.00	18.00
		207	6985	16.50	16.50	19.50

<Power Index 5 / Power index 6 / Power index 7 / Power index 8 / Power index 9>

Burst Average Power (dBm)						
WiFi 6 GHz	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 7+3(7) Tune-Up Limit	Ant 7+3(3) Tune-Up Limit	Ant 7+3 Tune-Up Limit
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00
		57	6235	6.00	6.00	9.00
		113	6515	4.00	4.00	7.00
		173	6815	6.00	6.00	9.00
		233	7115	6.00	6.00	9.00
	802.11ax-HE40 MCS0	3	5965	9.00	9.00	12.00
		59	6245	9.00	9.00	12.00
		107	6485	7.00	7.00	10.00
		171	6805	9.00	9.00	12.00
		227	7085	9.00	10.00	12.54
	802.11ax-HE80 MCS0	7	5985	11.00	11.00	14.00
		71	6305	11.00	11.00	14.00
		119	6545	11.00	11.00	14.00
		167	6785	11.00	11.00	14.00
		215	7025	11.00	11.00	14.00
	802.11ax-HE160 MCS0	15	6025	10.00	10.00	13.00
		47	6185	10.00	10.00	13.00
		111	6505	11.00	11.00	14.00
		175	6825	9.50	9.50	12.50
		207	6985	9.00	9.00	12.00



**<Bluetooth Maximum Power>**

**General Note:**

1. The device implements the power management for Bluetooth SAR compliance for different exposure conditions and user cases. When the device is operated against the user’s head, power index 1 is used; when the device is operated in the body-worn or extremity condition, power index 2-4 are used. In each exposure condition, the power selection is based on the user cases as described in Section 15 of this report. Full details about the proprietary power management decision are illustrated in the operational description
2. 4+3(4): power level on antenna 4, when device operated in MIMO mode (4+3)

**<Mobile condition – Power index 0 >**

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	21	21

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	21	21

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18	18	21	15	15	18	15	15	18

**<Power Index 1>**

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	12	11	11	12	12

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	12	11	11	12	12

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		12	12	15	11	11	14	11	11	14



**<Power Index 2, Power Index 3>**

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	21	21

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	21	21

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18	18	21	15	15	18	15	15	18

**<Power Index 4>**

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	19.5	18	18	19.5	19.5

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	19.5	18	18	19.5	19.5

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18	18	21	15	15	18	15	15	18



**2.3 General LTE SAR Test and Reporting Considerations**

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																															
FCC ID	A4RG8V0U																																																														
Equipment Name	Phone																																																														
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																														
Channel Bandwidth	LTE Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 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 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																														
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																														
LTE Voice / Data requirements	Voice and Data																																																														
LTE MPR permanently built-in by design	<p align="center"><b>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N<sub>RB</sub>)</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>	Modulation	Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> )						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
Modulation	Channel bandwidth / Transmission bandwidth (N <sub>RB</sub> )						MPR (dB)																																																								
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																																									
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																																								
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																								
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																																								
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2																																																								
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3																																																								
256 QAM	≥ 1						≤ 5																																																								
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																														
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																														
Power reduction applied to satisfy SAR compliance	The device has several different power modes for each exposure conditions SAR compliance; power selection is determined by the device's positioning and usage scenarios. Detail refer to operational description.																																																														
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 13.																																																														
LTE Carrier Aggregation Additional Information	This device supports maximum of 5 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		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	20407	824.7	20415	825.5	20425	826.5	20450	829	20475	830.5	20500	832				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20575	842.5	20550	840				
LTE Band 7																
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 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	20875	2512.5	20900	2515				
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21325	2557.5	21300	2555				
LTE Band 12																
	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	23017	699.7	23025	700.5	23035	701.5	23060	704	23085	706.5	23110	709				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23105	708.5	23080	706				
LTE Band 13																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5		23280		787	
M	23230		782		23255		784.5		23280		787		23305		789.5	
H	23255		784.5		23280		787		23305		789.5		23330		792	
LTE Band 14																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Channel #		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23305		790.5		23330		793		23355		795.5		23380		798	
M	23330		793		23355		795.5		23380		798		23405		800.5	
H	23355		795.5		23380		798		23405		800.5		23430		803	
LTE Band 17																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23755		706.5		23780		709		23805		711.5		23830		714	
M	23790		710		23815		713		23840		716		23865		719	
H	23825		713.5		23850		716.5		23875		719.5		23900		722	



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		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26965	841.5
LTE Band 30												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)					
L	27685		2307.5		27710		2310					
M	27710		2310									
H	27735		2312.5									
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
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	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
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	55810	3607	55815	3607.5	55820	3608	55830	3609				
M	56170	3643	56165	3642.5	56160	3642	56150	3641				
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690				
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				





**2.4 General 5G NR SAR Test and Reporting Considerations**

5G NR Information																	
FCC ID		A4RG8V0U															
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 n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n77: 3450 MHz ~ 3550 MHz															
Channel Bandwidth		5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 15MHz, 20MHz 5G NR n41: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz															
SCS		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 B5/12/13/14/48															
LTE Anchor Bands for n5		LTE B2/7/30/48/66															
LTE Anchor Bands for n25		LTE B12/26/48															
LTE Anchor Bands for n30		LTE B5/12/14															
LTE Anchor Bands for n38		LTE B66															
LTE Anchor Bands for n41		LTE B2/4/12/25/26/66															
LTE Anchor Bands for n66		LTE B5/12/13/14/48/71															
LTE Anchor Bands for n71		LTE B2/7/66															
LTE Anchor Bands for n77		LTE B7/41															
NR Band 2																	
		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz									
		Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L		370500	1852.5	371000	1855	371500	1857.5	372000	1860								
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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L		165300	826.5	165800	829	166300	831.5	166800	834								
M		167300	836.5	167300	836.5	167300	836.5	167300	836.5								
H		169300	846.5	168800	844	168300	841.5	167800	839								
NR Band 7																	
		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz	
		Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L		500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520	505000	2525
M		507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H		513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550	509000	2545



NR Band 12																						
Bandwidth 5MHz					Bandwidth 10MHz					Bandwidth 15MHz												
Ch. #		Freq. (MHz)			Ch. #		Freq. (MHz)			Ch. #		Freq. (MHz)										
L	140300	701.5			140800	704			141300	706.5												
M	141500	707.5			141500	707.5			141500	707.5												
H	142700	713.5			142200	711			141700	708.5												
NR Band 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	376500	1882.5		376500	1882.5		376500	1882.5		376500	1882.5											
H	382500	1912.5		382000	1910		381500	1907.5		381000	1905											
NR Band 30																						
Bandwidth 5MHz										Bandwidth 10MHz												
Ch. #					Freq. (MHz)					Ch. #					Freq. (MHz)							
L	461500					2307.5					462000					2310						
M	462000					2310																
H	462500					2312.5																
NR Band 38																						
Bandwidth 10MHz						Bandwidth 15MHz						Bandwidth 20MHz										
Ch. #			Freq. (MHz)			Ch. #			Freq. (MHz)			Ch. #			Freq. (MHz)							
L	515004			2575.02			515502			2577.51			516000			2580						
M	519000			2595			519000			2595			519000			2595						
H	522996			2614.98			522498			2612.49			522000			2610						
NR Band 41																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		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)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)			
L	500202	2501.01	500700	2503.5	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	507204	2536.02	508200	2541	509202	2546.01		
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99		
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	529998	2649.99	528996	2644.98	528000	2640		
NR Band 66																						
Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz			Bandwidth 30MHz			Bandwidth 40MHz							
Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)					
L	342500		1712.5	343000		1715	343500		1717.5	344000		1720	345000		1725	346000		1730				
M	349000		1745	349000		1745	349000		1745	349000		1745	349000		1745	349000		1745				
H	355500		1777.5	355000		1775	354500		1772.5	354000		1770	353000		1765	352000		1760				
NR Band 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							
I6NR Band 77 (3700-3980)																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	647000	3705	647168	3707.52	647334	3710.01	647668	664334	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664668	3970.02	664504	3967.98	664340	3965.94	664176	3963.90	664052	3961.86	663928	3959.82	663804	3957.78	663680	3955.74	663556	3953.70
NR Band 77 (3450-3980)																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630338	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	633332	3499.98
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98		
H	636332	3544.98	636166	3542.49	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		



### 3. TAS feature for RF Exposure compliance

The FCC RF exposure limit is based on time-averaged RF exposure. Both SAR and PD regulatory specifications are defined over certain measurement duration allowing for time-averaging. The Samsung S.LSI proprietary TAS (Time Average SAR) algorithm has been designed to meet the compliance limits over the required duration, while still allowing dynamic control of transmit power for meeting system performance. Under the control of TAS algorithm, the device can transmit at high power up to Pmax for certain interval, but the average power will be maintained not exceeding the pre-defined averaged level (Plimit), and thus maintain the time-averaged RF exposure compliance

The following table shows Plimit and maximum tune up output power Pmax, for all exposure and transmit transmit conditions (output power index).

Pmax	Maximum Tx power that can be transmitted physically from RFIC for a given RAT
SAR_FCC_limit	SAR limit specified by FCC 1.6 W/kg averaged over 1-gram, for head and body exposure, and 4 W/kg averaged over 10-gram, for extremity exposure
PD_FCC_limit	PD limit specified by FCC, 10 W/m <sup>2</sup> averaged over 4 cm <sup>2</sup>
Plimit	The time-averaged RF power that corresponds to SAR_target or PD_target.



**3.1 SAR Characterization – Power Table**

**General Note:**

1. The P<sub>limit</sub> values correspond to SAR<sub>design\_target</sub>.
2. GSM and WCDMA don't support time average feature of dynamic power varying, the power will be fixed at the static reduce power level at different exposure conditions for RF exposure compliance. For the GSM (TDD) P<sub>limit</sub> power levels in the table correspond to the burst average power levels which don't account for TX duty cycle.

**<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> corresponding to SAR design target)>**

Wireless technology/ band (No Accounting duty cycle)	Config	Antenna	duty cycle	Head		Hotspot	Body-worn/Extremity		P <sub>max</sub> Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
				P <sub>limit</sub> Burst average power (dBm)					
GSM850 GPRS 1TX	TX0	0	12.50%	42.50	41.30	42.40	43.60	42.40	33.00
GSM850 GPRS 2TX	TX0	0	25.00%	39.50	38.30	39.40	40.60	39.40	31.50
GSM850 GPRS 3TX	TX0	0	37.50%	38.00	36.80	37.60	38.80	37.60	30.50
GSM850 GPRS 4TX	TX0	0	50.00%	36.50	35.30	36.40	37.60	36.40	29.50
GSM1900 GPRS 1TX	TX0	2	12.50%	41.00	39.80	30.10	31.30	30.10	30.00
GSM1900 GPRS 2TX	TX0	2	25.00%	38.00	36.80	27.10	28.30	27.10	28.50
GSM1900 GPRS 3TX	TX0	2	37.50%	36.00	34.80	25.30	26.50	25.30	28.00
GSM1900 GPRS 4TX	TX0	2	50.00%	35.00	33.80	24.10	25.30	25.30	27.00
WCDMA B2	TX0	2	100.00%	31.20	30.00	22.40	23.60	23.60	24.30
WCDMA B4	TX0	2	100.00%	31.70	30.50	22.00	23.20	22.80	24.30
WCDMA B5	TX0	0	100.00%	31.00	29.80	28.30	29.50	28.30	24.40

Wireless technology/ band (No Accounting duty cycle)	Config	Antenna	duty cycle	Head		Hotspot	Body-worn/Extremity		P <sub>Max</sub> Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
				P <sub>limit</sub> Burst average power (dBm)					
GSM850 GPRS 1TX	TX1	1	12.50%	35.00	33.80	37.80	39.00	37.80	33.00
GSM850 GPRS 2TX	TX1	1	25.00%	32.00	30.80	34.80	36.00	34.80	31.00
GSM850 GPRS 3TX	TX1	1	37.50%	30.00	28.80	32.80	34.00	32.80	29.70
GSM850 GPRS 4TX	TX1	1	50.00%	29.00	27.80	31.80	33.00	31.80	28.50
GSM1900 GPRS 1TX	TX1	0	12.50%	38.50	37.30	32.20	33.40	32.20	29.80
GSM1900 GPRS 2TX	TX1	0	25.00%	35.50	34.30	29.20	30.40	29.20	27.70
GSM1900 GPRS 3TX	TX1	0	37.50%	34.00	32.80	27.70	28.90	27.70	26.50
GSM1900 GPRS 4TX	TX1	0	50.00%	32.50	31.30	26.20	27.40	26.20	25.20
WCDMA B2	TX1	0	100.00%	28.10	26.90	22.10	23.30	22.10	23.30
WCDMA B4	TX1	0	100.00%	30.20	29.00	25.10	26.30	25.10	23.50
WCDMA B5	TX1	1	100.00%	24.50	23.30	28.10	29.30	28.10	24.20

**<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> corresponding to SAR design target)>**

Wireless technology/ band (Accounting duty cycle)	Config	Antenna	duty cycle	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
P limit time-average power (dBm)									
LTE B7	TX0	2	100.00%	30.7	29.5	20.1	21.3	20.1	24.5
LTE B12/17	TX0	0	100.00%	31.7	30.5	29.8	31	29.8	24.5
LTE B13	TX0	0	100.00%	31.4	30.2	28.9	30.1	28.9	24.5
LTE B14	TX0	0	100.00%	31.1	29.9	29	30.2	29	24.5
LTE B25/2	TX0	2	100.00%	31.2	30	21	22.2	22.2	24.5
LTE B26/5	TX0	0	100.00%	30.9	29.7	28.9	30.1	28.9	24.5
LTE B30	TX0	2	100.00%	33.9	32.7	20.8	22	20.8	24.5
LTE B41/38	TX0	2	63.30%	30	28.8	21.3	22.5	21.3	22.5
LTE B38 HPUE	TX0	2	43.30%	30	28.8	21.3	22.5	21.3	22.4
LTE B41 HPUE	TX0	2	43.30%	30	28.8	21.3	22.5	21.3	22.9
LTE B48	TX0	2	63.30%	28.6	27.4	21.3	23.4	22.2	22.5
LTE B66/4	TX0	2	100.00%	32.6	31.4	20.7	22.8	22.8	24.5
LTE B71	TX0	0	100.00%	31.6	30.4	29.1	30.3	29.1	24.5
FR1 n25/2	TX0	2	100.00%	30.5	29.3	20.9	22.1	22.1	24.5
FR1 n5	TX0	0	100.00%	30.6	29.4	28.5	29.7	28.5	24.5
FR1 n7	TX0	2	100.00%	30.4	29.2	20.4	21.6	20.4	24.5
FR1 n12	TX0	0	100.00%	31.7	30.5	30.1	31.3	30.1	24.5
FR1 n30	TX0	2	100.00%	31.6	30.4	21.2	22.4	21.2	24.5
FR1 n41/n38	TX0	1	100.00%	17.5	16.3	19.9	22.5	21.3	24.5
FR1 n38/41 HPUE	TX0	1	50.00%	17.5	16.3	19.9	22.5	21.3	23
FR1 n66	TX0	2	100.00%	32	30.8	21.2	22.4	22.4	24.5
FR1 n71	TX0	0	100.00%	32.5	31.3	29.4	30.6	29.4	24.5
FR1 n77	TX0	6	100.00%	27.9	26.7	21.1	22.3	22.3	24.3
FR1 n77 HPUE	TX0	6	50.00%	27.9	26.7	21.1	22.3	22.3	23

1. LTE and 5GNR TDD: P<sub>limit</sub> power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
2. Maximum target power, P<sub>max</sub>, is configured in NV settings in EUT to limit maximum transmitting power. This power is converted into peak power in NV settings for TDD schemes.



**<P<sub>limit</sub> for supported technologies and bands (P<sub>limit</sub> corresponding to SAR design target)>**

Wireless technology/ band (Accounting duty cycle)	Config	Antenna	duty cycle	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
P limit time-average power (dBm)									
LTE B7	TX1	0	100.00%	28.1	26.9	21	22.2	22.2	23.1
LTE B12/17	TX1	1	100.00%	28.5	27.3	29.1	30.3	29.1	24.2
LTE B13	TX1	1	100.00%	28.7	27.5	28.9	30.1	28.9	24.2
LTE B14	TX1	1	100.00%	26.6	25.4	29.1	30.3	29.1	24.2
LTE B25/2	TX1	0	100.00%	28.5	27.3	22.6	23.8	22.6	23.6
LTE B26/5	TX1	1	100.00%	27.5	26.3	27.9	29.1	27.9	24
LTE B30	TX1	0	100.00%	30.4	29.2	24.7	27	25.8	23.4
LTE 41/38	TX1	0	63.30%	29	27.8	20.4	23.8	22.6	21.5
LTE B38 HPUE	TX1	0	43.30%	29	27.8	20.4	23.8	22.6	21.1
LTE B41 HPUE	TX1	0	43.30%	29	27.8	20.4	23.8	22.6	22
LTE B48	TX1	2	63.30%	32.1	30.9	25	29.3	28.1	19.9
LTE B66	TX1	0	100.00%	29.1	27.9	23.4	24.6	23.4	23.4
LTE B71	TX1	1	100.00%	29.8	28.6	29.7	30.9	29.7	24
FR1 n25/2	TX1	0	100.00%	27.9	26.7	22.3	23.5	22.3	23.6
FR1 n5	TX1	1	100.00%	26.3	25.1	27.9	29.1	27.9	24.1
FR1 n7	TX1	0	100.00%	27.4	26.2	20.8	22	22	23.7
FR1 n12	TX1	1	100.00%	27.6	26.4	29	30.2	29	24.1
FR1 n30	TX1	0	100.00%	28.7	27.5	24.5	27.4	26.2	23.5
FR1 n38	TX1	5	100.00%	21.4	20.2	20.8	22	22	24.2
FR1 n41	TX1	5	100.00%	21.4	20.2	20.8	22	22	24
FR1 n38/41 HPUE	TX1	5	50.00%	21.4	20.2	20.8	22	22	22.4
FR1 n66	TX1	0	100.00%	29.6	28.4	23.1	24.3	23.1	23.2
FR1 n71	TX1	1	100.00%	28.9	27.7	29.8	31	29.8	24.1
FR1 n77	TX1	2	100.00%	35.9	34.7	27.3	29.7	28.5	22.3
FR1 n77 HPUE	TX1	2	50.00%	35.9	34.7	27.3	29.7	28.5	21

1. LTE and 5GNR TDD: P<sub>limit</sub> power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
2. Maximum target power, P<sub>max</sub>, is configured in NV settings in EUT to limit maximum transmitting power. This power is converted into peak power in NV settings for TDD schemes.



### 4. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards, the below KDB standard may not including in the TAF code without accreditation.

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- FCC KDB 941225 D07 UMPC Mini Tablet v01r02

### 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.

**5.3 RF Exposure limit for above 6GHz**

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm<sup>2</sup> per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

**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)

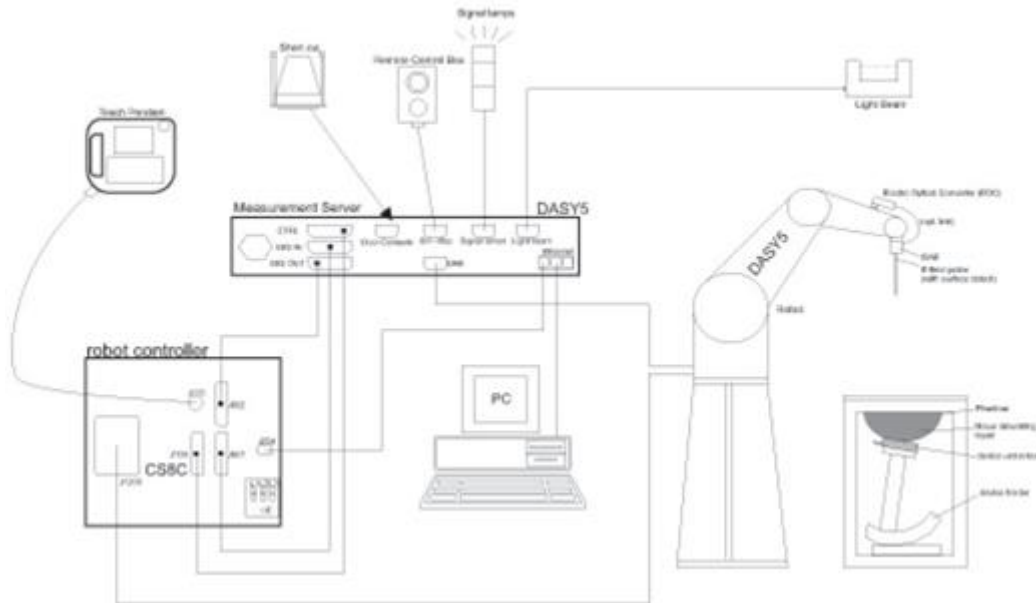
$$SAR = \frac{\sigma |E|^2}{\rho}$$

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 Site Location**


The SAR measurement facilities used to collect data are within both Sporton Lab list below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 3786) and the FCC designation No. TW1190 and TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. In system validation list test site number, if the test site number is include in the Wensan Laboratory, that's mean the test data are subcontracted to Sporton International Inc. Wensan Laboratory.

Test Site	EMC & Wireless Communications Laboratory		Wensan Laboratory		
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan		
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-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>**

<b>Construction</b>	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
<b>Frequency</b>	10 MHz – 4 GHz; Linearity: $\pm 0.2$ dB (30 MHz – 4 GHz)	
<b>Directivity</b>	$\pm 0.2$ dB in TSL (rotation around probe axis) $\pm 0.3$ dB in TSL (rotation normal to probe axis)	
<b>Dynamic Range</b>	5 $\mu$ W/g – >100 mW/g; Linearity: $\pm 0.2$ dB	
<b>Dimensions</b>	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	

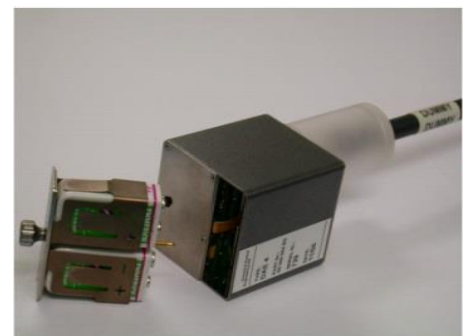
**<EX3DV4 Probe>**

<b>Construction</b>	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
<b>Frequency</b>	10 MHz – >6 GHz Linearity: $\pm 0.2$ dB (30 MHz – 6 GHz)	
<b>Directivity</b>	$\pm 0.3$ dB in TSL (rotation around probe axis) $\pm 0.5$ dB in TSL (rotation normal to probe axis)	
<b>Dynamic Range</b>	10 $\mu$ W/g – >100 mW/g Linearity: $\pm 0.2$ dB (noise: typically <1 $\mu$ W/g)	
<b>Dimensions</b>	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>**

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

<b>Shell Thickness</b>	2 ± 0.2 mm (sagging: <1%)	
<b>Filling Volume</b>	Approx. 30 liters	
<b>Dimensions</b>	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° ± 1°	20° ± 1°
Maximum area scan spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$	≤ 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 ≤ 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 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 shoes 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: $\Delta x_{Zoom}, \Delta y_{Zoom}$		$\leq 2$ GHz: $\leq 8$ mm 2 – 3 GHz: $\leq 5$ mm*	3 – 4 GHz: $\leq 5$ mm* 4 – 6 GHz: $\leq 4$ mm*	
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	$\leq 5$ mm	3 – 4 GHz: $\leq 4$ mm 4 – 5 GHz: $\leq 3$ mm 5 – 6 GHz: $\leq 2$ mm	
	graded grid	$\Delta z_{Zoom}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface	$\leq 4$ mm	3 – 4 GHz: $\leq 3$ mm 4 – 5 GHz: $\leq 2.5$ mm 5 – 6 GHz: $\leq 2$ mm
		$\Delta z_{Zoom}(n>1)$ : between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z	$\geq 30$ mm	3 – 4 GHz: $\geq 28$ mm 4 – 5 GHz: $\geq 25$ mm 5 – 6 GHz: $\geq 22$ mm	
Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is $\leq 1.4$ W/kg, $\leq 8$ mm, $\leq 7$ mm and $\leq 5$ mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

**8.5 Volume Scan Procedures**

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

**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 <sup>(2)</sup>	D750V3	1107	Mar. 08, 2019	Mar. 05, 2022
SPEAG	835MHz System Validation Kit <sup>(2)</sup>	D835V2	4d167	Nov. 25, 2019	Nov. 23, 2021
SPEAG	1750MHz System Validation Kit <sup>(2)</sup>	D1750V2	1112	Mar. 07, 2019	Mar. 04, 2022
SPEAG	1900MHz System Validation Kit <sup>(2)</sup>	D1900V2	5d041	Sep. 11, 2018	Sep. 08, 2021
SPEAG	1900MHz System Validation Kit <sup>(2)</sup>	D1900V2	5d185	Mar. 07, 2019	Mar. 04, 2022
SPEAG	2300MHz System Validation Kit <sup>(2)</sup>	D2300V2	1006	Jan. 28, 2019	Jan. 25, 2022
SPEAG	2450MHz System Validation Kit <sup>(2)</sup>	D2450V2	736	Aug. 31, 2018	Aug. 28, 2021
SPEAG	2600MHz System Validation Kit <sup>(2)</sup>	D2600V2	1008	Aug. 31, 2018	Aug. 28, 2021
SPEAG	2600MHz System Validation Kit <sup>(2)</sup>	D2600V2	1078	Mar. 06, 2019	Mar. 03, 2022
SPEAG	3500MHz System Validation Kit <sup>(2)</sup>	D3500V2	1014	Jan. 29, 2019	Jan. 26, 2022
SPEAG	3700MHz System Validation Kit <sup>(2)</sup>	D3700V2	1006	Mar. 05, 2019	Mar. 02, 2022
SPEAG	3900MHz System Validation Kit <sup>(2)</sup>	D3900V2	1017	Apr. 29, 2019	Apr. 26, 2022
SPEAG	5GHz System Validation Kit <sup>(2)</sup>	D5GHzV2	1006	Sep. 27, 2018	Sep. 24, 2021
SPEAG	5GHz System Validation Kit <sup>(2)</sup>	D5GHzV2	1128	Dec. 16, 2019	Dec. 14, 2021
SPEAG	6500MHz System Validation Kit <sup>(2)</sup>	D6.5GHzV2	1003	Feb. 04, 2020	Feb. 02, 2022
SPEAG	5G Verification Source	10 GHz	1020	Jan. 18, 2021	Jan. 17, 2022
SPEAG	Data Acquisition Electronics	DAE3	393	Apr. 09, 2021	Apr. 08, 2022
SPEAG	Data Acquisition Electronics	DAE3	577	Sep. 16, 2020	Sep. 15, 2021
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 22, 2021	Jan. 21, 2022
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 16, 2021	Feb. 15, 2022
SPEAG	Data Acquisition Electronics	DAE4	917	Dec. 22, 2020	Dec. 21, 2021
SPEAG	Data Acquisition Electronics	DAE4	1311	Aug. 25, 2020	Aug. 24, 2021
SPEAG	Dosimetric E-Field Probe	ES3DV3	3124	Nov. 23, 2020	Nov. 22, 2021
SPEAG	Dosimetric E-Field Probe	ES3DV3	3169	May. 28, 2021	May. 27, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 26, 2021	Apr. 25, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3898	Jun. 24, 2021	Jun. 23, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	Jan. 27, 2021	Jan. 26, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7306	Jul. 24, 2020	Jul. 23, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Jan. 19, 2021	Jan. 18, 2022
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9441	Nov. 24, 2020	Nov. 23, 2021
Testo	Hygro meter	608-H1	45196600	Nov. 10, 2020	Nov. 09, 2021
Testo	Hygro meter	608-H1	45207528	Nov. 10, 2020	Nov. 09, 2021
RCPTWN	Thermometer	HTC-1	TM685-1	Nov. 10, 2020	Nov. 09, 2021
RCPTWN	Thermometer	HTC-1	TM560-2	Nov. 10, 2020	Nov. 09, 2021
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Nov. 10, 2020	Nov. 09, 2021
Keysight	Wireless Communication Test Set	E5515C	MY50266977	May. 12, 2021	May. 11, 2022
Keysight	5G Wireless Test Platform	E7515B	MY59321826	Mar. 23, 2021	Mar. 22, 2022
R&S	BT Base Station	CBT	100815	Feb. 19, 2021	Feb. 18, 2022
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Nov. 11, 2020	Nov. 10, 2021
Keysight	ENA Network Analyzer	E5071C	MY46104758	Sep. 03, 2020	Sep. 02, 2021
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 16, 2020	Sep. 15, 2021
LINE SEIKI	Digital Thermometer	DTM3000-spezial	2942	Nov. 06, 2020	Nov. 05, 2021
Anritsu	Power Meter	ML2495A	1419002	Aug. 19, 2020	Aug. 18, 2021
Anritsu	Power Sensor	MA2411B	1911176	Aug. 18, 2020	Aug. 17, 2021
Anritsu	Power Meter	ML2495A	1804003	Oct. 21, 2020	Oct. 20, 2021





Anritsu	Power Sensor	MA2411B	1726150	Oct. 21, 2020	Oct. 20, 2021
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 27, 2020	Aug. 26, 2021
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Jan. 15, 2021	Jan. 14, 2022
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 21, 2020	Oct. 20, 2021
Mini-Circuits	Power Amplifier	ZVE-8G+	479102029	Aug. 26, 2020	Aug. 25, 2021
Custom Microwave	Standard Horn antenna	M15RH	V91113-A	NCR	NCR
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Warison	Directional Coupler	WCOU-10-50S-10	WR889BMC4B1	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:**

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.



## 10. System Verification

### 10.1 Tissue Verification

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18°C to 25°C, measured with calibrated instruments and apparatuses, such as network analyzers and temperature probes. The temperature of the tissue-equivalent medium during SAR measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The tissue dielectric measurement system must be calibrated before use. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements.

The liquid tissue depth was at least 15cm in the phantom for all SAR testing

#### <Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε <sub>r</sub> )	Conductivity Target (σ)	Permittivity Target (ε <sub>r</sub> )	Delta (σ) (%)	Delta (ε <sub>r</sub> ) (%)	Limit (%)	Date
750	22.5	0.898	42.686	0.89	41.90	0.90	1.88	±5	2021/7/4
750	22.5	0.883	43.146	0.89	41.90	-0.79	2.97	±5	2021/7/9
750	22.5	0.908	42.996	0.89	41.90	2.02	2.62	±5	2021/7/11
750	22.6	0.902	42.656	0.89	41.90	1.35	1.80	±5	2021/7/12
750	22.6	0.890	42.563	0.89	41.90	0.00	1.58	±5	2021/7/12
750	22.6	0.890	42.563	0.89	41.90	0.00	1.58	±5	2021/7/12
750	22.3	0.891	43.376	0.89	41.90	0.11	3.52	±5	2021/7/16
835	22.5	0.944	42.700	0.90	41.50	4.89	2.89	±5	2021/7/3
835	22.5	0.944	42.700	0.90	41.50	4.89	2.89	±5	2021/7/3
835	22.5	0.912	42.650	0.90	41.50	1.33	2.77	±5	2021/7/9
835	22.6	0.941	42.636	0.90	41.50	4.56	2.74	±5	2021/7/11
835	22.3	0.921	42.780	0.90	41.50	2.33	3.08	±5	2021/7/16
835	22.5	0.892	40.992	0.90	41.50	-0.89	-1.22	±5	2021/7/16
1750	22.5	1.371	40.329	1.37	40.10	0.07	0.57	±5	2021/7/8
1750	22.6	1.354	40.418	1.37	40.10	-1.17	0.79	±5	2021/7/9
1750	22.6	1.370	40.577	1.37	40.10	0.00	1.19	±5	2021/7/14
1750	22.5	1.389	40.296	1.37	40.10	1.39	0.49	±5	2021/7/14
1750	22.5	1.344	40.237	1.37	40.10	-1.90	0.34	±5	2021/7/16
1750	22.5	1.344	40.122	1.37	40.10	-1.90	0.05	±5	2021/7/21
1750	22.5	1.337	39.453	1.37	40.10	-2.41	-1.61	±5	2021/7/28
1900	22.5	1.448	38.781	1.40	40.00	3.43	-3.05	±5	2021/7/8
1900	22.6	1.430	38.870	1.40	40.00	2.14	-2.83	±5	2021/7/9
1900	22.5	1.405	40.193	1.40	40.00	0.36	0.48	±5	2021/7/12
1900	22.6	1.447	39.029	1.40	40.00	3.36	-2.43	±5	2021/7/14
1900	22.5	1.438	38.803	1.40	40.00	2.71	-2.99	±5	2021/7/15
1900	22.3	1.439	38.156	1.40	40.00	2.79	-4.61	±5	2021/7/16
1900	22.5	1.419	38.574	1.40	40.00	1.36	-3.57	±5	2021/7/22
2300	22.5	1.657	40.233	1.67	39.50	-0.78	1.86	±5	2021/7/10
2300	22.6	1.666	39.643	1.67	39.50	-0.24	0.36	±5	2021/7/13
2300	22.5	1.644	39.752	1.67	39.50	-1.56	0.64	±5	2021/7/15
2300	22.5	1.628	39.040	1.67	39.50	-2.51	-1.16	±5	2021/7/25
2450	22.5	1.851	39.267	1.80	39.20	2.83	0.17	±5	2021/7/14
2450	22.3	1.793	40.543	1.80	39.20	-0.39	3.43	±5	2021/7/15
2450	22.5	1.800	39.388	1.80	39.20	0.00	0.48	±5	2021/7/23
2450	22.5	1.800	39.388	1.80	39.20	0.00	0.48	±5	2021/7/23
2450	22.5	1.809	39.297	1.80	39.20	0.50	0.25	±5	2021/7/27



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (εr)	Conductivity Target (σ)	Permittivity Target (εr)	Delta (σ) (%)	Delta (εr) (%)	Limit (%)	Date
2600	22.5	2.008	39.057	1.96	39.00	2.45	0.15	±5	2021/7/10
2600	22.5	1.963	38.687	1.96	39.00	0.15	-0.80	±5	2021/7/13
2600	22.5	1.956	37.741	1.96	39.00	-0.20	-3.23	±5	2021/7/14
2600	22.5	1.956	37.741	1.96	39.00	-0.20	-3.23	±5	2021/7/14
2600	22.5	1.953	38.758	1.96	39.00	-0.36	-0.62	±5	2021/7/15
2600	22.5	2.014	38.831	1.96	39.00	2.76	-0.43	±5	2021/7/16
2600	22.5	1.944	37.866	1.96	39.00	-0.82	-2.91	±5	2021/7/25
2600	22.5	1.944	38.188	1.96	39.00	-0.82	-2.08	±5	2021/7/27
2600	22.5	1.927	37.796	1.96	39.00	-1.68	-3.09	±5	2021/7/28
2600	22.4	1.976	38.083	1.96	39.00	0.82	-2.35	±5	2021/8/10
3500	22.5	2.985	37.876	2.91	37.90	2.58	-0.06	±5	2021/7/7
3500	22.6	2.930	37.497	2.91	37.90	0.69	-1.06	±5	2021/7/13
3500	22.5	2.944	38.716	2.91	37.90	1.17	2.15	±5	2021/7/17
3500	22.5	2.910	37.900	2.91	37.90	0.00	0.00	±5	2021/7/18
3500	22.5	2.885	37.700	2.91	37.90	-0.86	-0.53	±5	2021/7/20
3500	22.5	2.938	37.868	2.91	37.90	0.96	-0.08	±5	2021/8/5
3700	22.5	3.173	37.577	3.12	37.70	1.70	-0.33	±5	2021/7/7
3700	22.6	3.115	37.198	3.12	37.70	-0.16	-1.33	±5	2021/7/13
3700	22.5	3.129	38.417	3.12	37.70	0.29	1.90	±5	2021/7/17
3700	22.5	3.119	37.698	3.12	37.70	-0.03	-0.01	±5	2021/7/18
3700	22.5	3.078	37.588	3.12	37.70	-1.35	-0.30	±5	2021/7/20
3700	22.5	3.169	37.558	3.12	37.70	1.57	-0.38	±5	2021/8/5
3900	22.5	3.331	38.139	3.33	37.51	0.03	1.68	±5	2021/7/17
3900	22.5	3.327	37.510	3.33	37.51	-0.09	0.00	±5	2021/7/18
3900	22.5	3.411	37.717	3.33	37.51	2.43	0.55	±5	2021/8/5
5250	22.5	4.668	35.693	4.71	35.95	-0.89	-0.71	±5	2021/7/6
5250	22.5	4.601	35.923	4.71	35.95	-2.31	-0.08	±5	2021/7/17
5250	22.5	4.673	36.300	4.71	35.95	-0.79	0.97	±5	2021/7/20
5250	22.5	4.657	37.608	4.71	35.95	-1.13	4.61	±5	2021/7/21
5600	22.5	4.993	35.178	5.07	35.50	-1.52	-0.91	±5	2021/7/6
5600	22.5	4.934	35.463	5.07	35.50	-2.68	-0.10	±5	2021/7/17
5600	22.5	5.016	35.770	5.07	35.50	-1.07	0.76	±5	2021/7/20
5600	22.5	5.014	37.129	5.07	35.50	-1.10	4.59	±5	2021/7/21
5750	22.5	5.165	34.917	5.22	35.35	-1.05	-1.22	±5	2021/7/6
5750	22.5	5.095	35.231	5.22	35.35	-2.39	-0.34	±5	2021/7/17
5750	22.5	5.190	35.579	5.22	35.35	-0.57	0.65	±5	2021/7/20
5750	22.5	5.160	36.889	5.22	35.35	-1.15	4.35	±5	2021/7/21
6500	23.5	6.100	35.630	6.07	34.50	0.49	3.28	±5	2021/7/21

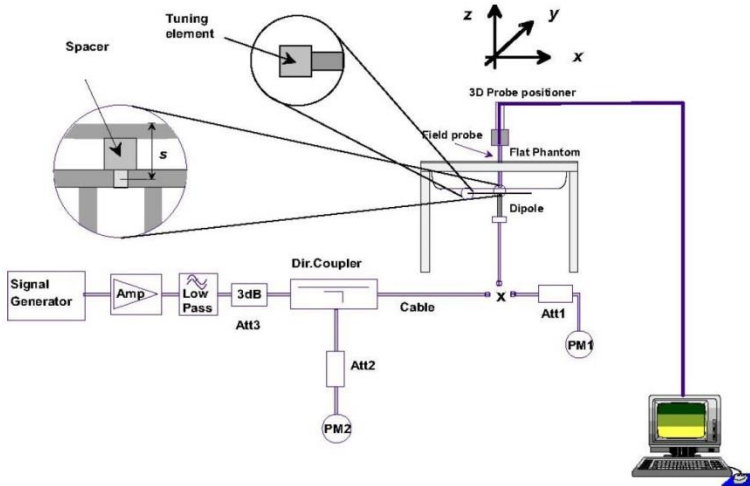


**10.2 System Performance Check Results**

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.

Test site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR01-HY	2021/7/4	750	250	D750V3-1107	ES3DV3 - SN3124	DAE4 Sn1311	2.13	8.32	8.52	2.40	1.46	5.61	5.84	4.10
SAR01-HY	2021/7/9	750	250	D750V3-1107	ES3DV3 - SN3124	DAE4 Sn1311	1.92	8.32	7.68	-7.69	1.29	5.61	5.16	-8.02
SAR01-HY	2021/7/11	750	250	D750V3-1107	ES3DV3 - SN3124	DAE3 Sn393	2.15	8.32	8.6	3.37	1.47	5.61	5.88	4.81
SAR01-HY	2021/7/12	750	250	D750V3-1107	ES3DV3 - SN3124	DAE3 Sn393	2.13	8.32	8.52	2.40	1.47	5.61	5.88	4.81
SAR08-HY	2021/7/12	750	250	D750V3-1107	EX3DV4 - SN3642	DAE4 Sn917	2.08	8.32	8.32	0.00	1.34	5.61	5.36	-4.46
SAR11-HY	2021/7/12	750	50	D750V3-1107	EX3DV4 - SN3976	DAE4 Sn656	0.39	8.32	7.8	-6.25	0.26	5.61	5.2	-7.31
SAR08-HY	2021/7/16	750	250	D750V3-1107	EX3DV4 - SN3642	DAE4 Sn656	2.08	8.32	8.32	0.00	1.34	5.61	5.36	-4.46
SAR08-HY	2021/7/3	835	250	D835V2-4d167	EX3DV4 - SN3642	DAE4 Sn917	2.36	9.55	9.44	-1.15	1.55	6.21	6.2	-0.16
SAR01-HY	2021/7/3	835	250	D835V2-4d167	ES3DV3 - SN3124	DAE4 Sn1311	2.33	9.55	9.32	-2.41	1.56	6.21	6.24	0.48
SAR01-HY	2021/7/9	835	50	D835V2-4d167	ES3DV3 - SN3124	DAE3 Sn393	0.46	9.55	9.26	-3.04	0.30	6.21	6.06	-2.42
SAR08-HY	2021/7/11	835	50	D835V2-4d167	EX3DV4 - SN3642	DAE4 Sn917	0.46	9.55	9.2	-3.66	0.31	6.21	6.2	-0.16
SAR08-HY	2021/7/16	835	250	D835V2-4d167	EX3DV4 - SN3642	DAE4 Sn656	2.33	9.55	9.32	-2.41	1.49	6.21	5.96	-4.03
SAR15-HY	2021/7/16	835	50	D835V2-4d167	EX3DV4 - SN7625	DAE4 Sn699	0.44	9.55	8.82	-7.64	0.29	6.21	5.74	-7.57
SAR01-HY	2021/7/8	1750	250	D1750V2-1112	ES3DV3 - SN3124	DAE3 Sn393	9.12	36.70	36.48	-0.60	5.10	19.40	20.4	5.15
SAR08-HY	2021/7/9	1750	50	D1750V2-1112	EX3DV4 - SN3642	DAE4 Sn917	1.67	36.70	33.4	-8.99	0.88	19.40	17.6	-9.28
SAR11-HY	2021/7/14	1750	50	D1750V2-1112	EX3DV4 - SN3976	DAE4 Sn656	1.83	36.70	36.6	-0.27	0.99	19.40	19.8	2.06
SAR15-HY	2021/7/14	1750	250	D1750V2-1112	EX3DV4 - SN7625	DAE4 Sn699	8.90	36.70	35.6	-3.00	4.70	19.40	18.8	-3.09
SAR08-HY	2021/7/16	1750	250	D1750V2-1112	EX3DV4 - SN3642	DAE4 Sn917	8.80	36.70	35.2	-4.09	4.68	19.40	18.72	-3.51
SAR08-HY	2021/7/21	1750	50	D1750V2-1112	EX3DV4 - SN3642	DAE4 Sn917	1.69	36.70	33.8	-7.90	0.91	19.40	18.12	-6.60
SAR15-HY	2021/7/28	1750	250	D1750V2-1112	EX3DV4 - SN7625	DAE3 Sn393	9.13	36.70	36.52	-0.49	4.79	19.40	19.16	-1.24
SAR01-HY	2021/7/8	1900	250	D1900V2-5d185	ES3DV3 - SN3124	DAE4 Sn1311	9.67	39.40	38.68	-1.83	5.34	20.50	21.36	4.20
SAR08-HY	2021/7/9	1900	250	D1900V2-5d041	EX3DV4 - SN3642	DAE4 Sn917	9.50	40.20	38	-5.47	4.88	21.20	19.52	-7.92
SAR15-HY	2021/7/12	1900	250	D1900V2-5d185	EX3DV4 - SN7625	DAE4 Sn699	9.91	39.40	39.64	0.61	5.10	20.50	20.4	-0.49
SAR11-HY	2021/7/14	1900	50	D1900V2-5d041	EX3DV4 - SN3976	DAE4 Sn656	2.04	40.20	40.8	1.49	1.08	21.20	21.6	1.89
SAR08-HY	2021/7/15	1900	250	D1900V2-5d185	EX3DV4 - SN3642	DAE4 Sn917	10.20	39.40	40.8	3.55	5.26	20.50	21.04	2.63
SAR08-HY	2021/7/16	1900	250	D1900V2-5d041	EX3DV4 - SN3642	DAE4 Sn656	9.57	40.20	38.28	-4.78	4.91	21.20	19.64	-7.36
SAR08-HY	2021/7/22	1900	250	D1900V2-5d185	EX3DV4 - SN3642	DAE4 Sn917	10.10	39.40	40.4	2.54	5.19	20.50	20.76	1.27
SAR01-HY	2021/7/10	2300	250	D2300V2-1006	ES3DV3 - SN3124	DAE3 Sn393	12.10	48.70	48.4	-0.62	6.03	23.20	24.12	3.97
SAR08-HY	2021/7/13	2300	250	D2300V2-1006	EX3DV4 - SN3642	DAE4 Sn656	11.60	48.70	46.4	-4.72	5.53	23.20	22.12	-4.66
SAR15-HY	2021/7/15	2300	250	D2300V2-1006	EX3DV4 - SN7625	DAE4 Sn699	11.90	48.70	47.6	-2.26	5.72	23.20	22.88	-1.38
SAR08-HY	2021/7/25	2300	250	D2300V2-1006	EX3DV4 - SN3642	DAE4 Sn917	12.10	48.70	48.4	-0.62	5.78	23.20	23.12	-0.34
SAR01-HY	2021/7/14	2450	50	D2450V2-736	ES3DV3 - SN3124	DAE3 Sn393	2.77	52.70	55.4	5.12	1.30	24.60	26	5.69
SAR01-HY	2021/7/15	2450	50	D2450V2-736	ES3DV3 - SN3124	DAE3 Sn393	2.68	52.70	53.6	1.71	1.26	24.60	25.2	2.44
SAR11-HY	2021/7/23	2450	50	D2450V2-736	EX3DV4 - SN3976	DAE4 Sn699	2.61	52.70	52.2	-0.95	1.26	24.60	25.2	2.44
SAR01-HY	2021/7/23	2450	50	D2450V2-736	ES3DV3 - SN3124	DAE4 Sn699	2.69	52.70	53.8	2.09	1.27	24.60	25.4	3.25
SAR11-HY	2021/7/27	2450	50	D2450V2-736	EX3DV4 - SN3976	DAE4 Sn699	2.62	52.70	52.4	-0.57	1.27	24.60	25.4	3.25
SAR01-HY	2021/7/10	2600	50	D2600V2-1078	ES3DV3 - SN3124	DAE3 Sn393	2.98	57.60	59.6	3.47	1.35	25.50	27	5.88
SAR15-HY	2021/7/13	2600	250	D2600V2-1078	EX3DV4 - SN7625	DAE4 Sn699	14.80	57.60	59.2	2.78	6.72	25.50	26.88	5.41
SAR08-HY	2021/7/14	2600	250	D2600V2-1078	EX3DV4 - SN3642	DAE4 Sn917	13.80	57.60	55.2	-4.17	6.30	25.50	25.2	-1.18
SAR15-HY	2021/7/14	2600	250	D2600V2-1078	EX3DV4 - SN7625	DAE3 Sn393	14.70	57.60	58.8	2.08	6.70	25.50	26.8	5.10
SAR08-HY	2021/7/15	2600	250	D2600V2-1008	EX3DV4 - SN3642	DAE4 Sn656	13.70	56.40	54.8	-2.84	6.17	25.30	24.68	-2.45
SAR15-HY	2021/7/16	2600	250	D2600V2-1078	EX3DV4 - SN7625	DAE4 Sn699	15.20	57.60	60.8	5.56	6.90	25.50	27.6	8.24
SAR08-HY	2021/7/25	2600	250	D2600V2-1078	EX3DV4 - SN3642	DAE4 Sn917	13.70	57.60	54.8	-4.86	6.26	25.50	25.04	-1.80
SAR03-HY	2021/7/27	2600	250	D2600V2-1078	ES3DV3 - SN3169	DAE3 Sn577	15.00	57.60	60	4.17	6.81	25.50	27.24	6.82
SAR15-HY	2021/7/28	2600	250	D2600V2-1078	EX3DV4 - SN7625	DAE3 Sn393	14.5	57.60	58	0.69	6.60	25.50	26.4	3.53
SAR11-HY	2021/8/10	2600	50	D2600V2-1008	EX3DV4 - SN3976	DAE4 Sn699	2.92	56.40	58.4	3.55	1.35	25.30	27	6.72

Test site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR12-HY	2021/7/7	3500	100	D3500V2-1014	EX3DV4 - SN3898	DAE4 Sn1311	6.81	67.90	68.1	0.29	2.55	25.60	25.5	-0.39
SAR08-HY	2021/7/13	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn656	6.63	67.90	66.3	-2.36	2.48	25.60	24.8	-3.13
SAR08-HY	2021/7/17	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn917	6.36	67.90	63.6	-6.33	2.37	25.60	23.7	-7.42
SAR08-HY	2021/7/18	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn917	6.29	67.90	62.9	-7.36	2.35	25.60	23.5	-8.20
SAR08-HY	2021/7/20	3500	100	D3500V2-1014	EX3DV4 - SN3642	DAE4 Sn917	6.61	67.90	66.1	-2.65	2.54	25.60	25.4	-0.78
SAR15-HY	2021/8/5	3500	100	D3500V2-1014	EX3DV4 - SN7625	DAE3 Sn393	6.37	67.90	63.7	-6.19	2.36	25.60	23.6	-7.81
SAR12-HY	2021/7/7	3700	100	D3700V2-1006	EX3DV4 - SN3898	DAE4 Sn1311	7.00	67.30	70	4.01	2.51	24.50	25.1	2.45
SAR08-HY	2021/7/13	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn656	6.29	67.30	62.9	-6.54	2.28	24.50	22.8	-6.94
SAR08-HY	2021/7/17	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn917	6.89	67.30	68.9	2.38	2.53	24.50	25.3	3.27
SAR08-HY	2021/7/18	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn917	7.00	67.30	70	4.01	2.52	24.50	25.2	2.86
SAR08-HY	2021/7/20	3700	100	D3700V2-1006	EX3DV4 - SN3642	DAE4 Sn917	6.77	67.30	67.7	0.59	2.49	24.50	24.9	1.63
SAR15-HY	2021/8/5	3700	100	D3700V2-1006	EX3DV4 - SN7625	DAE3 Sn393	6.96	67.30	69.6	3.42	2.50	24.50	25	2.04
SAR08-HY	2021/7/17	3900	100	D3900V2-1017-3900	EX3DV4 - SN3642	DAE4 Sn917	6.93	69.50	69.3	-0.29	2.33	24.20	23.3	-3.72
SAR08-HY	2021/7/18	3900	100	D3900V2-1017-3900	EX3DV4 - SN3642	DAE4 Sn917	6.67	69.50	66.7	-4.03	2.22	24.20	22.2	-8.26
SAR15-HY	2021/8/5	3900	100	D3900V2-1017-3900	EX3DV4 - SN7625	DAE3 Sn393	7.26	69.50	72.6	4.46	2.51	24.20	25.1	3.72
SAR04-HY	2021/7/6	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN7306	DAE4 Sn1311	7.66	80.70	76.6	-5.08	2.18	23.20	21.8	-6.03
SAR15-HY	2021/7/17	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7625	DAE3 Sn393	7.95	80.00	79.5	-0.63	2.26	22.90	22.6	-1.31
SAR11-HY	2021/7/20	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN3976	DAE4 Sn699	4.12	80.70	82.4	2.11	1.18	23.20	23.6	1.72
SAR11-HY	2021/7/21	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN3976	DAE4 Sn699	4.10	80.70	82	1.61	1.19	23.20	23.8	2.59
SAR04-HY	2021/7/6	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN7306	DAE4 Sn1311	8.63	83.30	86.3	3.60	2.38	23.80	23.8	0.00
SAR15-HY	2021/7/17	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7625	DAE3 Sn393	8.02	82.40	80.2	-2.67	2.27	23.60	22.7	-3.81
SAR11-HY	2021/7/20	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN3976	DAE4 Sn699	4.29	83.30	85.8	3.00	1.21	23.80	24.2	1.68
SAR11-HY	2021/7/21	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN3976	DAE4 Sn699	4.29	83.30	85.8	3.00	1.22	23.80	24.4	2.52
SAR04-HY	2021/7/6	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN7306	DAE4 Sn1311	7.82	80.40	78.2	-2.74	2.23	22.90	22.3	-2.62
SAR15-HY	2021/7/17	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7625	DAE3 Sn393	7.84	79.10	78.4	-0.88	2.22	22.60	22.2	-1.77
SAR11-HY	2021/7/20	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN3976	DAE4 Sn699	3.97	80.40	79.4	-1.24	1.12	22.90	22.4	-2.18
SAR11-HY	2021/7/21	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN3976	DAE4 Sn699	3.94	80.40	78.8	-1.99	1.14	22.90	22.8	-0.44
SAR15-HY	2021/7/21	6500	50	D6.5GHzV2-1003	EX3DV4 - SN7625	DAE4 - SN656	16.20	299.00	324	8.36	2.96	55.10	59.2	7.44



**Fig 8.3.1 System Performance Check Setup**

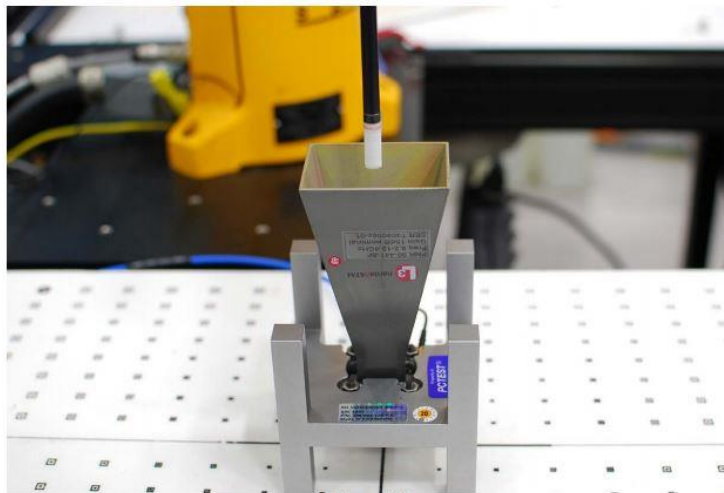


**Fig 8.3.2 Setup Photo**

**10.3 PD System Performance Check Results**

The system was verified to be within  $\pm 0.66$  dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes

Test Location	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm <sup>2</sup> (W/m <sup>2</sup> )	Targeted 4 cm <sup>2</sup> (W/m <sup>2</sup> )	Deviation (dB)	Date
SAR06-HY	10G	10GHz_1020	9441	699	10mm	44	42.2	0.18	2021/7/16



**Figure 4-3**  
System Verification Setup Photo

**System Performance Check Setup**

## 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.

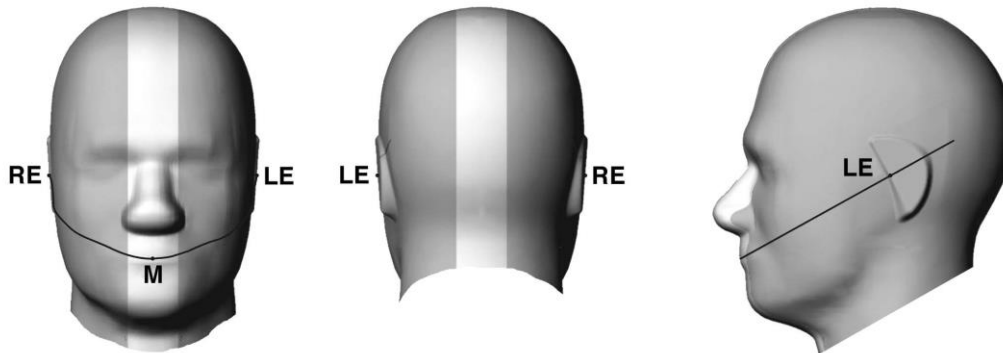


Fig 9.1.1 Front, back, and side views of SAM twin phantom

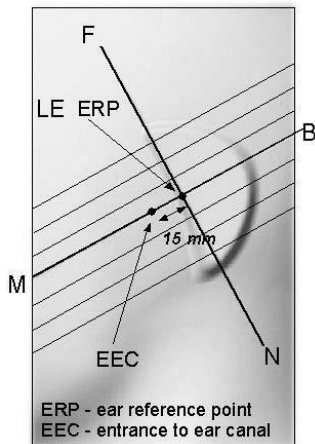


Fig 9.1.2 Close-up side view of phantom showing the ear region.

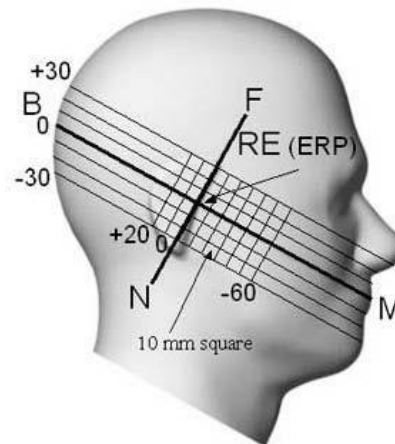


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

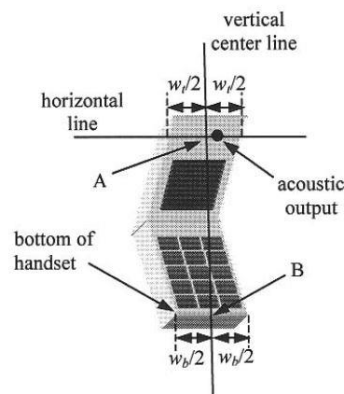


**11.2 Definition of the cheek position**

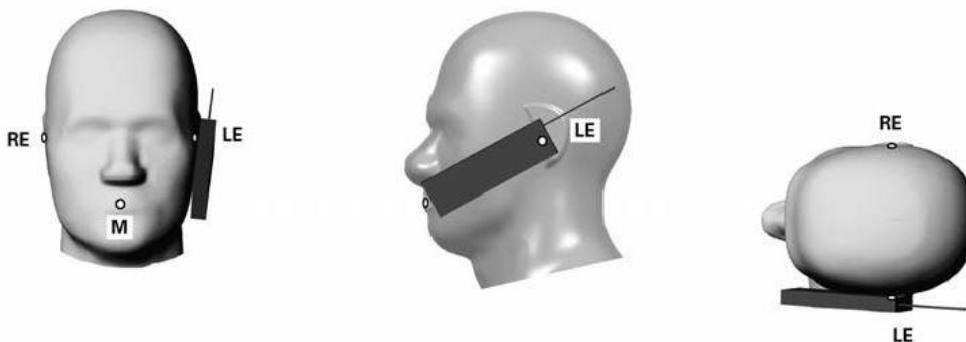
1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal 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”**

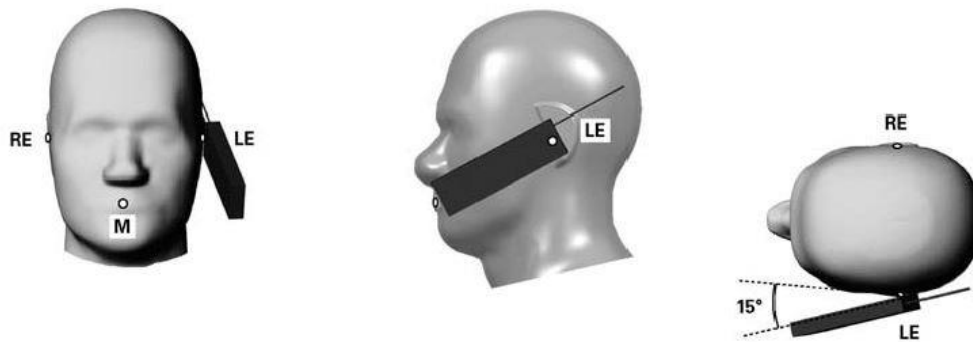


**Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.**



**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

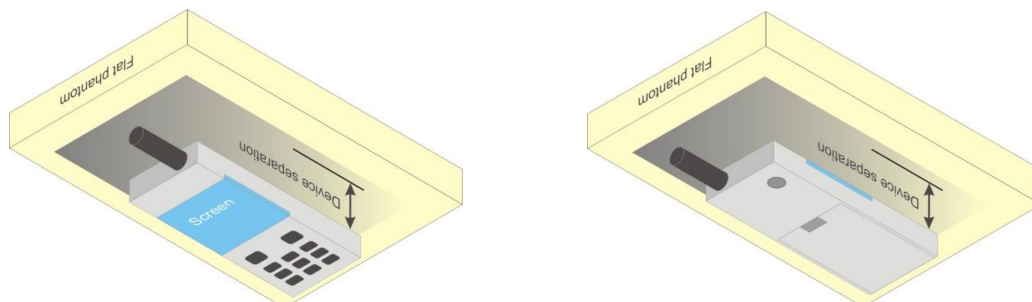


**Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.**

**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 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset 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 cm or an overall diagonal dimension > 16.0 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  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.6 The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

### **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 ( $L \times W \geq 9$  cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

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



## **12. Measurement procedure for output power and SAR**

Detail output power measurement data is in the appendix D

### **<GSM Note>**

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode, SAR measurement is not required for the secondary mode

### **<WCDMA Conducted Power>**

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 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 to RMC12.2Kbps and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for HSDPA / HSUPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA) are less than  $\frac{1}{4}$  dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA.
3. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
4. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.

A summary of these settings is illustrated below:

**HSDPA Setup Configuration:**

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

**Table C.10.1.4:  $\beta$  values for transmitter characteristics tests with HS-DPCCH**

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$ (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1:  $\Delta_{ACK}, \Delta_{NACK}$  and  $\Delta_{CQI} = 30/15$  with  $\beta_{HS} = 30/15 * \beta_c$ .

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA,  $\Delta_{ACK}$  and  $\Delta_{NACK} = 30/15$  with  $\beta_{HS} = 30/15 * \beta_c$ , and  $\Delta_{CQI} = 24/15$  with  $\beta_{HS} = 24/15 * \beta_c$ .

Note 3: CM = 1 for  $\beta_c/\beta_d = 12/15, \beta_{HS}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ .

**Setup Configuration**

**HSUPA Setup Configuration:**

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

**Table C.11.1.3:  $\beta$  values for transmitter characteristics tests with HS-DPCCH and E-DCH**

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{HS}$ (Note1)	$\beta_{ec}$	$\beta_{ed}$ (Note 4) (Note 5)	$\beta_{ed}$ (SF)	$\beta_{ed}$ (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCl
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

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

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

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

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

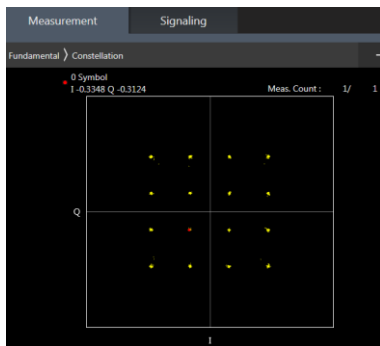
Note 5:  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.

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

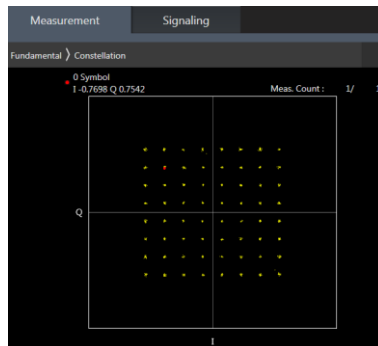
**Setup Configuration**

**<LTE Note>**

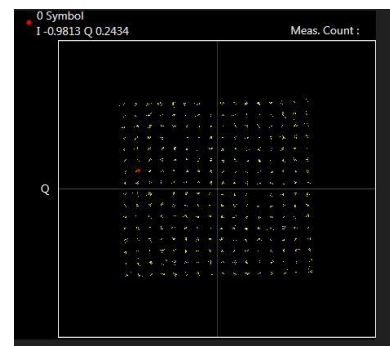
1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. the maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion
  - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to 2017 TCB workshop, for 16QAM, 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 16QAM, 64QAM, 256QAM signal modulation are correct.



**16QAM**



**64QAM**



**256QAM**

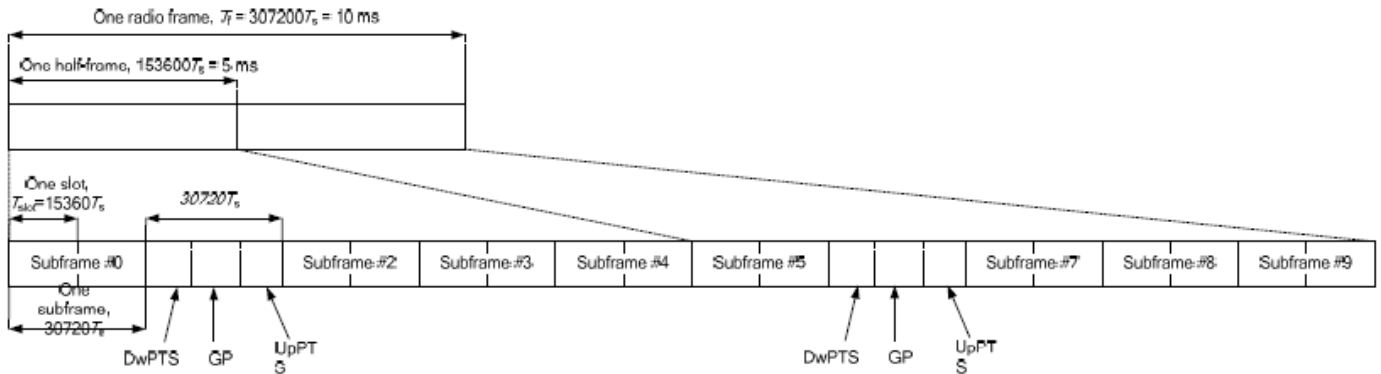


**<TDD LTE SAR Measurement>**

TDD LTE configuration setup for SAR measurement

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

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



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

**Table 4.2-2: Uplink-downlink configurations.**

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

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

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



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

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

The highest duty factor is resulted from:

- i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subframes, uplink operation is in 3 uplink subframes and 1 special subframe.
- ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink
- iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(3+0.167)/5 = 63.3\%$
- iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is:  $(3+0.143)/5 = 62.9\%$
- v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix  $63.3\%/62.9\% = 1.006$  is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.
- vi. The device supports Power Class 3 uplink-downlink configurations 0 and 6, and Power Class 2 uplink-downlink configurations 1 to 5 operations for LTE Band 41.
- vii. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1, for Power Class 3 operation is 63.3% using UL-DL configuration 0. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR among all exposure condition.



**<5G NR Note>**

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below
  - a. For DFT-OFDM output power measurement, full measurement was done for Pi/2 BPSK and QPSK and for the largest supported bandwidth, repeat test for 16QAM/64QAM/256QAM under 1RB 1Offset configuration. For smaller bandwidth, measure conducted power for Pi/2 BPSK and 1RB 1Offset configuration.
  - b. According to the tune-up, CP-OFDM output power is not ½ dB higher than DFT-OFDM mode, and the reported SAR of DFT-OFDM mode reported SAR is ≤ 1.45 W/kg, SAR test and thus conducted power for CP-OFDM mode is not required.
  - c. To start SAR test for the largest channel bandwidth 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. Also do SAR test for 50% RB allocation for Pi/2 BPSK SAR testing using 1RB Pi/2 BPSK allocation procedure
  - d. For Pi/2 BPSK with 100% RB allocation, SAR test 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.
  - e. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not ½ 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.
  - f. Smaller bandwidth output power for each RB allocation configuration for this device is not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
2. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

**<3GPP 38.101 MPR for EN-DC>**

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

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

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

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

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

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

**<WLAN Note>**

1. All of the wireless technology of this device only supports MIMO mode operation.
2. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band additional output power measurements were not necessary.
3. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
4. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
5. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
6. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
  - a. When the reported SAR of the initial test position is  $\leq 0.4$  W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
  - b. When the reported SAR of the test position is  $> 0.4$  W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is  $\leq 0.8$  W/kg or all required test position are tested.
  - c. For all positions/configurations, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are tested.
7. Per 201904 TCBC workshops, General principles of FCC KDB Publication 248227 D01 can be applied to determine the SAR Initial Test Configurations and test reduction for 802.11ax SAR testing. For the table below the 802.11ax maximum power is SU (non-OFDMA), and the SU maximum power also higher than RU (OFDMA)
8. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing
9. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
10. When SAR testing for 802.11ax is required
  - a. If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
  - b. Otherwise, consider the fully allocated channel for SAR testing
  - c. When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel
11. For the conducted power measurement is MIMO chains transmitting simultaneously and measured the separately conducted power for both chains and then based on the conducted power of antenna 3 and antenna 4 or antenna 3 and antenna 7 respectively to calculate sum of the power for MIMO mode

**<Bluetooth>**

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 76.83% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation, for the duty cycle figure and output power include in appendix D.

**13. DL/UL carrier aggregation**

**<LTE Carrier Aggregation combinations>**

**General Note:**

1. This device supports Carrier Aggregation on downlink only 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			
Number	Combination	Restriction	Covered by	Number	Combination	Restriction	Covered by
			Measurement Superset				Measurement Superset
1	CA_2A-17A			1	CA_2A-13A-46A	B46 SCC Only	
2	CA_5A-25A			2	CA_2A-14A-30A		
4CC Downlink Carrier Aggregation				5CC Downlink Carrier Aggregation			
Number	Combination	Restriction	Covered by	Number	Combination	Restriction	Covered by
			Measurement Superset				Measurement Superset
1	CA_2A-13A-66C		5CC-2	1	CA_2A-12A-30A-66A-66A		
2	CA_2A-2A-4A-71A			2	CA_2A-13A-48A-48A-66A		
3	CA_2A-2A-5B			3	CA_2A-13A-66A-66B		5CC-2

**<Power verification when LTE Carrier Aggregation Active>**

**General Note:**

- i. 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.
- ii. 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.
- iii. The device supports downlink 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.
- iv. 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.

**<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	CA_2A-17A	2	10	1880	18900	QPSK	1	0	17	10	740	5790	23.87	24.02
	CA_5A-25A	5	10	836.5	20525	QPSK	1	0	25	20	1960	8340	24.25	24.33

**<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	CA_2A-13A-46A	2	20	1860	18700	QPSK	1	0	13	10	751	5230	46	20	5537.5	50665	23.96	24.04
	CA_2A-14A-30A	2	20	1860	18700	QPSK	1	0	14	10	762	5330	30	10	2355	9820	23.96	24.04

**<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	CA_2A-2A-4A-71A	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	71	20	634.5	68761	23.96	24.04
	CA_2A-2A-5B	2	20	1860	18700	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	5	10	891.4	2624	23.96	24.04

**<Five Carrier power verification>**

Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				SCC3				SCC4				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	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-12A-30A-66A-66A	2	20	1860	18700	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	23.96	24.04
	CA_2A-13A-48A-48A-66A	2	20	1860	18700	QPSK	1	0	13	10	751	5230	48	20	3641	56150	48	5	3552.5	55265	66	20	2155	66886	23.96	24.04



<LTE Uplink carrier aggregation>

2CC Uplink Carrier Aggregation	
Number	Combination
1	CA_5B
2	CA_7C
3	CA_66B
4	CA_66C
5	CA_41C

<Intra-band>

General Note:

- i. The device supports intra-band uplink carrier aggregation 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.
- ii. 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.
- iii. Uplink CA is only operating with power class3, and additional SAR measurement for LTE UL CA whit 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.
- iv. For Intra-band, contiguous CA, the 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.

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

**TX 0**

Index 1/2/3/4/5/6										
CA_5B										
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	24.10	25.50
20575	20476	QPSK	1	0	1	49	2	0	24.15	25.50
20600	20501	QPSK	1	0	1	49	2	0	24.24	25.50

Index 1/2/3										
CA_7C										
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	24.09	25.50
21100	20902	QPSK	1	0	1	99	2	0	24.28	25.50
21350	21152	QPSK	1	0	1	99	2	0	24.38	25.50



Index 4/6										
CA_7C										
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	19.97	21.10
21100	20902	QPSK	1	0	1	99	2	0	19.91	21.10
21350	21152	QPSK	1	0	1	99	2	0	19.82	21.10

Index 5										
CA_7C										
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	20.53	22.30
21100	20902	QPSK	1	0	1	99	2	0	20.45	22.30
21350	21152	QPSK	1	0	1	99	2	0	20.40	22.30

Index 1/2/3										
CA_66B										
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	23.74	25.50
132322	132229	QPSK	1	0	1	24	2	0	23.78	25.50
132597	132504	QPSK	1	0	1	24	2	0	24	25.50

Index 1/2/3										
CA_66C										
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	23.68	25.50
132322	132124	QPSK	1	0	1	99	2	0	23.84	25.50
132572	132374	QPSK	1	0	1	99	2	0	23.73	25.50

Index 4										
CA_66B										
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	21.25	21.70
132322	132229	QPSK	1	0	1	24	2	0	21.04	21.70
132597	132504	QPSK	1	0	1	24	2	0	21.09	21.70

Index 4										
CA_66C										
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	20.71	21.70
132322	132124	QPSK	1	0	1	99	2	0	20.79	21.70
132572	132374	QPSK	1	0	1	99	2	0	20.85	21.70



Index 5/6										
CA_66B										
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	22.29	23.80
132322	132229	QPSK	1	0	1	24	2	0	22.23	23.80
132597	132504	QPSK	1	0	1	24	2	0	22.24	23.80

Index 5/6										
CA_66C										
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	21.85	23.80
132322	132124	QPSK	1	0	1	99	2	0	21.98	23.80
132572	132374	QPSK	1	0	1	99	2	0	22.07	23.80

Index 1/2/3/4/5/6										
CA_41C_PC3										
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	22.88	23.00
40185	39987	QPSK	1	0	1	99	2	0	22.76	23.00
40620	40422	QPSK	1	0	1	99	2	0	22.85	23.00
41055	40857	QPSK	1	0	1	99	2	0	22.79	23.00
41490	41292	QPSK	1	0	1	99	2	0	22.75	23.00





**TX 1**

Index 1/2/3/4/5/6										
CA_5B										
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	23.45	25.00
20575	20476	QPSK	1	0	1	49	2	0	23.39	25.00
20600	20501	QPSK	1	0	1	49	2	0	23.41	25.00

Index 1/2/3										
CA_7C										
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	22.45	24.10
21100	20902	QPSK	1	0	1	99	2	0	22.34	24.10
21350	21152	QPSK	1	0	1	99	2	0	22.14	24.10

Index 4										
CA_7C										
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	21.73	22.00
21100	20902	QPSK	1	0	1	99	2	0	21.54	22.00
21350	21152	QPSK	1	0	1	99	2	0	21.47	22.00

Index 5/6										
CA_7C										
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	21.73	23.20
21100	20902	QPSK	1	0	1	99	2	0	21.54	23.20
21350	21152	QPSK	1	0	1	99	2	0	21.47	23.20

Index 1/2/3/4/5/6										
CA_66B										
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	22.52	24.40
132322	132229	QPSK	1	0	1	24	2	0	22.51	24.40
132597	132504	QPSK	1	0	1	24	2	0	22.43	24.40

Index 1/2/3/4/5/6										
CA_66C										
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	23.1	24.40
132322	132124	QPSK	1	0	1	99	2	0	23.2	24.40
132572	132374	QPSK	1	0	1	99	2	0	23.10	24.40





Index 1/2/3/4/5/6											
CA_41C_PC3											
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	21.54	23.00	
40185	39987	QPSK	1	0	1	99	2	0	21.37	23.00	
40620	40422	QPSK	1	0	1	99	2	0	21.5	23.00	
41055	40857	QPSK	1	0	1	99	2	0	21.41	23.00	
41490	41292	QPSK	1	0	1	99	2	0	21.49	23.00	

**14. 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 6	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WLAN/BT Ant 4+3	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WLAN/BT Ant 7+3	≤ 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	Yes	No	Yes	Yes
WWAN Ant 6	Yes	Yes	No	Yes	Yes	Yes
2.4GHz WLAN/BT Ant 4+3	Yes	Yes	Yes	No	Yes	Yes
5/6GHz WLAN/BT Ant 7+3	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 antenna location is illustrated in the Appendix E.



## 15. SAR Test Results

### General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
  - c. For 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.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - $\leq 0.8$  W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
  - $\leq 0.4$  W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is  $\leq 1.2$  W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension  $> 15.0$  cm or an overall diagonal dimension  $> 16.0$  cm, when hotspot mode applies, 10-g 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 bottom side, FR1 n41 Top Side.
6. For 5.3GHz / 5.5GHz / 5.8GHz / 6GHz 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  $\leq 1/4$  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 is  $\leq 1/4$  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 to RMC12.2Kbps and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for HSDPA / HSUPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA) are less than  $1/4$  dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA .

**LTE Note:**

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM 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  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; 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.

**5G NR Note:**

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
  - a. To start SAR test for the largest channel bandwidth 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. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
  - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
  - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is 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.
  - d. Smaller bandwidth output power for each RB allocation configuration for this device 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  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device
  - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
  - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission



**WLAN Note:**

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.
2. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required when the WLAN5.3GHz band highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for WLAN5.2GHz band.
3. When the reported SAR of the test position is  $> 0.4$  W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is  $\leq 0.8$  W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are tested.
5. WiFi 2.4/5/6 GHz does not support SISO mode, so standalone SAR was only tested in MIMO mode operation
6. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain
7. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

**WLAN PD Note:**

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Absorbed power density (APD) using a 4cm<sup>2</sup> averaging area is reported based on SAR measurements.
4. Power density was calculated by repeated E-field measurements on two measurement planes separated by  $\lambda/4$ .
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
6. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty  $> 30\%$ . Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor.
7. The measurement procedure consists of measuring the PDinc at two different distances: 2 mm (compliance distance) and  $\lambda/5$ . The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPDn fulfill the criterion described below. Since iPD ratio between the two distances is  $\geq -1$ dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

$$10 \cdot \log_{10} \frac{iPD_n(2mm)}{iPD_n(\lambda/5)} \geq -1$$



15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Index 2/3	251	848.8	28.80	30.50	1.479	0.01	0.145	0.214
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2/3	251	848.8	28.80	30.50	1.479	-0.05	0.070	0.104
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	251	848.8	28.80	30.50	1.479	0.02	0.146	0.216
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	128	824.2	28.60	30.50	1.549	-0.07	0.153	0.237
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	189	836.4	28.78	30.50	1.486	0.1	0.138	0.205
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2/3	251	848.8	28.80	30.50	1.479	0.1	0.085	0.126
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	251	848.8	27.85	29.50	1.462	0.05	0.717	1.048
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	128	824.2	27.68	29.50	1.521	0.07	0.551	0.838
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	189	836.4	27.61	29.50	1.545	0.1	0.548	0.847
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	251	848.8	27.85	29.50	1.462	-0.06	0.668	0.977
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	128	824.2	27.68	29.50	1.521	0.03	0.484	0.736
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	189	836.4	27.61	29.50	1.545	-0.03	0.625	0.966
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2	251	848.8	27.85	29.50	1.462	-0.09	0.597	0.873
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2	128	824.2	27.68	29.50	1.521	0.01	0.506	0.769
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2	189	836.4	27.61	29.50	1.545	0.09	0.529	0.817
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2	251	848.8	27.85	29.50	1.462	0.04	0.577	0.844
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2	128	824.2	27.68	29.50	1.521	-0.06	0.484	0.736
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2	189	836.4	27.61	29.50	1.545	-0.14	0.510	0.788
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	251	848.8	27.85	28.80	1.245	0.05	0.717	0.892
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	128	824.2	27.68	28.80	1.294	0.07	0.551	0.713
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	189	836.4	27.61	28.80	1.315	0.1	0.548	0.721
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	251	848.8	27.85	28.80	1.245	-0.06	0.668	0.831
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	128	824.2	27.68	28.80	1.294	0.03	0.484	0.626
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	189	836.4	27.61	28.80	1.315	-0.03	0.625	0.822
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 3	251	848.8	27.85	28.80	1.245	-0.09	0.597	0.743
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 3	251	848.8	27.85	28.80	1.245	0.04	0.577	0.718
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	512	1850.2	26.10	28.00	1.549	-0.19	0.121	0.187
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	661	1880	26.05	28.00	1.567	0.02	0.113	0.177
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	810	1909.8	26.01	28.00	1.581	0.01	0.105	0.166
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2/3	512	1850.2	26.10	28.00	1.549	0.05	0.048	0.074
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	512	1850.2	26.10	28.00	1.549	-0.04	0.059	0.091
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2/3	512	1850.2	26.10	28.00	1.549	0.09	0.003	0.005
	GSM1900_Ant 0	GPRS (3 Tx slots)	Right Cheek	0mm	Index 2/3	661	1880	26.53	27.50	1.250	0.07	0.062	0.078
	GSM1900_Ant 0	GPRS (3 Tx slots)	Right Tilted	0mm	Index 2/3	661	1880	26.53	27.50	1.250	0.02	0.043	0.054
	GSM1900_Ant 0	GPRS (3 Tx slots)	Left Cheek	0mm	Index 2/3	661	1880	26.53	27.50	1.250	-0.15	0.114	0.143
02	GSM1900_Ant 0	GPRS (3 Tx slots)	Left Cheek	0mm	Index 2/3	512	1850.2	26.09	27.50	1.384	-0.18	0.156	0.216
	GSM1900_Ant 0	GPRS (3 Tx slots)	Left Cheek	0mm	Index 2/3	810	1909.8	26.39	27.50	1.291	0.11	0.119	0.154
	GSM1900_Ant 0	GPRS (3 Tx slots)	Left Tilted	0mm	Index 2/3	661	1880	26.53	27.50	1.250	0.03	0.052	0.065



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Index 2/3	9262	1852.4	24.03	25.25	1.324	-0.05	0.159	0.211
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	9400	1880	23.90	25.25	1.365	-0.08	0.165	0.225
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	9538	1907.6	23.90	25.25	1.365	-0.15	0.159	0.217
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	9262	1852.4	24.03	25.25	1.324	-0.06	0.059	0.078
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9262	1852.4	24.03	25.25	1.324	-0.01	0.079	0.105
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	9262	1852.4	24.03	25.25	1.324	-0.09	0.076	0.101
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	9262	1852.4	23.21	24.30	1.285	-0.05	0.100	0.129
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	9262	1852.4	23.21	24.30	1.285	-0.06	0.088	0.113
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9262	1852.4	23.21	24.30	1.285	-0.04	0.211	0.271
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9400	1880	23.42	24.30	1.225	-0.08	0.227	0.278
03	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9538	1907.6	23.27	24.30	1.268	-0.14	0.239	0.303
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	9262	1852.4	23.21	24.30	1.285	-0.18	0.099	0.127
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1312	1712.4	23.95	25.25	1.349	-0.18	0.119	0.161
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1413	1732.6	23.89	25.25	1.368	-0.18	0.122	0.167
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1513	1752.6	23.87	25.25	1.374	-0.07	0.144	0.198
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	1312	1712.4	23.95	25.25	1.349	0.05	0.023	0.031
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1312	1712.4	23.95	25.25	1.349	-0.09	0.043	0.058
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	1312	1712.4	23.95	25.25	1.349	-0.1	0.027	0.036
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1312	1712.4	23.09	24.50	1.384	-0.05	0.110	0.152
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	1312	1712.4	23.09	24.50	1.384	-0.03	0.108	0.149
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1312	1712.4	23.09	24.50	1.384	-0.03	0.169	0.234
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1413	1732.6	23.06	24.50	1.393	-0.08	0.192	0.267
04	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1513	1752.6	23.05	24.50	1.396	-0.14	0.226	0.316
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	1312	1712.4	23.09	24.50	1.384	-0.13	0.097	0.134
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	4182	836.4	23.99	25.40	1.384	0.06	0.196	0.271
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	4182	836.4	23.99	25.40	1.384	0	0.101	0.140
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4182	836.4	23.99	25.40	1.384	-0.18	0.212	0.293
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	4233	846.6	23.98	25.40	1.387	-0.14	0.090	0.125
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4132	826.4	23.97	25.40	1.390	-0.09	0.213	0.296
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4233	846.6	23.98	25.40	1.387	-0.17	0.267	0.370
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2	4132	826.4	23.74	25.20	1.400	0.03	0.784	1.097
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2	4182	836.4	23.75	25.20	1.396	0.05	0.625	0.873
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2	4233	846.6	23.61	25.20	1.442	0.03	0.644	0.929
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4132	826.4	23.74	25.20	1.400	0.08	0.623	0.872
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4182	836.4	23.75	25.20	1.396	0.05	0.512	0.715
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4233	846.6	23.61	25.20	1.442	0.03	0.539	0.777
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Index 2	4132	826.4	23.74	25.20	1.400	-0.03	0.345	0.483
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Index 2	4132	826.4	23.74	25.20	1.400	0.02	0.262	0.367
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 3	4132	826.4	23.74	24.30	1.138	0.03	0.784	0.892
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 3	4182	836.4	23.75	24.30	1.135	0.05	0.625	0.709
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 3	4233	846.6	23.61	24.30	1.172	0.03	0.644	0.755
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 3	4132	826.4	23.74	24.30	1.138	0.08	0.623	0.709
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Index 3	4132	826.4	23.74	24.30	1.138	-0.03	0.345	0.392
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Index 3	4132	826.4	23.74	24.30	1.138	0.02	0.262	0.298





<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	0	Right Cheek	0mm	Index 2/3	21350	2560	24.16	25.50	1.361	-0.18	0.205	0.279
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	20850	2510	24.12	25.50	1.374	-0.05	0.185	0.254
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	21100	2535	24.07	25.50	1.390	-0.07	0.144	0.200
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	20850	2510	23.28	24.50	1.324	-0.1	0.136	0.180
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	21350	2560	24.16	25.50	1.361	0	0.133	0.181
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	20850	2510	23.28	24.50	1.324	-0.09	0.111	0.147
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	21350	2560	24.16	25.50	1.361	-0.02	0.175	0.238
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	20850	2510	23.28	24.50	1.324	0.07	0.153	0.203
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	21350	2560	24.16	25.50	1.361	-0.1	0.149	0.203
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	20850	2510	23.28	24.50	1.324	0.08	0.122	0.162
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	21350+21152	2560	24.38	25.50	1.294	-0.03	0.188	0.243
	LTE Band 7_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	Index 2/3	20850	2510	22.56	24.10	1.426	-0.09	0.125	0.178
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	Index 2/3	20850	2510	21.71	23.10	1.377	0.04	0.104	0.143
	LTE Band 7_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	Index 2/3	20850	2510	22.56	24.10	1.426	-0.04	0.149	0.212
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	Index 2/3	20850	2510	21.71	23.10	1.377	0.1	0.112	0.154
	LTE Band 7_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	20850	2510	22.56	24.10	1.426	0.09	0.233	0.332
06	LTE Band 7_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	21100	2535	22.55	24.10	1.429	-0.18	0.256	0.366
	LTE Band 7_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	21350	2560	22.52	24.10	1.439	0.1	0.226	0.325
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	Index 2/3	20850	2510	21.71	23.10	1.377	0.08	0.189	0.260
	LTE Band 7_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	Index 2/3	20850	2510	22.56	24.10	1.426	-0.01	0.093	0.133
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	Index 2/3	20850	2510	21.71	23.10	1.377	0.04	0.078	0.107
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	Index 2/3	20850+21048	2510	22.45	24.10	1.462	0.08	0.245	0.358
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	23095	707.5	24.31	25.50	1.315	-0.12	0.157	0.206
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	Index 2/3	23095	707.5	23.36	24.50	1.300	-0.17	0.128	0.166
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	23095	707.5	24.31	25.50	1.315	0.01	0.120	0.158
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	Index 2/3	23095	707.5	23.36	24.50	1.300	0.04	0.093	0.121
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	23095	707.5	24.31	25.50	1.315	-0.02	0.158	0.208
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	Index 2/3	23095	707.5	23.36	24.50	1.300	-0.01	0.181	0.235
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	23095	707.5	24.31	25.50	1.315	-0.16	0.100	0.132
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	Index 2/3	23095	707.5	23.36	24.50	1.300	-0.14	0.079	0.103
07	LTE Band 12_Ant 1	10M	QPSK	1	25	Right Cheek	0mm	Index 2/3	23095	707.5	23.87	25.20	1.358	-0.12	0.253	0.344
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	Index 2/3	23095	707.5	22.89	24.20	1.352	-0.11	0.217	0.293
	LTE Band 12_Ant 1	10M	QPSK	1	25	Right Tilted	0mm	Index 2/3	23095	707.5	23.87	25.20	1.358	-0.1	0.233	0.316
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	Index 2/3	23095	707.5	22.89	24.20	1.352	-0.13	0.220	0.297
	LTE Band 12_Ant 1	10M	QPSK	1	25	Left Cheek	0mm	Index 2/3	23095	707.5	23.87	25.20	1.358	-0.18	0.147	0.200
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	Index 2/3	23095	707.5	22.89	24.20	1.352	-0.08	0.123	0.166
	LTE Band 12_Ant 1	10M	QPSK	1	25	Left Tilted	0mm	Index 2/3	23095	707.5	23.87	25.20	1.358	-0.06	0.128	0.174
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	Index 2/3	23095	707.5	22.89	24.20	1.352	-0.02	0.126	0.170



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	0	Right Cheek	0mm	Index 2/3	23230	782	24.47	25.50	1.268	-0.11	0.164	0.208
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	Index 2/3	23230	782	23.55	24.50	1.245	-0.19	0.132	0.164
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	23230	782	24.47	25.50	1.268	0.14	0.136	0.172
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	Index 2/3	23230	782	23.55	24.50	1.245	0.08	0.114	0.142
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	23230	782	24.47	25.50	1.268	-0.02	0.254	0.322
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	Index 2/3	23230	782	23.55	24.50	1.245	-0.16	0.200	0.249
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	23230	782	24.47	25.50	1.268	0.03	0.110	0.139
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	Index 2/3	23230	782	23.55	24.50	1.245	-0.15	0.090	0.112
08	LTE Band 13_Ant 1	10M	QPSK	1	25	Right Cheek	0mm	Index 2/3	23230	782	23.94	25.20	1.337	-0.04	0.322	0.430
	LTE Band 13_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	Index 2/3	23230	782	23.01	24.20	1.315	-0.19	0.251	0.330
	LTE Band 13_Ant 1	10M	QPSK	1	25	Right Tilted	0mm	Index 2/3	23230	782	23.94	25.20	1.337	-0.14	0.261	0.349
	LTE Band 13_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	Index 2/3	23230	782	23.01	24.20	1.315	-0.13	0.240	0.316
	LTE Band 13_Ant 1	10M	QPSK	1	25	Left Cheek	0mm	Index 2/3	23230	782	23.94	25.20	1.337	-0.07	0.211	0.282
	LTE Band 13_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	Index 2/3	23230	782	23.01	24.20	1.315	-0.05	0.165	0.217
	LTE Band 13_Ant 1	10M	QPSK	1	25	Left Tilted	0mm	Index 2/3	23230	782	23.94	25.20	1.337	-0.03	0.198	0.265
	LTE Band 13_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	Index 2/3	23230	782	23.01	24.20	1.315	-0.02	0.154	0.203
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	23330	793	24.30	25.50	1.318	-0.12	0.159	0.210
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	Index 2/3	23330	793	23.34	24.50	1.306	-0.18	0.130	0.170
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	23330	793	24.30	25.50	1.318	0.12	0.139	0.183
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	Index 2/3	23330	793	23.34	24.50	1.306	0.1	0.112	0.146
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	23330	793	24.30	25.50	1.318	-0.08	0.275	0.363
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	Index 2/3	23330	793	23.34	24.50	1.306	-0.02	0.191	0.249
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	23330	793	24.30	25.50	1.318	-0.18	0.119	0.157
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	Index 2/3	23330	793	23.34	24.50	1.306	-0.19	0.093	0.121
09	LTE Band 14_Ant 1	10M	QPSK	1	25	Right Cheek	0mm	Index 2/3	23330	793	23.84	25.20	1.368	-0.08	0.493	0.674
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	Index 2/3	23330	793	22.92	24.20	1.343	-0.12	0.388	0.521
	LTE Band 14_Ant 1	10M	QPSK	1	25	Right Tilted	0mm	Index 2/3	23330	793	23.84	25.20	1.368	-0.14	0.374	0.512
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	Index 2/3	23330	793	22.92	24.20	1.343	-0.15	0.396	0.532
	LTE Band 14_Ant 1	10M	QPSK	1	25	Left Cheek	0mm	Index 2/3	23330	793	23.84	25.20	1.368	-0.01	0.313	0.428
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	Index 2/3	23330	793	22.92	24.20	1.343	-0.01	0.248	0.333
	LTE Band 14_Ant 1	10M	QPSK	1	25	Left Tilted	0mm	Index 2/3	23330	793	23.84	25.20	1.368	-0.05	0.291	0.398
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	Index 2/3	23330	793	22.92	24.20	1.343	-0.07	0.232	0.312
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	26340	1880	24.21	25.50	1.346	-0.03	0.210	0.283
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	26140	1860	24.19	25.50	1.352	-0.04	0.213	0.288
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	26590	1905	24.13	25.50	1.371	-0.07	0.223	0.306
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	26340	1880	23.25	24.50	1.334	0.01	0.182	0.243
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	26340	1880	24.21	25.50	1.346	-0.1	0.044	0.059
	LTE Band 25_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	26140	1860	23.30	24.50	1.318	-0.17	0.039	0.051
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	26340	1880	24.21	25.50	1.346	0.01	0.090	0.121
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	26140	1860	23.30	24.50	1.318	0.03	0.076	0.100
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	26340	1880	24.21	25.50	1.346	0.02	0.073	0.098
	LTE Band 25_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	26140	1860	23.30	24.50	1.318	0.01	0.065	0.086
	LTE Band 25_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	Index 2/3	26140	1860	23.23	24.60	1.371	-0.06	0.090	0.123
	LTE Band 25_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	Index 2/3	26140	1860	22.31	23.60	1.346	-0.02	0.075	0.101
	LTE Band 25_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	Index 2/3	26140	1860	23.23	24.60	1.371	-0.05	0.056	0.077
	LTE Band 25_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	Index 2/3	26140	1860	22.31	23.60	1.346	-0.17	0.041	0.055
	LTE Band 25_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	26140	1860	23.23	24.60	1.371	-0.07	0.238	0.326
	LTE Band 25_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	26340	1880	23.12	24.60	1.406	0.08	0.254	0.357
10	LTE Band 25_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	26590	1905	23.09	24.60	1.416	-0.18	0.269	0.381
	LTE Band 25_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	Index 2/3	26140	1860	22.31	23.60	1.346	0.03	0.162	0.218
	LTE Band 25_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	Index 2/3	26140	1860	23.23	24.60	1.371	0.06	0.128	0.175
	LTE Band 25_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	Index 2/3	26140	1860	22.31	23.60	1.346	0	0.105	0.141





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	0	Right Cheek	0mm	Index 2/3	26865	831.5	24.20	25.50	1.349	0.16	0.238	0.321
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Cheek	0mm	Index 2/3	26865	831.5	23.31	24.50	1.315	0.17	0.188	0.247
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	Index 2/3	26865	831.5	24.20	25.50	1.349	0.04	0.154	0.208
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Tilted	0mm	Index 2/3	26865	831.5	23.31	24.50	1.315	0.08	0.120	0.158
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	Index 2/3	26865	831.5	24.20	25.50	1.349	-0.06	0.246	0.332
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Cheek	0mm	Index 2/3	26865	831.5	23.31	24.50	1.315	-0.16	0.234	0.308
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	Index 2/3	26865	831.5	24.20	25.50	1.349	-0.07	0.134	0.181
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Tilted	0mm	Index 2/3	26865	831.5	23.31	24.50	1.315	-0.06	0.102	0.134
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	20600+20501	844	24.24	25.50	1.337	0.01	0.223	0.298
	LTE Band 26_Ant 1	15M	QPSK	1	37	Right Cheek	0mm	Index 2/3	26865	831.5	23.66	25.00	1.361	0.04	0.340	0.463
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Cheek	0mm	Index 2/3	26865	831.5	22.75	24.00	1.334	-0.06	0.226	0.301
11	LTE Band 26_Ant 1	15M	QPSK	1	37	Right Tilted	0mm	Index 2/3	26865	831.5	23.66	25.00	1.361	-0.11	0.392	0.534
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Tilted	0mm	Index 2/3	26865	831.5	22.75	24.00	1.334	-0.09	0.287	0.383
	LTE Band 26_Ant 1	15M	QPSK	1	37	Left Cheek	0mm	Index 2/3	26865	831.5	23.66	25.00	1.361	-0.12	0.254	0.346
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Cheek	0mm	Index 2/3	26865	831.5	22.75	24.00	1.334	-0.19	0.206	0.275
	LTE Band 26_Ant 1	15M	QPSK	1	37	Left Tilted	0mm	Index 2/3	26865	831.5	23.66	25.00	1.361	-0.02	0.320	0.436
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Tilted	0mm	Index 2/3	26865	831.5	22.75	24.00	1.334	0.04	0.278	0.371
	LTE Band 5B_Ant 0	10M	QPSK	1	49	Right Tilted	0mm	Index 2/3	20450+20549	829	23.45	25.00	1.429	0.06	0.368	0.526
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	27710	2310	24.11	25.50	1.377	-0.16	0.099	0.136
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Cheek	0mm	Index 2/3	27710	2310	23.16	24.50	1.361	0.02	0.078	0.106
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	27710	2310	24.11	25.50	1.377	0.01	0.037	0.051
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Tilted	0mm	Index 2/3	27710	2310	23.16	24.50	1.361	0.01	0.025	0.034
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	27710	2310	24.11	25.50	1.377	0.06	0.066	0.091
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Cheek	0mm	Index 2/3	27710	2310	23.16	24.50	1.361	0.05	0.048	0.065
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	27710	2310	24.11	25.50	1.377	-0.07	0.047	0.065
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Tilted	0mm	Index 2/3	27710	2310	23.16	24.50	1.361	-0.05	0.036	0.049
	LTE Band 30_Ant 0	10M	QPSK	1	25	Right Cheek	0mm	Index 2/3	27710	2310	22.62	24.40	1.507	0.08	0.078	0.118
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	Index 2/3	27710	2310	21.69	23.40	1.483	-0.04	0.062	0.092
	LTE Band 30_Ant 0	10M	QPSK	1	25	Right Tilted	0mm	Index 2/3	27710	2310	22.62	24.40	1.507	0.03	0.055	0.083
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	Index 2/3	27710	2310	21.69	23.40	1.483	-0.01	0.043	0.064
12	LTE Band 30_Ant 0	10M	QPSK	1	25	Left Cheek	0mm	Index 2/3	27710	2310	22.62	24.40	1.507	-0.17	0.159	0.240
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	Index 2/3	27710	2310	21.69	23.40	1.483	0.04	0.112	0.166
	LTE Band 30_Ant 0	10M	QPSK	1	25	Left Tilted	0mm	Index 2/3	27710	2310	22.62	24.40	1.507	-0.03	0.075	0.113
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	Index 2/3	27710	2310	21.69	23.40	1.483	-0.02	0.060	0.089



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Right Cheek	0mm	Index 2/3	132572	1770	24.23	25.50	1.340	-0.08	0.150	0.201
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132072	1720	24.17	25.50	1.358	-0.05	0.130	0.177
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132322	1745	24.19	25.50	1.352	-0.06	0.138	0.187
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	132572	1770	23.33	24.50	1.309	-0.05	0.125	0.164
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	132572	1770	24.23	25.50	1.340	-0.03	0.071	0.095
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	132072	1720	23.35	24.50	1.303	-0.08	0.055	0.072
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	132572	1770	24.23	25.50	1.340	-0.05	0.078	0.104
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	132072	1720	23.35	24.50	1.303	-0.11	0.070	0.091
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	132572	1770	24.23	25.50	1.340	-0.01	0.070	0.094
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	132072	1720	23.35	24.50	1.303	0.03	0.045	0.059
	LTE Band 66B_Ant 2	15M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132597+132504	1772.5	24.00	25.50	1.413	-0.12	0.120	0.170
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132322+132124	1745	23.84	25.50	1.466	0.03	0.092	0.135
	LTE Band 66_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	Index 2/3	132072	1720	23.11	24.40	1.346	0.05	0.081	0.109
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	132072	1720	22.22	23.40	1.312	0.08	0.064	0.084
	LTE Band 66_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	Index 2/3	132072	1720	23.11	24.40	1.346	0.09	0.113	0.152
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	132072	1720	22.22	23.40	1.312	0.02	0.123	0.161
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	132072	1720	23.11	24.40	1.346	0.06	0.124	0.167
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	132322	1745	22.98	24.40	1.387	0.08	0.187	0.259
13	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	132572	1770	22.86	24.40	1.426	0.1	0.219	0.312
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	132072	1720	22.22	23.40	1.312	-0.05	0.176	0.231
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	Index 2/3	132072	1720	23.11	24.40	1.346	-0.07	0.170	0.229
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	132072	1720	22.22	23.40	1.312	0.07	0.158	0.207
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Left Cheek	0mm	Index 2/3	132047+132140	1717.5	22.52	24.40	1.542	-0.04	0.201	0.310
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	132322+132124	1745	23.20	24.40	1.318	0.09	0.189	0.249
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	133322	683	24.19	25.50	1.352	0.06	0.083	0.112
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	133322	683	23.32	24.50	1.312	-0.03	0.068	0.089
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	133322	683	24.19	25.50	1.352	0.03	0.066	0.089
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	133322	683	23.32	24.50	1.312	-0.09	0.053	0.070
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	133322	683	24.19	25.50	1.352	-0.13	0.170	0.230
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	133322	683	23.32	24.50	1.312	-0.05	0.122	0.160
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	133322	683	24.19	25.50	1.352	-0.07	0.111	0.150
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	133322	683	23.32	24.50	1.312	-0.08	0.098	0.129
14	LTE Band 71_Ant 1	20M	QPSK	1	49	Right Cheek	0mm	Index 2/3	133322	683	23.66	25.00	1.361	0.18	0.228	0.310
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Cheek	0mm	Index 2/3	133322	683	22.77	24.00	1.327	-0.04	0.195	0.259
	LTE Band 71_Ant 1	20M	QPSK	1	49	Right Tilted	0mm	Index 2/3	133322	683	23.66	25.00	1.361	-0.1	0.147	0.200
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Tilted	0mm	Index 2/3	133322	683	22.77	24.00	1.327	0.1	0.120	0.159
	LTE Band 71_Ant 1	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	133322	683	23.66	25.00	1.361	-0.09	0.139	0.189
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Cheek	0mm	Index 2/3	133322	683	22.77	24.00	1.327	-0.02	0.102	0.135
	LTE Band 71_Ant 1	20M	QPSK	1	49	Left Tilted	0mm	Index 2/3	133322	683	23.66	25.00	1.361	-0.08	0.100	0.136
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Tilted	0mm	Index 2/3	133322	683	22.77	24.00	1.327	-0.02	0.083	0.110



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	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)
	LTE Band 41_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	40185	2549.5	24.19	25.50	1.352	62.9	1.006	0.01	0.138	0.188
	LTE Band 41_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	39750	2506	24.18	25.50	1.355	62.9	1.006	-0.16	0.140	0.191
	LTE Band 41_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	40620	2593	24.11	25.50	1.377	62.9	1.006	-0.04	0.090	0.125
	LTE Band 41_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	41055	2636.5	24.02	25.50	1.406	62.9	1.006	-0.08	0.090	0.127
	LTE Band 41_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	41490	2680	23.93	25.50	1.435	62.9	1.006	0.14	0.096	0.139
	LTE Band 41_Ant 2	20M	QPSK	50	50	Right Cheek	0mm	Index 2/3	40185	2549.5	23.34	24.50	1.306	62.9	1.006	0.13	0.087	0.114
	LTE Band 41_Ant 2	20M	QPSK	1	99	Right Tilted	0mm	Index 2/3	40185	2549.5	24.19	25.50	1.352	62.9	1.006	-0.02	0.062	0.084
	LTE Band 41_Ant 2	20M	QPSK	50	50	Right Tilted	0mm	Index 2/3	40185	2549.5	23.34	24.50	1.306	62.9	1.006	0.01	0.050	0.066
	LTE Band 41_Ant 2	20M	QPSK	1	99	Left Cheek	0mm	Index 2/3	40185	2549.5	24.19	25.50	1.352	62.9	1.006	-0.05	0.100	0.136
	LTE Band 41_Ant 2	20M	QPSK	50	50	Left Cheek	0mm	Index 2/3	40185	2549.5	23.34	24.50	1.306	62.9	1.006	-0.14	0.089	0.117
	LTE Band 41_Ant 2	20M	QPSK	1	99	Left Tilted	0mm	Index 2/3	40185	2549.5	24.19	25.50	1.352	62.9	1.006	0.13	0.056	0.076
	LTE Band 41_Ant 2	20M	QPSK	50	50	Left Tilted	0mm	Index 2/3	40185	2549.5	23.34	24.50	1.306	62.9	1.006	-0.09	0.043	0.057
15	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	39750	2506	26.23	27.50	1.340	62.9	1.006	-0.03	0.158	0.213
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	39750+39948	2506	22.88	23.00	1.028	62.9	1.006	0.03	0.158	0.163
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	Index 2/3	39750	2506	22.69	24.50	1.517	62.9	1.006	0.01	0.050	0.076
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	39750	2506	21.79	23.50	1.483	62.9	1.006	0.12	0.038	0.057
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	Index 2/3	39750	2506	22.69	24.50	1.517	62.9	1.006	-0.05	0.059	0.090
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	39750	2506	21.79	23.50	1.483	62.9	1.006	-0.04	0.041	0.061
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	39750	2506	22.69	24.50	1.517	62.9	1.006	-0.08	0.126	0.192
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	40185	2549.5	22.60	24.50	1.549	62.9	1.006	0.01	0.078	0.122
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	40620	2593	22.55	24.50	1.567	62.9	1.006	0	0.095	0.150
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	41055	2636.5	22.52	24.50	1.578	62.9	1.006	0.06	0.131	0.208
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	41490	2680	22.52	24.50	1.578	62.9	1.006	0.08	0.113	0.179
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	39750	2506	21.79	23.50	1.483	62.9	1.006	-0.09	0.092	0.137
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	Index 2/3	39750	2506	22.69	24.50	1.517	62.9	1.006	0.14	0.046	0.070
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	39750	2506	21.79	23.50	1.483	62.9	1.006	0.08	0.033	0.049
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	41055	2636.5	24.66	26.60	1.563	42.9	1.009	-0.04	0.132	0.208
	LTE Band 41C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	Index 2/3	39750+39948	2506	21.54	23.00	1.400	62.9	1.006	0.03	0.066	0.093
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	56640	3690	23.89	25.50	1.449	62.9	1.006	0.01	0.128	0.187
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Cheek	0mm	Index 2/3	56150	3641	23.45	24.50	1.274	62.9	1.006	0.12	0.105	0.135
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	56640	3690	23.89	25.50	1.449	62.9	1.006	0.05	0.125	0.182
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Tilted	0mm	Index 2/3	56150	3641	23.45	24.50	1.274	62.9	1.006	0.06	0.090	0.115
16	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	55340	3560	23.63	25.50	1.538	62.9	1.006	-0.13	0.224	0.347
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Cheek	0mm	Index 2/3	56150	3641	23.45	24.50	1.274	62.9	1.006	0.08	0.155	0.199
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	56640	3690	23.89	25.50	1.449	62.9	1.006	-0.14	0.069	0.101
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Tilted	0mm	Index 2/3	56150	3641	23.45	24.50	1.274	62.9	1.006	0.01	0.054	0.069
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	56640	3690	22.06	22.90	1.213	62.9	1.006	-0.03	0.052	0.063
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	55340	3560	21.49	22.90	1.384	62.9	1.006	0.11	0.084	0.117
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	55830	3609	21.83	22.90	1.279	62.9	1.006	0.07	0.047	0.060
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	56150	3641	21.96	22.90	1.242	62.9	1.006	-0.03	0.044	0.055
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	Index 2/3	56640	3690	21.09	21.90	1.205	62.9	1.006	0.01	0.038	0.046
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	56640	3690	22.06	22.90	1.213	62.9	1.006	0.01	0.001	0.001
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	Index 2/3	56640	3690	21.09	21.90	1.205	62.9	1.006	0.02	0.001	0.001
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	56640	3690	22.06	22.90	1.213	62.9	1.006	-0.04	0.039	0.048
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	Index 2/3	56640	3690	21.09	21.90	1.205	62.9	1.006	-0.08	0.026	0.032
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	56640	3690	22.06	22.90	1.213	62.9	1.006	0.14	0.040	0.049
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	Index 2/3	56640	3690	21.09	21.90	1.205	62.9	1.006	0.13	0.030	0.036



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	167300	836.5	24.64	25.50	1.219	-0.11	0.184	0.224
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	167300	836.5	24.50	25.50	1.259	0.05	0.174	0.219
	FR1 n5_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	167300	836.5	24.64	25.50	1.219	0.06	0.113	0.138
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	167300	836.5	24.50	25.50	1.259	-0.13	0.113	0.142
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	167300	836.5	24.64	25.50	1.219	-0.07	0.241	0.294
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	167300	836.5	24.50	25.50	1.259	-0.13	0.242	0.305
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	167300	836.5	24.64	25.50	1.219	0.06	0.151	0.184
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	167300	836.5	24.50	25.50	1.259	0.05	0.148	0.186
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	167300	836.5	24.09	25.10	1.262	0.03	0.564	0.712
17	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	167300	836.5	23.96	25.10	1.300	-0.04	0.552	0.718
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	167300	836.5	24.09	25.10	1.262	0.05	0.557	0.703
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	167300	836.5	23.96	25.10	1.300	-0.08	0.546	0.709
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	167300	836.5	24.09	25.10	1.262	-0.08	0.387	0.488
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	167300	836.5	23.96	25.10	1.300	-0.16	0.382	0.497
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	167300	836.5	24.09	25.10	1.262	-0.01	0.401	0.506
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	167300	836.5	23.96	25.10	1.300	0.18	0.393	0.512
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	502000	2510	24.54	25.50	1.247	0.18	0.240	0.299
	FR1 n7_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	502000	2510	24.41	25.50	1.285	-0.18	0.234	0.301
	FR1 n7_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	507000	2535	24.36	25.50	1.300	0.03	0.218	0.283
	FR1 n7_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	512000	2560	24.38	25.50	1.294	0.05	0.209	0.270
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	502000	2510	24.54	25.50	1.247	0.19	0.094	0.117
	FR1 n7_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	502000	2510	24.41	25.50	1.285	-0.03	0.087	0.112
	FR1 n7_Ant 2	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	502000	2510	24.54	25.50	1.247	-0.12	0.139	0.173
	FR1 n7_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	502000	2510	24.41	25.50	1.285	0.1	0.131	0.168
	FR1 n7_Ant 2	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	502000	2510	24.54	25.50	1.247	-0.05	0.117	0.146
	FR1 n7_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	502000	2510	24.41	25.50	1.285	-0.05	0.102	0.131
	FR1 n7_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	502000	2510	23.10	24.70	1.445	-0.16	0.128	0.185
	FR1 n7_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	502000	2510	22.95	24.70	1.496	0.06	0.122	0.183
	FR1 n7_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	502000	2510	23.10	24.70	1.445	-0.15	0.148	0.213
	FR1 n7_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	502000	2510	22.95	24.70	1.496	-0.04	0.147	0.220
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	502000	2510	23.10	24.70	1.445	0.15	0.284	0.411
18	FR1 n7_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	512000	2560	22.74	24.70	1.570	0.05	0.355	0.557
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	502000	2510	22.95	24.70	1.496	-0.06	0.331	0.495
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	507000	2535	22.86	24.70	1.528	0.03	0.308	0.470
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	502000	2510	23.10	24.70	1.445	0.03	0.087	0.126
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	502000	2510	22.95	24.70	1.496	-0.01	0.088	0.131
	FR1 n12_Ant 0	15M	BPSK	1	40	Right Cheek	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	0.14	0.175	0.217
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	0.08	0.177	0.219
	FR1 n12_Ant 0	15M	BPSK	1	40	Right Tilted	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	0.14	0.104	0.129
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	0.04	0.108	0.134
	FR1 n12_Ant 0	15M	BPSK	1	40	Left Cheek	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	0.07	0.174	0.216
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	-0.03	0.205	0.254
	FR1 n12_Ant 0	15M	BPSK	1	40	Left Tilted	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	0.02	0.104	0.129
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	Index 2/3	141500	707.5	24.57	25.50	1.239	-0.19	0.119	0.148
	FR1 n12_Ant 1	15M	BPSK	1	40	Right Cheek	0mm	Index 2/3	141500	707.5	24.05	25.10	1.274	-0.14	0.343	0.437
19	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	Index 2/3	141500	707.5	24.11	25.10	1.256	-0.03	0.419	0.526
	FR1 n12_Ant 1	15M	BPSK	1	40	Right Tilted	0mm	Index 2/3	141500	707.5	24.05	25.10	1.274	-0.1	0.347	0.443
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	Index 2/3	141500	707.5	24.11	25.10	1.256	0.13	0.323	0.406
	FR1 n12_Ant 1	15M	BPSK	1	40	Left Cheek	0mm	Index 2/3	141500	707.5	24.05	25.10	1.274	-0.15	0.197	0.251
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	Index 2/3	141500	707.5	24.11	25.10	1.256	-0.14	0.203	0.255
	FR1 n12_Ant 1	15M	BPSK	1	40	Left Tilted	0mm	Index 2/3	141500	707.5	24.05	25.10	1.274	0.07	0.227	0.289
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	Index 2/3	141500	707.5	24.11	25.10	1.256	-0.18	0.234	0.294



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	376500	1882.5	24.16	25.50	1.361	0.09	0.212	0.289
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	376500	1882.5	24.02	25.50	1.406	-0.04	0.210	0.295
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	372000	1860	23.86	25.50	1.459	0.06	0.198	0.289
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	381000	1905	24.03	25.50	1.403	-0.01	0.202	0.283
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	376500	1882.5	24.16	25.50	1.361	0.18	0.098	0.134
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	376500	1882.5	24.02	25.50	1.406	-0.01	0.095	0.133
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	376500	1882.5	24.16	25.50	1.361	-0.15	0.091	0.124
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	376500	1882.5	24.02	25.50	1.406	0.07	0.084	0.118
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	376500	1882.5	24.16	25.50	1.361	-0.17	0.076	0.104
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	376500	1882.5	24.02	25.50	1.406	0.15	0.095	0.133
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	376500	1882.5	23.30	24.60	1.349	0	0.148	0.199
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	376500	1882.5	23.17	24.60	1.390	0.11	0.160	0.222
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	376500	1882.5	23.30	24.60	1.349	0.15	0.098	0.132
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	376500	1882.5	23.17	24.60	1.390	-0.09	0.125	0.174
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	376500	1882.5	23.30	24.60	1.349	0.08	0.280	0.378
20	FR1 n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	376500	1882.5	23.17	24.60	1.390	-0.04	0.315	0.438
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	372000	1860	23.08	24.60	1.419	0.01	0.288	0.409
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	381000	1905	23.11	24.60	1.409	0.09	0.268	0.378
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	376500	1882.5	23.30	24.60	1.349	-0.07	0.113	0.152
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	376500	1882.5	23.17	24.60	1.390	0.01	0.135	0.188
	FR1 n30_Ant 2	10M	BPSK	1	26	Right Cheek	0mm	Index 2/3	462000	2310	24.53	25.50	1.250	-0.18	0.182	0.228
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Cheek	0mm	Index 2/3	462000	2310	24.39	25.50	1.291	-0.15	0.174	0.225
	FR1 n30_Ant 2	10M	BPSK	1	26	Right Tilted	0mm	Index 2/3	462000	2310	24.53	25.50	1.250	-0.07	0.115	0.144
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Tilted	0mm	Index 2/3	462000	2310	24.39	25.50	1.291	0.07	0.106	0.137
	FR1 n30_Ant 2	10M	BPSK	1	26	Left Cheek	0mm	Index 2/3	462000	2310	24.53	25.50	1.250	-0.13	0.127	0.159
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Cheek	0mm	Index 2/3	462000	2310	24.39	25.50	1.291	-0.18	0.119	0.154
	FR1 n30_Ant 2	10M	BPSK	1	26	Left Tilted	0mm	Index 2/3	462000	2310	24.53	25.50	1.250	0.17	0.081	0.101
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Tilted	0mm	Index 2/3	462000	2310	24.39	25.50	1.291	0.03	0.078	0.101
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Cheek	0mm	Index 2/3	462000	2310	22.92	24.50	1.439	-0.01	0.119	0.172
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Cheek	0mm	Index 2/3	462000	2310	22.77	24.50	1.489	-0.01	0.113	0.169
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Tilted	0mm	Index 2/3	462000	2310	22.92	24.50	1.439	-0.15	0.093	0.134
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Tilted	0mm	Index 2/3	462000	2310	22.77	24.50	1.489	-0.17	0.081	0.120
21	FR1 n30_Ant 0	10M	BPSK	1	26	Left Cheek	0mm	Index 2/3	462000	2310	22.92	24.50	1.439	0.12	0.245	0.353
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Cheek	0mm	Index 2/3	462000	2310	22.77	24.50	1.489	0.14	0.224	0.333
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Tilted	0mm	Index 2/3	462000	2310	22.92	24.50	1.439	0.12	0.125	0.180
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Tilted	0mm	Index 2/3	462000	2310	22.77	24.50	1.489	0.11	0.120	0.179





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Cheek	0mm	Index 2	518598	2592.99	17.50	18.50	1.259	-0.06	0.761	0.958
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	Index 2	518598	2592.99	17.47	18.50	1.268	0.03	0.766	0.971
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	Index 2	518598	2592.99	17.36	18.50	1.300	0.01	0.720	0.936
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Tilted	0mm	Index 2	518598	2592.99	17.50	18.50	1.259	-0.08	0.842	1.060
22	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Index 2	518598	2592.99	17.47	18.50	1.268	-0.07	0.872	1.105
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	Index 2	518598	2592.99	17.36	18.50	1.300	-0.03	0.826	1.074
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Cheek	0mm	Index 2	518598	2592.99	17.50	18.50	1.259	0.02	0.243	0.306
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	Index 2	518598	2592.99	17.47	18.50	1.268	-0.04	0.256	0.325
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Tilted	0mm	Index 2	518598	2592.99	17.50	18.50	1.259	-0.09	0.270	0.340
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	Index 2	518598	2592.99	17.47	18.50	1.268	0.18	0.284	0.360
	FR1 n41_HPUE_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Index 2	518598	2592.99	20.57	21.50	1.239	-0.05	0.839	1.039
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Cheek	0mm	Index 3	518598	2592.99	16.27	17.30	1.268	-0.06	0.598	0.758
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	Index 3	518598	2592.99	16.19	17.30	1.291	0.03	0.604	0.780
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Tilted	0mm	Index 3	518598	2592.99	16.27	17.30	1.268	-0.08	0.662	0.839
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Index 3	518598	2592.99	16.19	17.30	1.291	-0.17	0.695	0.897
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	Index 3	518598	2592.99	16.08	17.30	1.324	0.11	0.611	0.809
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Cheek	0mm	Index 3	518598	2592.99	16.27	17.30	1.268	0.02	0.221	0.280
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	Index 3	518598	2592.99	16.19	17.30	1.291	-0.04	0.233	0.301
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Tilted	0mm	Index 3	518598	2592.99	16.27	17.30	1.268	-0.09	0.246	0.312
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	Index 3	518598	2592.99	16.19	17.30	1.291	0.18	0.259	0.334
	FR1 n41_HPUE_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Index 3	518598	2592.99	19.13	20.30	1.309	-0.08	0.667	0.873
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Cheek	0mm	Index 2	518598	2592.99	21.38	22.40	1.265	-0.05	0.232	0.293
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Index 2	518598	2592.99	21.25	22.40	1.303	0.03	0.246	0.321
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	Index 2	518598	2592.99	21.38	22.40	1.265	0.11	0.154	0.195
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Index 2	518598	2592.99	21.25	22.40	1.303	-0.03	0.168	0.219
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	Index 2	518598	2592.99	21.38	22.40	1.265	-0.13	0.811	1.026
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Index 2	518598	2592.99	21.25	22.40	1.303	-0.09	0.839	1.093
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 2	518598	2592.99	21.20	22.40	1.318	0.07	0.765	1.008
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	Index 2	518598	2592.99	21.38	22.40	1.265	0.15	0.211	0.267
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Index 2	518598	2592.99	21.25	22.40	1.303	0.11	0.243	0.317
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Index 2	518598	2592.99	24.60	25.40	1.202	-0.01	0.834	1.003
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Cheek	0mm	Index 2/3	518598	2592.99	20.35	21.20	1.216	0.1	0.180	0.219
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Index 2/3	518598	2592.99	20.26	21.20	1.242	0.04	0.204	0.253
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	Index 2/3	518598	2592.99	20.35	21.20	1.216	-0.11	0.089	0.108
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Index 2/3	518598	2592.99	20.26	21.20	1.242	0.07	0.074	0.092
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	Index 2/3	518598	2592.99	20.35	21.20	1.216	-0.05	0.695	0.845
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Index 2/3	518598	2592.99	20.26	21.20	1.242	-0.08	0.715	0.888
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 2/3	518598	2592.99	20.15	21.20	1.274	0	0.687	0.875
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	Index 2/3	518598	2592.99	20.35	21.20	1.216	0.11	0.165	0.201
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Index 2/3	518598	2592.99	20.26	21.20	1.242	0.08	0.178	0.221
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Index 2/3	518598	2592.99	23.71	24.20	1.119	-0.13	0.674	0.755



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Cheek	0mm	Index 2/3	352000	1760	24.07	25.50	1.390	-0.15	0.140	0.195
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	Index 2/3	352000	1760	23.90	25.50	1.445	-0.16	0.145	0.210
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	Index 2/3	346000	1730	23.86	25.50	1.459	0.02	0.131	0.191
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	Index 2/3	349000	1745	23.88	25.50	1.452	-0.01	0.134	0.195
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Tilted	0mm	Index 2/3	352000	1760	24.07	25.50	1.390	-0.03	0.067	0.093
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	Index 2/3	352000	1760	23.90	25.50	1.445	-0.1	0.067	0.097
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Cheek	0mm	Index 2/3	352000	1760	24.07	25.50	1.390	0.15	0.074	0.103
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	Index 2/3	352000	1760	23.90	25.50	1.445	0.05	0.075	0.108
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Tilted	0mm	Index 2/3	352000	1760	24.07	25.50	1.390	0	0.078	0.108
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	Index 2/3	352000	1760	23.90	25.50	1.445	-0.07	0.076	0.110
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Cheek	0mm	Index 2/3	346000	1730	23.10	24.20	1.288	-0.18	0.083	0.108
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Cheek	0mm	Index 2/3	346000	1730	22.85	24.20	1.365	-0.05	0.077	0.105
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Tilted	0mm	Index 2/3	346000	1730	23.10	24.20	1.288	0.04	0.088	0.113
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Tilted	0mm	Index 2/3	346000	1730	22.85	24.20	1.365	0	0.083	0.114
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Cheek	0mm	Index 2/3	346000	1730	23.10	24.20	1.288	-0.01	0.170	0.219
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Cheek	0mm	Index 2/3	349000	1745	22.99	24.20	1.321	-0.02	0.132	0.174
23	FR1 n66_Ant 0	40M	BPSK	1	108	Left Cheek	0mm	Index 2/3	352000	1760	22.93	24.20	1.340	-0.11	0.232	0.311
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Cheek	0mm	Index 2/3	346000	1730	22.85	24.20	1.365	-0.04	0.157	0.215
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Tilted	0mm	Index 2/3	346000	1730	23.10	24.20	1.288	0.16	0.078	0.101
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Tilted	0mm	Index 2/3	346000	1730	22.85	24.20	1.365	-0.08	0.075	0.102
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	136100	680.5	24.67	25.50	1.211	0.03	0.141	0.171
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	136100	680.5	24.56	25.50	1.242	-0.08	0.155	0.192
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	136100	680.5	24.67	25.50	1.211	-0.1	0.090	0.109
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	136100	680.5	24.56	25.50	1.242	0.06	0.090	0.112
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	136100	680.5	24.67	25.50	1.211	0.04	0.123	0.149
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	136100	680.5	24.56	25.50	1.242	0.08	0.122	0.151
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	136100	680.5	24.67	25.50	1.211	-0.06	0.094	0.114
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	136100	680.5	24.56	25.50	1.242	-0.04	0.089	0.111
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	136100	680.5	24.21	25.10	1.227	0.04	0.296	0.364
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	136100	680.5	24.07	25.10	1.268	-0.01	0.287	0.364
24	FR1 n71_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	136100	680.5	24.21	25.10	1.227	-0.08	0.324	0.398
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	136100	680.5	24.07	25.10	1.268	0.09	0.300	0.380
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	136100	680.5	24.21	25.10	1.227	0.03	0.184	0.225
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	136100	680.5	24.07	25.10	1.268	-0.05	0.167	0.212
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	136100	680.5	24.21	25.10	1.227	-0.18	0.195	0.239
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	136100	680.5	24.07	25.10	1.268	0.06	0.179	0.227



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Cheek	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	-0.11	0.231	0.347
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	-0.18	0.193	0.290
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Tilted	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	0	0.207	0.311
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	-0.16	0.192	0.289
25	FR1 n77_Ant 6	100M	BPSK	1	137	Left Cheek	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	-0.09	0.409	0.615
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	0.12	0.357	0.537
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Tilted	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	-0.15	0.148	0.222
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	Index 2/3	656000	3840	23.53	25.30	1.503	0.09	0.150	0.225
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Left Cheek	0mm	Index 2/3	656000	3840	25.73	27.00	1.340	-0.1	0.312	0.418
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Cheek	0mm	Index 2/3	633332	3499.98	23.77	25.30	1.422	-0.15	0.140	0.199
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	Index 2/3	633332	3499.98	23.50	25.30	1.514	0.18	0.142	0.215
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Tilted	0mm	Index 2/3	633332	3499.98	23.77	25.30	1.422	0	0.168	0.239
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	Index 2/3	633332	3499.98	23.50	25.30	1.514	0.07	0.177	0.268
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Cheek	0mm	Index 2/3	633332	3499.98	23.77	25.30	1.422	-0.05	0.328	0.467
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 2/3	633332	3499.98	23.50	25.30	1.514	-0.12	0.267	0.404
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Tilted	0mm	Index 2/3	633332	3499.98	23.77	25.30	1.422	0.14	0.115	0.164
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	Index 2/3	633332	3499.98	23.50	25.30	1.514	-0.12	0.121	0.183
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Left Cheek	0mm	Index 2/3	633332	3499.98	25.83	27.00	1.309	0.04	0.172	0.225
	FR1 n77_Ant 2	100M	BPSK	1	271	Right Cheek	0mm	Index 2/3	656000	3840	22.74	23.30	1.208	0.13	0.045	0.051
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 2/3	656000	3840	22.27	23.30	1.213	-0.09	0.043	0.055
	FR1 n77_Ant 2	100M	BPSK	1	271	Right Tilted	0mm	Index 2/3	656000	3840	22.74	23.30	1.208	-0.15	0.024	0.027
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	Index 2/3	656000	3840	22.27	23.30	1.213	-0.13	0.035	0.044
	FR1 n77_Ant 2	100M	BPSK	1	271	Left Cheek	0mm	Index 2/3	656000	3840	22.74	23.30	1.208	0.05	0.043	0.049
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	Index 2/3	656000	3840	22.27	23.30	1.213	0.13	0.038	0.048
	FR1 n77_Ant 2	100M	BPSK	1	271	Left Tilted	0mm	Index 2/3	656000	3840	22.74	23.30	1.208	0.09	0.034	0.039
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	Index 2/3	656000	3840	22.27	23.30	1.213	0	0.038	0.048
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	271	Right Cheek	0mm	Index 2/3	656000	3840	23.68	25.00	1.355	-0.15	0.029	0.039
	FR1 n77_Ant 2	100M	BPSK	1	271	Right Cheek	0mm	Index 2/3	633332	3499.98	22.34	23.30	1.303	0.13	0.035	0.044
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 2/3	633332	3499.98	22.14	23.30	1.365	-0.16	0.038	0.050
	FR1 n77_Ant 2	100M	BPSK	1	271	Right Tilted	0mm	Index 2/3	633332	3499.98	22.34	23.30	1.303	0.16	0.019	0.024
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	Index 2/3	633332	3499.98	22.14	23.30	1.365	0.11	0.027	0.035
	FR1 n77_Ant 2	100M	BPSK	1	271	Left Cheek	0mm	Index 2/3	633332	3499.98	22.34	23.30	1.303	0.12	0.034	0.042
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	Index 2/3	633332	3499.98	22.14	23.30	1.365	-0.02	0.030	0.039
	FR1 n77_Ant 2	100M	BPSK	1	271	Left Tilted	0mm	Index 2/3	633332	3499.98	22.34	23.30	1.303	-0.09	0.027	0.034
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	Index 2/3	633332	3499.98	22.14	23.30	1.365	0.17	0.030	0.039
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	271	Right Cheek	0mm	Index 2/3	633332	3499.98	23.55	25.00	1.396	0.1	0.025	0.035





<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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 3+4 (4)	1	13	2472	16.95	17.50	1.135	94.7	1.056	-0.13	0.429	0.514
				0mm	Ant 3+4 (3)	1	13	2472	16.89	17.50	1.151	94.7	1.056	-0.13	0.287	0.349
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3+4 (4)	1	13	2472	16.95	17.50	1.135	94.7	1.056	-0.06	0.407	0.488
				0mm	Ant 3+4 (3)	1	13	2472	16.89	17.50	1.151	94.7	1.056	-0.06	0.189	0.230
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	13	2472	16.95	17.50	1.135	94.7	1.056	-0.08	0.855	1.025
				0mm	Ant 3+4 (3)	1	13	2472	16.89	17.50	1.151	94.7	1.056	-0.08	0.177	0.215
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	1	2412	16.94	17.50	1.138	94.7	1.056	-0.04	0.704	0.846
				0mm	Ant 3+4 (3)	1	1	2412	16.85	17.50	1.161	94.7	1.056	-0.04	0.054	0.066
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	6	2437	16.89	17.50	1.151	94.7	1.056	-0.12	0.861	1.046
				0mm	Ant 3+4 (3)	1	6	2437	16.85	17.50	1.161	94.7	1.056	-0.12	0.164	0.201
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	11	2462	16.88	17.50	1.153	94.7	1.056	-0.09	0.827	1.007
				0mm	Ant 3+4 (3)	1	11	2462	16.75	17.50	1.189	94.7	1.056	-0.09	0.058	0.073
26	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	12	2467	16.95	17.50	1.135	94.7	1.056	0.18	0.922	1.105
				0mm	Ant 3+4 (3)	1	12	2467	16.55	17.50	1.245	94.7	1.056	0.18	0.219	0.288
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+4 (4)	1	13	2472	16.95	17.50	1.135	94.7	1.056	-0.1	0.838	1.004
				0mm	Ant 3+4 (3)	1	13	2472	16.89	17.50	1.151	94.7	1.056	-0.1	0.113	0.137
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+4 (4)	2	13	2472	16.95	17.00	1.012	94.7	1.056	-0.13	0.429	0.458
				0mm	Ant 3+4 (3)	2	13	2472	16.89	17.00	1.026	94.7	1.056	-0.13	0.287	0.311
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3+4 (4)	2	13	2472	16.95	17.00	1.012	94.7	1.056	-0.06	0.407	0.435
				0mm	Ant 3+4 (3)	2	13	2472	16.89	17.00	1.026	94.7	1.056	-0.06	0.189	0.205
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	2	13	2472	16.95	17.00	1.012	94.7	1.056	-0.08	0.855	0.913
				0mm	Ant 3+4 (3)	2	13	2472	16.89	17.00	1.026	94.7	1.056	-0.08	0.177	0.192
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+4 (4)	2	13	2472	16.95	17.00	1.012	94.7	1.056	-0.1	0.838	0.895
				0mm	Ant 3+4 (3)	2	13	2472	16.89	17.00	1.026	94.7	1.056	-0.1	0.113	0.122
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	2	1	2412	16.89	17.00	1.026	94.7	1.056	-0.04	0.704	0.762
				0mm	Ant 3+4 (3)	2	1	2412	16.85	17.00	1.035	94.7	1.056	-0.04	0.054	0.059
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	2	6	2437	16.89	17.00	1.026	94.7	1.056	-0.12	0.861	0.933
				0mm	Ant 3+4 (3)	2	6	2437	16.85	17.00	1.035	94.7	1.056	-0.12	0.164	0.179
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	2	11	2462	16.88	17.00	1.028	94.7	1.056	-0.09	0.827	0.898
				0mm	Ant 3+4 (3)	2	11	2462	16.75	17.00	1.059	94.7	1.056	-0.09	0.058	0.065
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	2	12	2467	16.95	17.00	1.012	94.7	1.056	0.18	0.922	0.985
				0mm	Ant 3+4 (3)	2	12	2467	16.55	17.00	1.109	94.7	1.056	0.18	0.219	0.257



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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 3+4 (4)	3	13	2472	14.45	15.00	1.135	94.7	1.056	0.08	0.244	0.292
				0mm	Ant 3+4 (3)	3	13	2472	14.25	15.00	1.189	94.7	1.056	0.08	0.004	0.005
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3+4 (4)	3	13	2472	14.45	15.00	1.135	94.7	1.056	0.13	0.223	0.267
				0mm	Ant 3+4 (3)	3	13	2472	14.25	15.00	1.189	94.7	1.056	0.13	0.002	0.003
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	3	13	2472	14.45	15.00	1.135	94.7	1.056	-0.09	0.445	0.533
				0mm	Ant 3+4 (3)	3	13	2472	14.25	15.00	1.189	94.7	1.056	-0.09	0.056	0.070
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+4 (4)	3	13	2472	14.45	15.00	1.135	94.7	1.056	0	0.396	0.475
				0mm	Ant 3+4 (3)	3	13	2472	14.25	15.00	1.189	94.7	1.056	0	0.018	0.023
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	3	1	2412	14.85	15.00	1.035	94.7	1.056	-0.08	0.356	0.389
				0mm	Ant 3+4 (3)	3	1	2412	14.25	15.00	1.189	94.7	1.056	-0.08	0.042	0.053
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	3	6	2437	14.45	15.00	1.135	94.7	1.056	-0.02	0.474	0.568
				0mm	Ant 3+4 (3)	3	6	2437	14.35	15.00	1.161	94.7	1.056	-0.02	0.100	0.123
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	3	11	2462	14.65	15.00	1.084	94.7	1.056	-0.13	0.458	0.524
				0mm	Ant 3+4 (3)	3	11	2462	14.35	15.00	1.161	94.7	1.056	-0.13	0.095	0.117
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	3	12	2467	14.45	15.00	1.135	94.7	1.056	-0.1	0.506	0.606
				0mm	Ant 3+4 (3)	3	12	2467	14.15	15.00	1.216	94.7	1.056	-0.1	0.113	0.145
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+4 (4)	4	6	2437	9.15	10.50	1.365	94.7	1.056	-0.04	0.076	0.110
				0mm	Ant 3+4 (3)	4	6	2437	9.05	10.50	1.396	94.7	1.056	-0.04	0.003	0.004
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3+4 (4)	4	6	2437	9.15	10.50	1.365	94.7	1.056	-0.07	0.065	0.094
				0mm	Ant 3+4 (3)	4	6	2437	9.05	10.50	1.396	94.7	1.056	-0.07	0.002	0.003
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	4	6	2437	9.15	10.50	1.365	94.7	1.056	-0.07	0.121	0.174
				0mm	Ant 3+4 (3)	4	6	2437	9.05	10.50	1.396	94.7	1.056	-0.07	0.013	0.019
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3+4 (4)	4	6	2437	9.15	10.50	1.365	94.7	1.056	0.03	0.072	0.104
				0mm	Ant 3+4 (3)	4	6	2437	9.05	10.50	1.396	94.7	1.056	0.03	0.007	0.010
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	4	1	2412	9.25	10.50	1.334	94.7	1.056	-0.05	0.106	0.149
				0mm	Ant 3+4 (3)	4	1	2412	8.95	10.50	1.429	94.7	1.056	-0.05	0.010	0.015
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	4	11	2462	8.95	10.50	1.429	94.7	1.056	-0.01	0.113	0.171
				0mm	Ant 3+4 (3)	4	11	2462	9.05	10.50	1.396	94.7	1.056	-0.01	0.011	0.016
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	4	12	2467	8.85	10.50	1.462	94.7	1.056	0.12	0.102	0.157
				0mm	Ant 3+4 (3)	4	12	2467	9.15	10.50	1.365	94.7	1.056	0.12	0.011	0.016
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	4	13	2472	8.95	10.50	1.429	94.7	1.056	0.18	0.110	0.166
				0mm	Ant 3+4 (3)	4	13	2472	9.15	10.50	1.365	94.7	1.056	0.18	0.012	0.017



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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)
27	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	54	5270	19.75	21.00	1.334	96.8	1.033	-0.09	0.281	0.387
				0mm	Ant 3+7 (3)	1/2	54	5270	19.40	21.00	1.445	96.8	1.033	-0.09	0.613	0.915
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3+7 (7)	1/2	54	5270	19.75	21.00	1.334	96.8	1.033	0.03	0.185	0.255
				0mm	Ant 3+7 (3)	1/2	54	5270	19.40	21.00	1.445	96.8	1.033	0.03	0.432	0.645
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3+7 (7)	1/2	54	5270	19.75	21.00	1.334	96.8	1.033	-0.11	0.188	0.259
				0mm	Ant 3+7 (3)	1/2	54	5270	19.40	21.00	1.445	96.8	1.033	-0.11	0.301	0.449
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2	54	5270	19.75	21.00	1.334	96.8	1.033	0.09	0.165	0.227
				0mm	Ant 3+7 (3)	1/2	54	5270	19.40	21.00	1.445	96.8	1.033	0.09	0.365	0.545
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 3+7 (7)	1/2	60	5300	18.05	18.50	1.109	93.5	1.070	-0.09	0.186	0.221
				0mm	Ant 3+7 (3)	1/2	60	5300	17.90	18.50	1.148	93.5	1.070	-0.09	0.467	0.574
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	62	5310	15.95	16.00	1.012	96.8	1.033	0.12	0.051	0.053
				0mm	Ant 3+7 (3)	1/2	62	5310	16.00	16.00	1.000	96.8	1.033	0.12	0.162	0.167
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3+7(3)	3/4	54	5270	17.20	17.50	1.072	96.8	1.033	-0.01	0.336	0.372
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 3+7(3)	3/4	54	5270	17.20	17.50	1.072	96.8	1.033	0.12	0.165	0.183
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 3+7(3)	3/4	54	5270	17.20	17.50	1.072	96.8	1.033	-0.02	0.131	0.145
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 3+7(3)	3/4	54	5270	17.20	17.50	1.072	96.8	1.033	-0.09	0.101	0.112
28	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	138	5690	19.55	21.00	1.396	88.1	1.135	0.04	0.290	0.460
				0mm	Ant 3+7 (3)	1/2	138	5690	19.50	21.00	1.413	88.1	1.135	0.04	0.598	0.959
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+7 (7)	1/2	138	5690	19.55	21.00	1.396	88.1	1.135	0.01	0.168	0.266
				0mm	Ant 3+7 (3)	1/2	138	5690	19.50	21.00	1.413	88.1	1.135	0.01	0.489	0.784
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+7 (7)	1/2	138	5690	19.55	21.00	1.396	88.1	1.135	-0.12	0.211	0.334
				0mm	Ant 3+7 (3)	1/2	138	5690	19.50	21.00	1.413	88.1	1.135	-0.12	0.257	0.412
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2	138	5690	19.55	21.00	1.396	88.1	1.135	0.07	0.133	0.211
				0mm	Ant 3+7 (3)	1/2	138	5690	19.50	21.00	1.413	88.1	1.135	0.07	0.298	0.478
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	122	5610	19.55	21.00	1.396	88.1	1.135	0.09	0.262	0.415
				0mm	Ant 3+7 (3)	1/2	122	5610	19.40	21.00	1.445	88.1	1.135	0.09	0.566	0.929
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	106	5530	15.75	16.00	1.059	88.1	1.135	-0.03	0.083	0.100
				0mm	Ant 3+7 (3)	1/2	106	5530	15.90	16.00	1.023	88.1	1.135	-0.03	0.189	0.220
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	126	5630	19.75	21.00	1.334	96.8	1.033	0.14	0.307	0.423
				0mm	Ant 3+7 (3)	1/2	126	5630	19.70	21.00	1.349	96.8	1.033	0.14	0.648	0.903
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7(3)	3	122	5610	17.90	19.50	1.445	88.1	1.135	-0.11	0.267	0.438
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+7(3)	3	122	5610	17.90	19.50	1.445	88.1	1.135	0.13	0.185	0.304
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+7(3)	3	122	5610	17.90	19.50	1.445	88.1	1.135	0.18	0.162	0.266
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+7(3)	3	122	5610	17.90	19.50	1.445	88.1	1.135	0.04	0.201	0.330
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7(3)	4	122	5610	17.90	18.50	1.148	88.1	1.135	-0.11	0.267	0.348
				0mm	Ant 3+7(3)	4	122	5610	17.90	18.50	1.148	88.1	1.135	0.13	0.185	0.241
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+7(3)	4	122	5610	17.90	18.50	1.148	88.1	1.135	0.18	0.162	0.211
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+7(3)	4	122	5610	17.90	18.50	1.148	88.1	1.135	0.18	0.162	0.211
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+7(3)	4	122	5610	17.90	18.50	1.148	88.1	1.135	0.04	0.201	0.262
29	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2	155	5775	19.85	21.00	1.303	88.1	1.135	0.04	0.320	0.473
				0mm	Ant 3+7 (3)	1/2	155	5775	19.90	21.00	1.288	88.1	1.135	0.04	0.513	0.750
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+7 (7)	1/2	155	5775	19.85	21.00	1.303	88.1	1.135	-0.01	0.202	0.299
				0mm	Ant 3+7 (3)	1/2	155	5775	19.90	21.00	1.288	88.1	1.135	-0.01	0.411	0.601
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+7 (7)	1/2	155	5775	19.85	21.00	1.303	88.1	1.135	0.15	0.265	0.392
				0mm	Ant 3+7 (3)	1/2	155	5775	19.90	21.00	1.288	88.1	1.135	0.15	0.310	0.453
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2	155	5775	19.85	21.00	1.303	88.1	1.135	0.06	0.161	0.238
				0mm	Ant 3+7 (3)	1/2	155	5775	19.90	21.00	1.288	88.1	1.135	0.06	0.298	0.436
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 3+7(3)	3/4	155	5775	19.00	19.50	1.122	88.1	1.135	0.02	0.397	0.506
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 3+7(3)	3/4	155	5775	19.00	19.50	1.122	88.1	1.135	-0.13	0.311	0.396
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+7(3)	3/4	155	5775	19.00	19.50	1.122	88.1	1.135	0.08	0.235	0.299
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 3+7(3)	3/4	155	5775	19.00	19.50	1.122	88.1	1.135	0.07	0.194	0.247



<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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)	APD
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+7 (7)	1/2/3/4	15	6025	14.20	15.00	1.202	85.1	1.175	0.03	0.032	0.045	0.226
				0mm	Ant 3+7 (3)	1/2/3/4	15	6025	14.60	15.00	1.096	85.1	1.175	0.03	0.019	0.024	0.200
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 3+7 (7)	1/2/3/4	15	6025	14.20	15.00	1.202	85.1	1.175	0.14	0.113	0.160	1.103
				0mm	Ant 3+7 (3)	1/2/3/4	15	6025	14.60	15.00	1.096	85.1	1.175	0.14	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 3+7 (7)	1/2/3/4	15	6025	14.20	15.00	1.202	85.1	1.175	0.1	0.048	0.068	0.276
				0mm	Ant 3+7 (3)	1/2/3/4	15	6025	14.60	15.00	1.096	85.1	1.175	0.1	0.063	0.081	0.476
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2/3/4	15	6025	14.20	15.00	1.202	85.1	1.175	0	0.118	0.167	0.877
				0mm	Ant 3+7 (3)	1/2/3/4	15	6025	14.60	15.00	1.096	85.1	1.175	0	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2/3/4	47	6185	13.70	15.00	1.349	85.1	1.175	-0.01	0.096	0.152	0.501
				0mm	Ant 3+7 (3)	1/2/3/4	47	6185	14.00	15.00	1.259	85.1	1.175	-0.01	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2/3/4	111	6505	12.60	13.50	1.230	85.1	1.175	0.05	0.078	0.113	0.401
				0mm	Ant 3+7 (3)	1/2/3/4	111	6505	13.30	13.50	1.047	85.1	1.175	0.05	0.001	0.001	0.025
30	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2/3/4	175	6825	14.10	15.00	1.230	85.1	1.175	-0.07	0.135	0.195	1.053
				0mm	Ant 3+7 (3)	1/2/3/4	175	6825	14.40	15.00	1.148	85.1	1.175	-0.07	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+7 (7)	1/2/3/4	207	6985	15.40	16.50	1.288	85.1	1.175	-0.12	0.119	0.180	0.902
				0mm	Ant 3+7 (3)	1/2/3/4	207	6985	16.30	16.50	1.047	85.1	1.175	-0.12	0.001	0.001	0.025



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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	1	39	2441	11.46	12.00	1.132	76.83	1.084	-0.04	0.051	0.063
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	1	39	2441	11.46	12.00	1.132	76.83	1.084	-0.17	0.038	0.047
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	39	2441	11.46	12.00	1.132	76.83	1.084	0.1	0.119	0.146
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	39	2441	11.46	12.00	1.132	76.83	1.084	0.16	0.089	0.109
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	00	2402	11.46	12.00	1.132	76.83	1.084	0.02	0.108	0.133
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	78	2480	11.45	12.00	1.135	76.83	1.084	-0.11	0.102	0.125
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	11.51	12.00	1.119	76.83	1.084	-0.14	0.046	0.056
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	1	39	2441	11.51	12.00	1.119	76.83	1.084	0.13	0.021	0.025
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	1	39	2441	11.51	12.00	1.119	76.83	1.084	0.05	0.032	0.039
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	1	39	2441	11.51	12.00	1.119	76.83	1.084	-0.08	0.016	0.019
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	00	2402	11.30	12.00	1.175	76.83	1.084	0.09	0.041	0.052
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	78	2480	11.48	12.00	1.127	76.83	1.084	-0.16	0.032	0.039
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3+4 (4)	1	39	2441	11.15	12.00	1.216	76.83	1.084	0.05	0.069	0.091
				0mm	Ant 3+4 (3)	1	39	2441	11.19	12.00	1.205	76.83	1.084	0.05	0.055	0.071
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3+4 (4)	1	39	2441	11.15	12.00	1.216	76.83	1.084	0.16	0.058	0.076
				0mm	Ant 3+4 (3)	1	39	2441	11.19	12.00	1.205	76.83	1.084	0.16	0.043	0.056
31	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	39	2441	11.15	12.00	1.216	76.83	1.084	0.01	0.136	0.179
					0mm	Ant 3+4 (3)	1	39	2441	11.19	12.00	1.205	76.83	1.084	0.01	0.031
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3+4 (4)	1	39	2441	11.15	12.00	1.216	76.83	1.084	-0.03	0.070	0.092
				0mm	Ant 3+4 (3)	1	39	2441	11.19	12.00	1.205	76.83	1.084	-0.03	0.019	0.025
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	00	2402	11.80	12.00	1.047	76.83	1.084	0.02	0.096	0.109
				0mm	Ant 3+4 (3)	1	00	2402	11.29	12.00	1.178	76.83	1.084	0.02	0.024	0.031
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	78	2480	11.74	12.00	1.062	76.83	1.084	-0.14	0.095	0.109
				0mm	Ant 3+4 (3)	1	78	2480	11.46	12.00	1.132	76.83	1.084	-0.14	0.022	0.027



15.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Index 4	251	848.8	28.80	30.50	1.479	-0.06	0.102	0.151
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 4	251	848.8	28.80	30.50	1.479	-0.17	0.256	0.379
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 4	128	824.2	28.60	30.50	1.549	-0.14	0.319	0.494
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 4	189	836.4	28.78	30.50	1.486	0.02	0.210	0.312
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	Index 4	251	848.8	28.80	30.50	1.479	0.03	0.087	0.129
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	Index 4	251	848.8	28.80	30.50	1.479	0.08	0.032	0.048
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	251	848.8	28.80	30.50	1.479	0.03	0.066	0.098
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	Index 4	251	848.8	27.85	29.50	1.462	0.04	0.160	0.234
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	251	848.8	27.85	29.50	1.462	-0.02	0.273	0.399
32	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	128	824.2	27.68	29.50	1.521	-0.08	0.330	0.502
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	189	836.4	27.61	29.50	1.545	-0.07	0.210	0.325
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	Index 4	251	848.8	27.85	29.50	1.462	-0.08	0.130	0.190
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	Index 4	251	848.8	27.85	29.50	1.462	0.01	0.058	0.085
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	Index 4	251	848.8	27.85	29.50	1.462	0.08	0.209	0.306
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 4	810	1909.8	25.07	25.10	1.007	0.05	0.308	0.310
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 4	810	1909.8	25.07	25.10	1.007	-0.07	0.379	0.382
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	Index 4	810	1909.8	25.07	25.10	1.007	-0.06	0.155	0.156
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	Index 4	810	1909.8	25.07	25.10	1.007	0.05	0.192	0.193
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	810	1909.8	25.07	25.10	1.007	-0.15	0.645	0.649
33	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	512	1850.2	24.99	25.10	1.026	-0.15	0.884	0.907
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	661	1880	24.98	25.10	1.028	-0.11	0.805	0.828
	GSM1900_Ant 0	GPRS (3 Tx slots)	Front	10mm	Index 4	661	1880	26.53	27.50	1.250	0.08	0.312	0.390
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	10mm	Index 4	661	1880	26.53	27.50	1.250	0.17	0.339	0.424
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	10mm	Index 4	512	1850.2	26.09	27.50	1.384	0.03	0.329	0.455
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	10mm	Index 4	810	1909.8	26.39	27.50	1.291	-0.03	0.533	0.688
	GSM1900_Ant 0	GPRS (3 Tx slots)	Left Side	10mm	Index 4	661	1880	26.53	27.50	1.250	-0.19	0.290	0.363
	GSM1900_Ant 0	GPRS (3 Tx slots)	Right Side	10mm	Index 4	661	1880	26.53	27.50	1.250	-0.04	0.029	0.036
	GSM1900_Ant 0	GPRS (3 Tx slots)	Bottom Side	10mm	Index 4	661	1880	26.53	27.50	1.250	0.05	0.202	0.253

**<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Index 4	9262	1852.4	23.29	23.40	1.026	-0.02	0.435	0.446
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	9262	1852.4	23.29	23.40	1.026	0	0.536	0.550
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	9400	1880	23.14	23.40	1.062	0.08	0.582	0.618
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	9538	1907.6	23.23	23.40	1.040	0.01	0.655	0.681
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	Index 4	9262	1852.4	23.29	23.40	1.026	0.1	0.005	0.005
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	Index 4	9262	1852.4	23.29	23.40	1.026	-0.17	0.234	0.240
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9262	1852.4	23.29	23.40	1.026	0.05	0.856	0.878
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9400	1880	23.14	23.40	1.062	-0.14	0.735	0.780
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9538	1907.6	23.23	23.40	1.040	0.03	0.703	0.731
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	9262	1852.4	22.53	23.10	1.140	0.15	0.348	0.397
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	9262	1852.4	22.53	23.10	1.140	-0.1	0.520	0.593
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	9400	1880	22.34	23.10	1.191	-0.1	0.629	0.749
34	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	9538	1907.6	22.41	23.10	1.172	-0.1	0.770	0.903
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	9262	1852.4	22.53	23.10	1.140	-0.08	0.525	0.599
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	Index 4	9262	1852.4	22.53	23.10	1.140	-0.02	0.004	0.005
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9262	1852.4	22.53	23.10	1.140	-0.06	0.326	0.372
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Index 4	1312	1712.4	22.91	23.00	1.021	-0.01	0.467	0.477
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	1312	1712.4	22.91	23.00	1.021	0.07	0.579	0.591
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	1413	1732.6	22.86	23.00	1.033	0.16	0.604	0.624
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	1513	1752.6	22.86	23.00	1.033	-0.05	0.714	0.737
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	Index 4	1312	1712.4	22.91	23.00	1.021	-0.01	0.229	0.234
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	Index 4	1312	1712.4	22.91	23.00	1.021	0.1	0.369	0.377
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1312	1712.4	22.91	23.00	1.021	0.18	0.816	0.833
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1413	1732.6	22.86	23.00	1.033	-0.13	0.814	0.841
35	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1513	1752.6	22.86	23.00	1.033	-0.03	0.864	0.892
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	1312	1712.4	23.09	24.50	1.384	0.02	0.231	0.320
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	1312	1712.4	23.09	24.50	1.384	0.01	0.314	0.434
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	1413	1732.6	23.06	24.50	1.393	-0.08	0.435	0.606
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	1513	1752.6	23.05	24.50	1.396	-0.08	0.404	0.564
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	1312	1712.4	23.09	24.50	1.384	-0.04	0.280	0.387
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	Index 4	1312	1712.4	23.09	24.50	1.384	0.06	0.146	0.203
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1312	1712.4	23.09	24.50	1.384	0.02	0.148	0.205
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	4182	836.4	23.99	25.40	1.384	0.09	0.189	0.261
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	4182	836.4	23.99	25.40	1.384	0.13	0.230	0.318
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	4132	826.4	23.97	25.40	1.390	-0.03	0.243	0.338
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	4233	846.6	23.98	25.40	1.387	-0.05	0.262	0.363
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	4182	836.4	23.99	25.40	1.384	-0.02	0.191	0.264
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	Index 4	4182	836.4	23.99	25.40	1.384	-0.08	0.076	0.105
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	4182	836.4	23.99	25.40	1.384	0.07	0.229	0.317
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Index 4	4132	826.4	23.74	25.20	1.400	-0.15	0.132	0.185
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4132	826.4	23.74	25.20	1.400	0.09	0.235	0.329
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4182	836.4	23.75	25.20	1.396	-0.07	0.239	0.334
36	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4233	846.6	23.61	25.20	1.442	-0.03	0.254	0.366
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	Index 4	4132	826.4	23.74	25.20	1.400	-0.13	0.107	0.150
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	Index 4	4132	826.4	23.74	25.20	1.400	0.07	0.001	0.001
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	Index 4	4132	826.4	23.74	25.20	1.400	0.17	0.163	0.228





<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Cap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	0	Front	10mm	Index 4	21350	2560	21.10	21.10	1.000	-0.12	0.596	0.596
	LTE Band 7_Ant 2	20M	QPSK	50	24	Front	10mm	Index 4	21350	2560	20.97	21.10	1.030	-0.03	0.601	0.619
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	21350	2560	21.10	21.10	1.000	-0.09	0.856	0.856
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	20850	2510	20.91	21.10	1.045	0.16	0.725	0.757
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	21100	2535	21.02	21.10	1.019	-0.03	0.796	0.811
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 4	21350	2560	20.97	21.10	1.030	-0.03	0.876	0.903
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 4	20850	2510	20.73	21.10	1.089	-0.14	0.735	0.800
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 4	21100	2535	20.86	21.10	1.057	-0.03	0.770	0.814
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	Index 4	21350	2560	21.08	21.10	1.005	-0.07	0.806	0.810
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Side	10mm	Index 4	21350	2560	21.10	21.10	1.000	-0.04	0.040	0.040
	LTE Band 7_Ant 2	20M	QPSK	50	24	Left Side	10mm	Index 4	21350	2560	20.97	21.10	1.030	0.05	0.039	0.040
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	21350	2560	21.10	21.10	1.000	-0.1	0.864	0.864
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	20850	2510	20.91	21.10	1.045	-0.14	0.824	0.861
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	21100	2535	21.02	21.10	1.019	-0.18	0.839	0.855
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Side	10mm	Index 4	21350	2560	20.97	21.10	1.030	-0.1	0.866	0.892
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Side	10mm	Index 4	20850	2510	20.73	21.10	1.089	-0.15	0.826	0.899
	LTE Band 7_Ant 2	20M	QPSK	50	24	Right Side	10mm	Index 4	21100	2535	20.86	21.10	1.057	-0.16	0.841	0.889
	LTE Band 7_Ant 2	20M	QPSK	100	0	Right Side	10mm	Index 4	21350	2560	21.08	21.10	1.005	-0.08	0.720	0.723
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	21350	2560	21.10	21.10	1.000	-0.03	0.869	0.869
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	20850	2510	20.91	21.10	1.045	-0.17	0.617	0.645
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	21100	2535	21.02	21.10	1.019	-0.1	0.651	0.663
	LTE Band 7_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	Index 4	21350	2560	20.97	21.10	1.030	-0.01	0.869	0.895
	LTE Band 7_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	Index 4	20850	2510	20.73	21.10	1.089	-0.01	0.743	0.809
	LTE Band 7_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	Index 4	21100	2535	20.86	21.10	1.057	-0.03	0.822	0.869
	LTE Band 7_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Index 4	21350	2560	21.08	21.10	1.005	0.02	0.887	0.891
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 4	20850+21048	2510	19.97	21.10	1.297	0.02	0.682	0.885
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	Index 4	20850	2510	21.76	22.00	1.057	-0.18	0.290	0.306
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	Index 4	20850	2510	21.64	22.00	1.086	0.16	0.336	0.365
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	20850	2510	21.76	22.00	1.057	0.16	0.327	0.346
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	Index 4	20850	2510	21.64	22.00	1.086	0.02	0.355	0.386
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	20850	2510	21.76	22.00	1.057	0.09	0.610	0.645
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Side	10mm	Index 4	20850	2510	21.64	22.00	1.086	0.13	0.682	0.741
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Side	10mm	Index 4	21100	2535	21.50	22.00	1.122	0.13	0.728	0.817
37	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Side	10mm	Index 4	21350	2560	21.58	22.00	1.102	0.07	0.823	0.907
	LTE Band 7_Ant 0	20M	QPSK	100	0	Left Side	10mm	Index 4	20850	2510	21.48	22.00	1.127	0.07	0.677	0.763
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Side	10mm	Index 4	20850	2510	21.76	22.00	1.057	-0.13	0.080	0.085
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Side	10mm	Index 4	20850	2510	21.64	22.00	1.086	0.14	0.073	0.079
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	Index 4	20850	2510	21.76	22.00	1.057	0.03	0.480	0.507
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	Index 4	20850	2510	21.64	22.00	1.086	-0.13	0.462	0.502
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Left Side	10mm	Index 4	20850+21048	2510	21.73	22.00	1.064	0.02	0.831	0.884





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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 12_Ant 0	10M	QPSK	1	0	Front	10mm	Index 4	23095	707.5	24.31	25.50	1.315	-0.04	0.151	0.199
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	Index 4	23095	707.5	23.36	24.50	1.300	0.1	0.121	0.157
38	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	23095	707.5	24.31	25.50	1.315	-0.19	0.238	0.313
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	Index 4	23095	707.5	23.36	24.50	1.300	0.13	0.161	0.209
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	23095	707.5	24.31	25.50	1.315	0.01	0.185	0.243
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Side	10mm	Index 4	23095	707.5	23.36	24.50	1.300	-0.06	0.148	0.192
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	Index 4	23095	707.5	24.31	25.50	1.315	-0.13	0.121	0.159
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Side	10mm	Index 4	23095	707.5	23.36	24.50	1.300	0.11	0.096	0.125
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Index 4	23095	707.5	24.31	25.50	1.315	-0.03	0.191	0.251
	LTE Band 12_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Index 4	23095	707.5	23.36	24.50	1.300	-0.16	0.153	0.199
	LTE Band 12_Ant 1	10M	QPSK	1	25	Front	10mm	Index 4	23095	707.5	23.87	25.20	1.358	0.06	0.121	0.164
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	Index 4	23095	707.5	22.89	24.20	1.352	-0.14	0.096	0.130
	LTE Band 12_Ant 1	10M	QPSK	1	25	Back	10mm	Index 4	23095	707.5	23.87	25.20	1.358	-0.06	0.208	0.283
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	Index 4	23095	707.5	22.89	24.20	1.352	-0.17	0.165	0.223
	LTE Band 12_Ant 1	10M	QPSK	1	25	Left Side	10mm	Index 4	23095	707.5	23.87	25.20	1.358	0.06	0.119	0.162
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Side	10mm	Index 4	23095	707.5	22.89	24.20	1.352	-0.11	0.095	0.128
	LTE Band 12_Ant 1	10M	QPSK	1	25	Right Side	10mm	Index 4	23095	707.5	23.87	25.20	1.358	0.16	0.001	0.001
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Side	10mm	Index 4	23095	707.5	22.89	24.20	1.352	-0.07	0.001	0.001
	LTE Band 12_Ant 1	10M	QPSK	1	25	Top Side	10mm	Index 4	23095	707.5	23.87	25.20	1.358	0.08	0.122	0.166
	LTE Band 12_Ant 1	10M	QPSK	25	25	Top Side	10mm	Index 4	23095	707.5	22.89	24.20	1.352	0.03	0.098	0.133
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Index 4	23230	782	24.47	25.50	1.268	-0.12	0.251	0.318
	LTE Band 13_Ant 0	10M	QPSK	25	12	Front	10mm	Index 4	23230	782	23.55	24.50	1.245	0.11	0.204	0.254
39	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	23230	782	24.47	25.50	1.268	0.01	0.269	0.341
	LTE Band 13_Ant 0	10M	QPSK	25	12	Back	10mm	Index 4	23230	782	23.55	24.50	1.245	-0.03	0.206	0.256
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	23230	782	24.47	25.50	1.268	0.06	0.227	0.288
	LTE Band 13_Ant 0	10M	QPSK	25	12	Left Side	10mm	Index 4	23230	782	23.55	24.50	1.245	0.02	0.184	0.229
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Side	10mm	Index 4	23230	782	24.47	25.50	1.268	-0.06	0.168	0.213
	LTE Band 13_Ant 0	10M	QPSK	25	12	Right Side	10mm	Index 4	23230	782	23.55	24.50	1.245	0.12	0.135	0.168
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Index 4	23230	782	24.47	25.50	1.268	0.06	0.227	0.288
	LTE Band 13_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	Index 4	23230	782	23.55	24.50	1.245	0.06	0.182	0.227
	LTE Band 13_Ant 1	10M	QPSK	1	25	Front	10mm	Index 4	23230	782	23.94	25.20	1.337	0.03	0.123	0.164
	LTE Band 13_Ant 1	10M	QPSK	25	25	Front	10mm	Index 4	23230	782	23.01	24.20	1.315	-0.02	0.100	0.132
	LTE Band 13_Ant 1	10M	QPSK	1	25	Back	10mm	Index 4	23230	782	23.94	25.20	1.337	-0.04	0.228	0.305
	LTE Band 13_Ant 1	10M	QPSK	25	25	Back	10mm	Index 4	23230	782	23.01	24.20	1.315	-0.1	0.184	0.242
	LTE Band 13_Ant 1	10M	QPSK	1	25	Left Side	10mm	Index 4	23230	782	23.94	25.20	1.337	-0.09	0.084	0.112
	LTE Band 13_Ant 1	10M	QPSK	25	25	Left Side	10mm	Index 4	23230	782	23.01	24.20	1.315	-0.04	0.067	0.088
	LTE Band 13_Ant 1	10M	QPSK	1	25	Right Side	10mm	Index 4	23230	782	23.94	25.20	1.337	0.15	0.001	0.001
	LTE Band 13_Ant 1	10M	QPSK	25	25	Right Side	10mm	Index 4	23230	782	23.01	24.20	1.315	-0.18	0.001	0.001
	LTE Band 13_Ant 1	10M	QPSK	1	25	Top Side	10mm	Index 4	23230	782	23.94	25.20	1.337	0	0.120	0.160
	LTE Band 13_Ant 1	10M	QPSK	25	25	Top Side	10mm	Index 4	23230	782	23.01	24.20	1.315	-0.09	0.096	0.126



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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 14_Ant 0	10M	QPSK	1	0	Front	10mm	Index 4	23330	793	24.30	25.50	1.318	-0.14	0.194	0.256
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	Index 4	23330	793	23.34	24.50	1.306	-0.14	0.155	0.202
40	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	23330	793	24.30	25.50	1.318	-0.15	0.249	0.328
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	Index 4	23330	793	23.34	24.50	1.306	0.07	0.192	0.251
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	23330	793	24.30	25.50	1.318	-0.13	0.230	0.303
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Side	10mm	Index 4	23330	793	23.34	24.50	1.306	0.13	0.184	0.240
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Side	10mm	Index 4	23330	793	24.30	25.50	1.318	0.12	0.170	0.224
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Side	10mm	Index 4	23330	793	23.34	24.50	1.306	0.16	0.136	0.178
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Index 4	23330	793	24.30	25.50	1.318	0.14	0.160	0.211
	LTE Band 14_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Index 4	23330	793	23.34	24.50	1.306	-0.17	0.128	0.167
	LTE Band 14_Ant 1	10M	QPSK	1	25	Front	10mm	Index 4	23330	793	23.84	25.20	1.368	0.07	0.110	0.150
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	Index 4	23330	793	22.92	24.20	1.343	0.05	0.089	0.120
	LTE Band 14_Ant 1	10M	QPSK	1	25	Back	10mm	Index 4	23330	793	23.84	25.20	1.368	-0.01	0.209	0.286
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	Index 4	23330	793	22.92	24.20	1.343	-0.16	0.169	0.227
	LTE Band 14_Ant 1	10M	QPSK	1	25	Left Side	10mm	Index 4	23330	793	23.84	25.20	1.368	-0.13	0.092	0.126
	LTE Band 14_Ant 1	10M	QPSK	25	25	Left Side	10mm	Index 4	23330	793	22.92	24.20	1.343	0.18	0.074	0.099
	LTE Band 14_Ant 1	10M	QPSK	1	25	Right Side	10mm	Index 4	23330	793	23.84	25.20	1.368	0.08	0.001	0.001
	LTE Band 14_Ant 1	10M	QPSK	25	25	Right Side	10mm	Index 4	23330	793	22.92	24.20	1.343	-0.05	0.001	0.001
	LTE Band 14_Ant 1	10M	QPSK	1	25	Top Side	10mm	Index 4	23330	793	23.84	25.20	1.368	0.19	0.126	0.172
	LTE Band 14_Ant 1	10M	QPSK	25	25	Top Side	10mm	Index 4	23330	793	22.92	24.20	1.343	-0.14	0.102	0.137
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	Index 4	26590	1905	21.55	22.00	1.109	0.01	0.374	0.415
	LTE Band 25_Ant 2	20M	QPSK	50	50	Front	10mm	Index 4	26590	1905	21.31	22.00	1.172	-0.11	0.410	0.481
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	26590	1905	21.55	22.00	1.109	-0.06	0.418	0.464
	LTE Band 25_Ant 2	20M	QPSK	50	50	Back	10mm	Index 4	26590	1905	21.31	22.00	1.172	-0.13	0.482	0.565
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Side	10mm	Index 4	26590	1905	21.55	22.00	1.109	0.13	0.216	0.240
	LTE Band 25_Ant 2	20M	QPSK	50	50	Left Side	10mm	Index 4	26590	1905	21.31	22.00	1.172	-0.05	0.244	0.286
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	26590	1905	21.55	22.00	1.109	-0.05	0.276	0.306
	LTE Band 25_Ant 2	20M	QPSK	50	50	Right Side	10mm	Index 4	26590	1905	21.31	22.00	1.172	-0.05	0.266	0.312
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	26590	1905	21.55	22.00	1.109	-0.17	0.684	0.759
	LTE Band 25_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	26590	1905	21.31	22.00	1.172	-0.18	0.688	0.806
41	LTE Band 25_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	26140	1860	21.25	22.00	1.189	-0.17	0.764	0.908
	LTE Band 25_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	26340	1880	21.29	22.00	1.178	-0.09	0.759	0.894
	LTE Band 25_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Index 4	26590	1905	21.38	22.00	1.153	0.05	0.733	0.845
	LTE Band 25_Ant 0	20M	QPSK	1	49	Front	10mm	Index 4	26140	1860	23.23	23.60	1.089	0.06	0.312	0.340
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	Index 4	26140	1860	22.31	23.60	1.346	-0.13	0.200	0.269
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 4	26140	1860	23.23	23.60	1.089	-0.16	0.736	0.801
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 4	26340	1880	23.12	23.60	1.117	-0.04	0.723	0.807
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 4	26590	1905	23.09	23.60	1.125	0.01	0.803	0.903
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	Index 4	26140	1860	22.31	23.60	1.346	0	0.527	0.709
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	Index 4	26140	1860	22.27	23.60	1.358	-0.13	0.534	0.725
	LTE Band 25_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	26140	1860	23.23	23.60	1.089	-0.12	0.532	0.579
	LTE Band 25_Ant 0	20M	QPSK	50	0	Left Side	10mm	Index 4	26140	1860	22.31	23.60	1.346	-0.18	0.341	0.459
	LTE Band 25_Ant 0	20M	QPSK	1	49	Right Side	10mm	Index 4	26140	1860	23.23	23.60	1.089	-0.12	0.001	0.001
	LTE Band 25_Ant 0	20M	QPSK	50	0	Right Side	10mm	Index 4	26140	1860	22.31	23.60	1.346	-0.17	0.001	0.001
	LTE Band 25_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	Index 4	26140	1860	23.23	23.60	1.089	-0.16	0.476	0.518
	LTE Band 25_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	Index 4	26140	1860	22.31	23.60	1.346	0.18	0.306	0.412



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	0	Front	10mm	Index 4	26865	831.5	24.20	25.50	1.349	-0.02	0.222	0.299
	LTE Band 26_Ant 0	15M	QPSK	36	20	Front	10mm	Index 4	26865	831.5	23.31	24.50	1.315	0.09	0.180	0.237
42	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	Index 4	26865	831.5	24.20	25.50	1.349	-0.03	0.278	0.375
	LTE Band 26_Ant 0	15M	QPSK	36	20	Back	10mm	Index 4	26865	831.5	23.31	24.50	1.315	-0.12	0.192	0.253
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	Index 4	26865	831.5	24.20	25.50	1.349	-0.19	0.215	0.290
	LTE Band 26_Ant 0	15M	QPSK	36	20	Left Side	10mm	Index 4	26865	831.5	23.31	24.50	1.315	0.07	0.174	0.229
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	Index 4	26865	831.5	24.20	25.50	1.349	-0.17	0.075	0.101
	LTE Band 26_Ant 0	15M	QPSK	36	20	Right Side	10mm	Index 4	26865	831.5	23.31	24.50	1.315	-0.16	0.060	0.079
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	Index 4	26865	831.5	24.20	25.50	1.349	0.13	0.118	0.159
	LTE Band 26_Ant 0	15M	QPSK	36	20	Bottom Side	10mm	Index 4	26865	831.5	23.31	24.50	1.315	-0.01	0.095	0.125
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	20600+20501	844	24.24	25.50	1.337	0.06	0.265	0.354
	LTE Band 26_Ant 1	15M	QPSK	1	37	Front	10mm	Index 4	26865	831.5	23.66	25.00	1.361	-0.17	0.143	0.195
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	Index 4	26865	831.5	22.75	24.00	1.334	0.14	0.116	0.155
	LTE Band 26_Ant 1	15M	QPSK	1	37	Back	10mm	Index 4	26865	831.5	23.66	25.00	1.361	0.08	0.263	0.358
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	Index 4	26865	831.5	22.75	24.00	1.334	-0.17	0.212	0.283
	LTE Band 26_Ant 1	15M	QPSK	1	37	Left Side	10mm	Index 4	26865	831.5	23.66	25.00	1.361	-0.13	0.089	0.121
	LTE Band 26_Ant 1	15M	QPSK	36	20	Left Side	10mm	Index 4	26865	831.5	22.75	24.00	1.334	-0.17	0.071	0.095
	LTE Band 26_Ant 1	15M	QPSK	1	37	Right Side	10mm	Index 4	26865	831.5	23.66	25.00	1.361	-0.16	0.001	0.001
	LTE Band 26_Ant 1	15M	QPSK	36	20	Right Side	10mm	Index 4	26865	831.5	22.75	24.00	1.334	0.12	0.001	0.001
	LTE Band 26_Ant 1	15M	QPSK	1	37	Bottom Side	10mm	Index 4	26865	831.5	23.66	25.00	1.361	-0.04	0.138	0.188
	LTE Band 26_Ant 1	15M	QPSK	36	20	Bottom Side	10mm	Index 4	26865	831.5	22.75	24.00	1.334	0.07	0.111	0.148
	LTE Band 5B_Ant 1	10M	QPSK	1	49	Back	10mm	Index 4	20450+20549	829	23.45	25.00	1.429	-0.01	0.244	0.349
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	Index 4	27710	2310	21.60	21.80	1.047	-0.01	0.564	0.591
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	Index 4	27710	2310	21.32	21.80	1.117	-0.07	0.490	0.547
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	Index 4	27710	2310	21.60	21.80	1.047	-0.06	0.778	0.815
43	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	Index 4	27710	2310	21.32	21.80	1.117	0.02	0.806	0.900
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	Index 4	27710	2310	21.39	21.80	1.099	-0.03	0.800	0.879
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	Index 4	27710	2310	21.60	21.80	1.047	0.11	0.025	0.026
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Side	10mm	Index 4	27710	2310	21.32	21.80	1.117	0.09	0.025	0.028
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	Index 4	27710	2310	21.60	21.80	1.047	-0.01	0.727	0.761
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Side	10mm	Index 4	27710	2310	21.32	21.80	1.117	-0.06	0.778	0.869
	LTE Band 30_Ant 2	10M	QPSK	50	0	Right Side	10mm	Index 4	27710	2310	21.39	21.80	1.099	-0.16	0.681	0.748
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	Index 4	27710	2310	21.60	21.80	1.047	-0.04	0.749	0.784
	LTE Band 30_Ant 2	10M	QPSK	25	0	Bottom Side	10mm	Index 4	27710	2310	21.32	21.80	1.117	-0.03	0.765	0.854
	LTE Band 30_Ant 2	10M	QPSK	50	0	Bottom Side	10mm	Index 4	27710	2310	21.39	21.80	1.099	-0.05	0.772	0.848
	LTE Band 30_Ant 0	10M	QPSK	1	25	Front	10mm	Index 4	27710	2310	22.62	24.40	1.507	0.05	0.226	0.340
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	Index 4	27710	2310	21.69	23.40	1.483	-0.12	0.182	0.270
	LTE Band 30_Ant 0	10M	QPSK	1	25	Back	10mm	Index 4	27710	2310	22.62	24.40	1.507	0.04	0.351	0.529
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	Index 4	27710	2310	21.69	23.40	1.483	-0.09	0.276	0.409
	LTE Band 30_Ant 0	10M	QPSK	1	25	Left Side	10mm	Index 4	27710	2310	22.62	24.40	1.507	0.01	0.453	0.682
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Side	10mm	Index 4	27710	2310	21.69	23.40	1.483	0.11	0.359	0.532
	LTE Band 30_Ant 0	10M	QPSK	1	25	Right Side	10mm	Index 4	27710	2310	22.62	24.40	1.507	0.11	0.001	0.002
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Side	10mm	Index 4	27710	2310	21.69	23.40	1.483	0	0.001	0.001
	LTE Band 30_Ant 0	10M	QPSK	1	25	Bottom Side	10mm	Index 4	27710	2310	22.62	24.40	1.507	0.11	0.135	0.203
	LTE Band 30_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Index 4	27710	2310	21.69	23.40	1.483	-0.05	0.109	0.162



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	49	Front	10mm	Index 4	132572	1770	21.30	21.70	1.096	-0.09	0.418	0.458
	LTE Band 66_Ant 2	20M	QPSK	50	50	Front	10mm	Index 4	132572	1770	21.28	21.70	1.102	-0.06	0.447	0.492
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 4	132572	1770	21.30	21.70	1.096	-0.1	0.459	0.503
	LTE Band 66_Ant 2	20M	QPSK	50	50	Back	10mm	Index 4	132572	1770	21.28	21.70	1.102	-0.18	0.468	0.516
	LTE Band 66_Ant 2	20M	QPSK	1	49	Left Side	10mm	Index 4	132572	1770	21.30	21.70	1.096	0.09	0.219	0.240
	LTE Band 66_Ant 2	20M	QPSK	50	50	Left Side	10mm	Index 4	132572	1770	21.28	21.70	1.102	0.09	0.223	0.246
	LTE Band 66_Ant 2	20M	QPSK	1	49	Right Side	10mm	Index 4	132572	1770	21.30	21.70	1.096	0.14	0.262	0.287
	LTE Band 66_Ant 2	20M	QPSK	50	50	Right Side	10mm	Index 4	132572	1770	21.28	21.70	1.102	-0.09	0.267	0.294
	LTE Band 66_Ant 2	20M	QPSK	1	49	Bottom Side	10mm	Index 4	132572	1770	21.30	21.70	1.096	0.04	0.732	0.803
	LTE Band 66_Ant 2	20M	QPSK	1	49	Bottom Side	10mm	Index 4	132072	1720	21.12	21.70	1.143	0.02	0.648	0.741
	LTE Band 66_Ant 2	20M	QPSK	1	49	Bottom Side	10mm	Index 4	132322	1745	21.16	21.70	1.132	0.12	0.668	0.756
44	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	132572	1770	21.28	21.70	1.102	0.06	0.810	0.892
	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	132072	1720	21.23	21.70	1.114	0.09	0.676	0.753
	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	132322	1745	21.25	21.70	1.109	0.07	0.665	0.738
	LTE Band 66_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Index 4	132572	1770	21.20	21.70	1.122	0.02	0.728	0.817
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Bottom Side	10mm	Index 4	132047+132140	1717.5	21.25	21.70	1.109	0.05	0.801	0.888
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	132572+132374	1770	20.85	21.70	1.216	0.06	0.715	0.870
	LTE Band 66_Ant 0	20M	QPSK	1	49	Front	10mm	Index 4	132072	1720	23.11	24.40	1.346	-0.03	0.234	0.315
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	Index 4	132072	1720	22.22	23.40	1.312	-0.15	0.190	0.249
	LTE Band 66_Ant 0	20M	QPSK	1	49	Back	10mm	Index 4	132072	1720	23.11	24.40	1.346	0	0.395	0.532
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	Index 4	132072	1720	22.22	23.40	1.312	-0.11	0.321	0.421
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	132072	1720	23.11	24.40	1.346	-0.09	0.460	0.619
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	132322	1745	22.98	24.40	1.387	-0.11	0.572	0.793
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	132572	1770	22.86	24.40	1.426	-0.06	0.583	0.831
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Side	10mm	Index 4	132072	1720	22.22	23.40	1.312	-0.11	0.375	0.492
	LTE Band 66_Ant 0	20M	QPSK	100	0	Left Side	10mm	Index 4	132072	1720	22.16	23.40	1.330	0.13	0.355	0.472
	LTE Band 66_Ant 0	20M	QPSK	1	49	Right Side	10mm	Index 4	132072	1720	23.11	24.40	1.346	0.02	0.038	0.051
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Side	10mm	Index 4	132072	1720	22.22	23.40	1.312	-0.14	0.032	0.042
	LTE Band 66_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	Index 4	132072	1720	23.11	24.40	1.346	0.04	0.187	0.252
	LTE Band 66_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	Index 4	132072	1720	22.22	23.40	1.312	-0.17	0.152	0.199
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Left Side	10mm	Index 4	132047+132140	1717.5	22.52	24.40	1.542	0.05	0.534	0.823
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	132322+132124	1745	23.20	24.40	1.318	0.05	0.628	0.828
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	Index 4	133322	683	24.19	25.50	1.352	0.13	0.181	0.245
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	Index 4	133322	683	23.32	24.50	1.312	0.04	0.148	0.194
45	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	133322	683	24.19	25.50	1.352	-0.1	0.240	0.324
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	Index 4	133322	683	23.32	24.50	1.312	0.03	0.170	0.223
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	133322	683	24.19	25.50	1.352	0.07	0.202	0.273
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Side	10mm	Index 4	133322	683	23.32	24.50	1.312	-0.1	0.165	0.217
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	Index 4	133322	683	24.19	25.50	1.352	0.03	0.124	0.168
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Side	10mm	Index 4	133322	683	23.32	24.50	1.312	-0.07	0.101	0.133
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	Index 4	133322	683	24.19	25.50	1.352	-0.12	0.036	0.049
	LTE Band 71_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	Index 4	133322	683	23.32	24.50	1.312	0.19	0.029	0.038
	LTE Band 71_Ant 1	20M	QPSK	1	49	Front	10mm	Index 4	133322	683	23.66	25.00	1.361	0.17	0.095	0.129
	LTE Band 71_Ant 1	20M	QPSK	50	50	Front	10mm	Index 4	133322	683	22.77	24.00	1.327	0.16	0.076	0.101
	LTE Band 71_Ant 1	20M	QPSK	1	49	Back	10mm	Index 4	133322	683	23.66	25.00	1.361	-0.09	0.175	0.238
	LTE Band 71_Ant 1	20M	QPSK	50	50	Back	10mm	Index 4	133322	683	22.77	24.00	1.327	0.14	0.142	0.188
	LTE Band 71_Ant 1	20M	QPSK	1	49	Left Side	10mm	Index 4	133322	683	23.66	25.00	1.361	-0.03	0.160	0.218
	LTE Band 71_Ant 1	20M	QPSK	50	50	Left Side	10mm	Index 4	133322	683	22.77	24.00	1.327	0.14	0.130	0.173
	LTE Band 71_Ant 1	20M	QPSK	1	49	Right Side	10mm	Index 4	133322	683	23.66	25.00	1.361	0.09	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	50	50	Right Side	10mm	Index 4	133322	683	22.77	24.00	1.327	0.13	0.001	0.001
	LTE Band 71_Ant 1	20M	QPSK	1	49	Top Side	10mm	Index 4	133322	683	23.66	25.00	1.361	-0.04	0.117	0.159
	LTE Band 71_Ant 1	20M	QPSK	50	50	Top Side	10mm	Index 4	133322	683	22.77	24.00	1.327	0.13	0.095	0.126



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	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)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Index 4	39750	2506	23.74	24.30	1.138	62.9	1.006	-0.11	0.481	0.550
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	Index 4	39750	2506	23.30	24.30	1.259	62.9	1.006	-0.04	0.436	0.552
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	39750	2506	23.74	24.30	1.138	62.9	1.006	-0.03	0.772	0.884
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	40185	2549.5	23.58	24.30	1.180	62.9	1.006	0.01	0.671	0.797
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	40620	2593	23.59	24.30	1.178	62.9	1.006	0.01	0.758	0.898
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	41055	2636.5	23.58	24.30	1.180	62.9	1.006	-0.04	0.559	0.664
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	41490	2680	23.51	24.30	1.199	62.9	1.006	-0.08	0.742	0.895
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 4	39750	2506	23.30	24.30	1.259	62.9	1.006	-0.17	0.637	0.807
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 4	40185	2549.5	22.98	24.30	1.355	62.9	1.006	-0.06	0.559	0.762
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 4	40620	2593	23.20	24.30	1.288	62.9	1.006	0.1	0.632	0.819
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 4	41055	2636.5	23.05	24.30	1.334	62.9	1.006	0.08	0.466	0.625
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 4	41490	2680	23.04	24.30	1.337	62.9	1.006	0.17	0.618	0.831
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	Index 4	39750	2506	23.32	24.30	1.253	62.9	1.006	-0.16	0.629	0.793
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	Index 4	39750	2506	23.74	24.30	1.138	62.9	1.006	0.08	0.052	0.060
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Side	10mm	Index 4	39750	2506	23.30	24.30	1.259	62.9	1.006	0.02	0.048	0.061
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	39750	2506	23.74	24.30	1.138	62.9	1.006	0.08	0.558	0.639
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	40185	2549.5	23.58	24.30	1.180	62.9	1.006	-0.04	0.542	0.643
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	40620	2593	23.59	24.30	1.178	62.9	1.006	-0.03	0.571	0.676
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	41055	2636.5	23.58	24.30	1.180	62.9	1.006	-0.16	0.525	0.624
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	41490	2680	23.51	24.30	1.199	62.9	1.006	0.02	0.513	0.619
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	Index 4	39750	2506	23.30	24.30	1.259	62.9	1.006	-0.17	0.562	0.712
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	Index 4	40185	2549.5	22.98	24.30	1.355	62.9	1.006	-0.16	0.587	0.800
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	Index 4	40620	2593	23.20	24.30	1.288	62.9	1.006	0.18	0.618	0.801
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	Index 4	41055	2636.5	23.05	24.30	1.334	62.9	1.006	0.08	0.569	0.764
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	Index 4	41490	2680	23.04	24.30	1.337	62.9	1.006	0.07	0.556	0.747
	LTE Band 41_Ant 2	20M	QPSK	100	0	Right Side	10mm	Index 4	39750	2506	23.32	24.30	1.253	62.9	1.006	-0.06	0.528	0.665
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	39750	2506	23.74	24.30	1.138	62.9	1.006	-0.01	0.733	0.839
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	40185	2549.5	23.58	24.30	1.180	62.9	1.006	-0.07	0.704	0.836
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	40620	2593	23.59	24.30	1.178	62.9	1.006	-0.14	0.742	0.879
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	41055	2636.5	23.58	24.30	1.180	62.9	1.006	-0.19	0.683	0.811
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	41490	2680	23.51	24.30	1.199	62.9	1.006	0.02	0.667	0.805
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Index 4	39750	2506	23.30	24.30	1.259	62.9	1.006	-0.06	0.633	0.802
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Index 4	40185	2549.5	22.98	24.30	1.355	62.9	1.006	-0.05	0.618	0.842
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Index 4	40620	2593	23.20	24.30	1.288	62.9	1.006	0.18	0.641	0.831
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Index 4	41055	2636.5	23.05	24.30	1.334	62.9	1.006	0.19	0.599	0.804
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Index 4	41490	2680	23.04	24.30	1.337	62.9	1.006	-0.01	0.585	0.787
	LTE Band 41_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Index 4	39750	2506	23.32	24.30	1.253	62.9	1.006	-0.1	0.615	0.775
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	40620	2593	25.80	25.90	1.023	42.9	1.009	0.18	0.822	0.849
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 4	39750+39948	2506	22.88	23.00	1.028	62.9	1.006	0.09	0.742	0.767





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	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)
	LTE Band 41_Ant 0	20M	QPSK	1	49	Front	10mm	Index 4	39750	2506	22.69	23.40	1.178	62.9	1.006	-0.19	0.208	0.246
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	Index 4	39750	2506	21.79	22.90	1.291	62.9	1.006	-0.02	0.176	0.229
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 4	39750	2506	22.69	23.40	1.178	62.9	1.006	-0.01	0.281	0.333
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	Index 4	39750	2506	21.79	22.90	1.291	62.9	1.006	-0.09	0.238	0.309
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	39750	2506	22.69	23.40	1.178	62.9	1.006	0.18	0.737	0.873
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	40185	2549.5	22.60	23.40	1.202	62.9	1.006	0.05	0.620	0.750
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	40620	2593	22.55	23.40	1.216	62.9	1.006	0.12	0.648	0.793
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	41055	2636.5	22.52	23.40	1.225	62.9	1.006	-0.07	0.637	0.785
	LTE Band 41_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	41490	2680	22.52	23.40	1.225	62.9	1.006	0.06	0.529	0.652
	LTE Band 41_Ant 0	20M	QPSK	50	24	Left Side	10mm	Index 4	39750	2506	21.79	22.90	1.291	62.9	1.006	-0.17	0.460	0.598
	LTE Band 41_Ant 0	20M	QPSK	100	0	Left Side	10mm	Index 4	39750	2506	21.73	22.90	1.309	62.9	1.006	0.08	0.452	0.595
	LTE Band 41_Ant 0	20M	QPSK	1	49	Right Side	10mm	Index 4	39750	2506	22.69	23.40	1.178	62.9	1.006	0.12	0.052	0.062
	LTE Band 41_Ant 0	20M	QPSK	50	24	Right Side	10mm	Index 4	39750	2506	21.79	22.90	1.291	62.9	1.006	-0.03	0.046	0.060
	LTE Band 41_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	Index 4	39750	2506	22.69	23.40	1.178	62.9	1.006	0.18	0.357	0.423
	LTE Band 41_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	Index 4	39750	2506	21.79	22.90	1.291	62.9	1.006	0.12	0.302	0.392
46	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	39750	2506	24.71	25.00	1.069	42.9	1.009	-0.15	0.837	0.903
	LTE Band 41C_Ant 0	20M	QPSK	1	99	Left Side	10mm	Index 4	39750+39948	2506	21.54	23.00	1.400	62.9	1.006	-0.04	0.525	0.739
	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	Index 4	56640	3690	23.89	24.30	1.099	62.9	1.006	-0.04	0.319	0.353
	LTE Band 48_Ant 6	20M	QPSK	50	0	Front	10mm	Index 4	56150	3641	23.45	24.30	1.216	62.9	1.006	0.04	0.283	0.346
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	56640	3690	23.89	24.30	1.099	62.9	1.006	0	0.640	0.708
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	55340	3560	23.63	24.30	1.167	62.9	1.006	-0.06	0.561	0.659
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	55830	3609	23.73	24.30	1.140	62.9	1.006	0.02	0.583	0.669
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	56150	3641	23.81	24.30	1.119	62.9	1.006	0.12	0.643	0.724
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 4	56150	3641	23.45	24.30	1.216	62.9	1.006	-0.05	0.593	0.726
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 4	55340	3560	23.29	24.30	1.262	62.9	1.006	0.04	0.576	0.731
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 4	55830	3609	23.42	24.30	1.225	62.9	1.006	0.01	0.603	0.743
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 4	56640	3690	23.39	24.30	1.233	62.9	1.006	0.08	0.618	0.767
	LTE Band 48_Ant 6	20M	QPSK	100	0	Back	10mm	Index 4	56640	3690	23.41	24.30	1.227	62.9	1.006	-0.06	0.601	0.742
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	56640	3690	23.89	24.30	1.099	62.9	1.006	-0.02	0.600	0.663
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	55340	3560	23.63	24.30	1.167	62.9	1.006	-0.16	0.711	0.835
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	55830	3609	23.73	24.30	1.140	62.9	1.006	-0.03	0.777	0.891
47	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	56150	3641	23.81	24.30	1.119	62.9	1.006	0.07	0.793	0.893
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Side	10mm	Index 4	56150	3641	23.45	24.30	1.216	62.9	1.006	-0.02	0.661	0.809
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Side	10mm	Index 4	55340	3560	23.29	24.30	1.262	62.9	1.006	-0.1	0.634	0.805
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Side	10mm	Index 4	55830	3609	23.42	24.30	1.225	62.9	1.006	0	0.642	0.791
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Side	10mm	Index 4	56640	3690	23.39	24.30	1.233	62.9	1.006	-0.12	0.695	0.862
	LTE Band 48_Ant 6	20M	QPSK	100	0	Left Side	10mm	Index 4	56640	3690	23.41	24.30	1.227	62.9	1.006	0.01	0.672	0.830
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Side	10mm	Index 4	56640	3690	23.89	24.30	1.099	62.9	1.006	0.03	0.078	0.086
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Side	10mm	Index 4	56150	3641	23.45	24.30	1.216	62.9	1.006	-0.06	0.068	0.083
	LTE Band 48_Ant 6	20M	QPSK	1	0	Bottom Side	10mm	Index 4	56640	3690	23.89	24.30	1.099	62.9	1.006	0.08	0.065	0.072
	LTE Band 48_Ant 6	20M	QPSK	50	0	Bottom Side	10mm	Index 4	56150	3641	23.45	24.30	1.216	62.9	1.006	0.04	0.057	0.070
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 4	56640	3690	22.06	22.90	1.213	62.9	1.006	0.03	0.112	0.137
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	Index 4	56640	3690	21.09	21.90	1.205	62.9	1.006	0.05	0.086	0.104
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	56640	3690	22.06	22.90	1.213	62.9	1.006	-0.02	0.108	0.132
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	Index 4	56640	3690	21.09	21.90	1.205	62.9	1.006	-0.08	0.091	0.110
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Side	10mm	Index 4	56640	3690	22.06	22.90	1.213	62.9	1.006	0.03	0.050	0.061
	LTE Band 48_Ant 2	20M	QPSK	50	0	Left Side	10mm	Index 4	56640	3690	21.09	21.90	1.205	62.9	1.006	-0.06	0.041	0.050
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	56640	3690	22.06	22.90	1.213	62.9	1.006	0.1	0.222	0.271
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	55340	3560	21.49	22.90	1.384	62.9	1.006	-0.02	0.202	0.281
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	55340	3560	21.49	22.90	1.384	62.9	1.006	0.16	0.220	0.306
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	56150	3641	21.96	22.90	1.242	62.9	1.006	-0.01	0.218	0.272
	LTE Band 48_Ant 2	20M	QPSK	50	0	Right Side	10mm	Index 4	56640	3690	21.09	21.90	1.205	62.9	1.006	0.03	0.177	0.215
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	56640	3690	22.06	22.90	1.213	62.9	1.006	0.08	0.059	0.072
	LTE Band 48_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	Index 4	56640	3690	21.09	21.90	1.205	62.9	1.006	0.03	0.048	0.058



<5G NR SAR>

Table with 17 columns: Plot No., Band, BW (MHz), Modulation, RB Size, RB offset, Test Position, Gap (mm), Output Power Index, Ch., Freq. (MHz), Average Power (dBm), Tune-Up Limit (dBm), Tune-up Scaling Factor, Power Drift (dB), Measured 1g SAR (W/kg), Reported 1g SAR (W/kg). Rows include antenna configurations for FR1 n5 and FR1 n7.

Summary table with 17 columns: Plot No., Band, BW (MHz), Modulation, RB Size, RB offset, Test Position, Gap (mm), Output Power Index, Ch., Freq. (MHz), Average Power (dBm), Tune-Up Limit (dBm), Tune-up Scaling Factor, Power Drift (dB), Measured 1g SAR (W/kg), Reported 1g SAR (W/kg).



**FCC SAR TEST REPORT**

**Report No. : FA121931-04C**

	FR1 n12_Ant 0	15M	BPSK	1	40	Front	10mm	Index 4	141500	707.5	24.57	25.50	1.239	0.01	0.186	0.230
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	Index 4	141500	707.5	24.57	25.50	1.239	0.01	0.179	0.221
	FR1 n12_Ant 0	15M	BPSK	1	40	Back	10mm	Index 4	141500	707.5	24.57	25.50	1.239	-0.14	0.201	0.249
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	Index 4	141500	707.5	24.57	25.50	1.239	0.06	0.200	0.248
	FR1 n12_Ant 0	15M	BPSK	1	40	Left Side	10mm	Index 4	141500	707.5	24.57	25.50	1.239	-0.02	0.194	0.240
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	Index 4	141500	707.5	24.57	25.50	1.239	-0.03	0.186	0.230
	FR1 n12_Ant 0	15M	BPSK	1	40	Right Side	10mm	Index 4	141500	707.5	24.57	25.50	1.239	-0.04	0.143	0.177
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	Index 4	141500	707.5	24.57	25.50	1.239	-0.08	0.082	0.102
	FR1 n12_Ant 0	15M	BPSK	1	40	Bottom Side	10mm	Index 4	141500	707.5	24.57	25.50	1.239	0.06	0.189	0.234
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	Index 4	141500	707.5	24.57	25.50	1.239	0.07	0.163	0.201
	FR1 n12_Ant 1	15M	BPSK	1	40	Front	10mm	Index 4	141500	707.5	24.05	25.10	1.274	-0.01	0.109	0.139
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	Index 4	141500	707.5	24.11	25.10	1.256	-0.08	0.116	0.146
50	FR1 n12_Ant 1	15M	BPSK	1	40	Back	10mm	Index 4	141500	707.5	24.05	25.10	1.274	-0.07	0.228	0.290
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	Index 4	141500	707.5	24.11	25.10	1.256	-0.12	0.221	0.278
	FR1 n12_Ant 1	15M	BPSK	1	40	Left Side	10mm	Index 4	141500	707.5	24.05	25.10	1.274	0.08	0.104	0.132
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	Index 4	141500	707.5	24.11	25.10	1.256	0.04	0.107	0.134
	FR1 n12_Ant 1	15M	BPSK	1	40	Right Side	10mm	Index 4	141500	707.5	24.05	25.10	1.274	-0.07	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Side	10mm	Index 4	141500	707.5	24.11	25.10	1.256	-0.08	0.001	0.001
	FR1 n12_Ant 1	15M	BPSK	1	40	Top Side	10mm	Index 4	141500	707.5	24.05	25.10	1.274	0.01	0.130	0.166
	FR1 n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	Index 4	141500	707.5	24.11	25.10	1.256	0.05	0.150	0.188
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 4	381000	1905	21.71	21.90	1.045	-0.07	0.500	0.522
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 4	381000	1905	21.90	21.90	1.000	0.16	0.513	0.513
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 4	381000	1905	21.71	21.90	1.045	0.09	0.510	0.533
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 4	381000	1905	21.90	21.90	1.000	-0.15	0.544	0.544
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Side	10mm	Index 4	381000	1905	21.71	21.90	1.045	-0.15	0.275	0.287
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Side	10mm	Index 4	381000	1905	21.90	21.90	1.000	-0.13	0.251	0.251
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Side	10mm	Index 4	381000	1905	21.71	21.90	1.045	0.13	0.389	0.406
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Side	10mm	Index 4	381000	1905	21.90	21.90	1.000	-0.02	0.331	0.331
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	381000	1905	21.71	21.90	1.045	-0.1	0.769	0.803
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	372000	1860	21.68	21.90	1.052	-0.04	0.801	0.843
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	376500	1882.5	21.63	21.90	1.064	0.17	0.790	0.841
	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	Index 4	381000	1905	21.90	21.90	1.000	-0.05	0.620	0.620
	FR1 n25_Ant 2	20M	BPSK	100	0	Bottom Side	10mm	Index 4	381000	1905	21.79	21.90	1.026	0.11	0.659	0.676
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	376500	1882.5	23.30	23.30	1.000	-0.06	0.567	0.567
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 4	376500	1882.5	23.17	23.30	1.030	0.12	0.415	0.428
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	376500	1882.5	23.30	23.30	1.000	-0.09	0.777	0.777
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	372000	1860	23.24	23.30	1.014	0.18	0.749	0.759
51	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	381000	1905	23.25	23.30	1.012	0	0.893	0.903
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 4	376500	1882.5	23.17	23.30	1.030	-0.14	0.741	0.764
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	Index 4	376500	1882.5	22.64	23.30	1.164	-0.14	0.702	0.817
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	376500	1882.5	23.30	23.30	1.000	-0.1	0.497	0.497
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Side	10mm	Index 4	376500	1882.5	23.17	23.30	1.030	0.02	0.490	0.505
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Side	10mm	Index 4	376500	1882.5	23.30	23.30	1.000	-0.04	0.039	0.039
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Side	10mm	Index 4	376500	1882.5	23.17	23.30	1.030	0.13	0.001	0.001
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	376500	1882.5	23.30	23.30	1.000	-0.17	0.425	0.425
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	376500	1882.5	23.17	23.30	1.030	0.02	0.282	0.291





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n30_Ant 2	10M	BPSK	1	26	Front	10mm	Index 4	462000	2310	22.17	22.20	1.007	0.15	0.575	0.579
	FR1 n30_Ant 2	10M	BPSK	25	0	Front	10mm	Index 4	462000	2310	22.18	22.20	1.005	0.14	0.563	0.566
52	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index 4	462000	2310	22.17	22.20	1.007	-0.08	0.892	0.898
	FR1 n30_Ant 2	10M	BPSK	25	0	Back	10mm	Index 4	462000	2310	22.18	22.20	1.005	-0.17	0.878	0.882
	FR1 n30_Ant 2	10M	BPSK	50	0	Back	10mm	Index 4	462000	2310	22.11	22.20	1.021	0.05	0.839	0.857
	FR1 n30_Ant 2	10M	BPSK	1	26	Left Side	10mm	Index 4	462000	2310	22.17	22.20	1.007	0.03	0.036	0.036
	FR1 n30_Ant 2	10M	BPSK	25	0	Left Side	10mm	Index 4	462000	2310	22.18	22.20	1.005	-0.07	0.031	0.031
	FR1 n30_Ant 2	10M	BPSK	1	26	Right Side	10mm	Index 4	462000	2310	22.17	22.20	1.007	0.17	0.741	0.746
	FR1 n30_Ant 2	10M	BPSK	25	0	Right Side	10mm	Index 4	462000	2310	22.18	22.20	1.005	-0.18	0.735	0.738
	FR1 n30_Ant 2	10M	BPSK	1	26	Bottom Side	10mm	Index 4	462000	2310	22.17	22.20	1.007	-0.11	0.759	0.764
	FR1 n30_Ant 2	10M	BPSK	25	0	Bottom Side	10mm	Index 4	462000	2310	22.18	22.20	1.005	0.17	0.743	0.746
	FR1 n30_Ant 0	10M	BPSK	1	26	Front	10mm	Index 4	462000	2310	22.92	24.50	1.439	0.08	0.295	0.424
	FR1 n30_Ant 0	10M	BPSK	25	14	Front	10mm	Index 4	462000	2310	22.77	24.50	1.489	-0.06	0.307	0.457
	FR1 n30_Ant 0	10M	BPSK	1	26	Back	10mm	Index 4	462000	2310	22.92	24.50	1.439	0.02	0.340	0.489
	FR1 n30_Ant 0	10M	BPSK	25	14	Back	10mm	Index 4	462000	2310	22.77	24.50	1.489	-0.09	0.314	0.468
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Side	10mm	Index 4	462000	2310	22.92	24.50	1.439	0.09	0.541	0.778
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Side	10mm	Index 4	462000	2310	22.77	24.50	1.489	-0.08	0.421	0.627
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Side	10mm	Index 4	462000	2310	22.92	24.50	1.439	0.03	0.074	0.106
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Side	10mm	Index 4	462000	2310	22.77	24.50	1.489	-0.04	0.070	0.104
	FR1 n30_Ant 0	10M	BPSK	1	26	Bottom Side	10mm	Index 4	462000	2310	22.92	24.50	1.439	0.02	0.185	0.266
	FR1 n30_Ant 0	10M	BPSK	25	14	Bottom Side	10mm	Index 4	462000	2310	22.77	24.50	1.489	0.08	0.219	0.326
	FR1 n41_Ant 1	100M	BPSK	1	137	Front	10mm	Index 4	518598	2592.99	20.82	20.90	1.019	-0.16	0.335	0.341
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Index 4	518598	2592.99	20.88	20.90	1.005	0.05	0.330	0.332
	FR1 n41_Ant 1	100M	BPSK	1	137	Back	10mm	Index 4	518598	2592.99	20.82	20.90	1.019	-0.02	0.634	0.646
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Index 4	518598	2592.99	20.88	20.90	1.005	-0.17	0.621	0.624
	FR1 n41_Ant 1	100M	BPSK	270	0	Back	10mm	Index 4	518598	2592.99	20.72	20.90	1.042	0.04	0.616	0.642
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Side	10mm	Index 4	518598	2592.99	20.82	20.90	1.019	-0.16	0.143	0.146
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Side	10mm	Index 4	518598	2592.99	20.88	20.90	1.005	-0.08	0.135	0.136
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Side	10mm	Index 4	518598	2592.99	20.82	20.90	1.019	0.12	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Side	10mm	Index 4	518598	2592.99	20.88	20.90	1.005	-0.02	0.001	0.001
53	FR1 n41_Ant 1	100M	BPSK	1	137	Top Side	10mm	Index 4	518598	2592.99	20.82	20.90	1.019	-0.03	0.869	0.885
	FR1 n41_Ant 1	100M	BPSK	135	69	Top Side	10mm	Index 4	518598	2592.99	20.88	20.90	1.005	-0.19	0.571	0.574
	FR1 n41_Ant 1	100M	BPSK	270	0	Top Side	10mm	Index 4	518598	2592.99	20.72	20.90	1.042	-0.16	0.628	0.655
	FR1 n41_HPUE_Ant 1	100M	BPSK	1	137	Top Side	10mm	Index 4	518598	2592.99	23.57	23.90	1.079	-0.02	0.758	0.818
	FR1 n41_Ant 5	100M	BPSK	1	137	Front	10mm	Index 4	518598	2592.99	21.50	21.80	1.072	-0.03	0.239	0.256
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	Index 4	518598	2592.99	21.43	21.80	1.089	-0.08	0.218	0.237
	FR1 n41_Ant 5	100M	BPSK	1	137	Back	10mm	Index 4	518598	2592.99	21.50	21.80	1.072	-0.09	0.381	0.408
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	Index 4	518598	2592.99	21.43	21.80	1.089	-0.17	0.340	0.370
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Side	10mm	Index 4	518598	2592.99	21.50	21.80	1.072	0.03	0.047	0.050
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Side	10mm	Index 4	518598	2592.99	21.43	21.80	1.089	0.04	0.033	0.036
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Side	10mm	Index 4	518598	2592.99	21.50	21.80	1.072	-0.05	0.824	0.883
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Side	10mm	Index 4	509202	2546.01	21.46	21.80	1.081	0.18	0.680	0.735
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Side	10mm	Index 4	528000	2640	21.65	21.80	1.035	-0.02	0.829	0.858
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Side	10mm	Index 4	518598	2592.99	21.43	21.80	1.089	-0.07	0.806	0.878
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Side	10mm	Index 4	509202	2546.01	21.43	21.80	1.089	0.05	0.648	0.706
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Side	10mm	Index 4	528000	2640	21.52	21.80	1.067	-0.14	0.794	0.847
	FR1 n41_Ant 5	100M	BPSK	270	0	Right Side	10mm	Index 4	518598	2592.99	21.30	21.80	1.122	0.18	0.781	0.876
	FR1 n41_Ant 5	100M	BPSK	1	137	Top Side	10mm	Index 4	518598	2592.99	21.50	21.80	1.072	0.09	0.095	0.102
	FR1 n41_Ant 5	100M	BPSK	135	69	Top Side	10mm	Index 4	518598	2592.99	21.43	21.80	1.089	0.05	0.085	0.093
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	137	Right Side	10mm	Index 4	518598	2592.99	24.46	24.80	1.081	-0.08	0.773	0.836



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n66_Ant 2	40M	BPSK	1	108	Front	10mm	Index 4	349000	1745	21.78	22.20	1.102	0.07	0.402	0.443
	FR1 n66_Ant 2	40M	BPSK	108	108	Front	10mm	Index 4	349000	1745	21.63	22.20	1.140	0.18	0.388	0.442
	FR1 n66_Ant 2	40M	BPSK	1	108	Back	10mm	Index 4	349000	1745	21.78	22.20	1.102	-0.11	0.580	0.639
	FR1 n66_Ant 2	40M	BPSK	108	108	Back	10mm	Index 4	349000	1745	21.63	22.20	1.140	-0.04	0.572	0.652
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Side	10mm	Index 4	349000	1745	21.78	22.20	1.102	-0.03	0.158	0.174
	FR1 n66_Ant 2	40M	BPSK	108	108	Left Side	10mm	Index 4	349000	1745	21.63	22.20	1.140	-0.07	0.141	0.161
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Side	10mm	Index 4	349000	1745	21.78	22.20	1.102	-0.19	0.346	0.381
	FR1 n66_Ant 2	40M	BPSK	108	108	Right Side	10mm	Index 4	349000	1745	21.63	22.20	1.140	-0.13	0.342	0.390
54	FR1 n66_Ant 2	40M	BPSK	1	108	Bottom Side	10mm	Index 4	349000	1745	21.78	22.20	1.102	-0.06	0.784	0.864
	FR1 n66_Ant 2	40M	BPSK	108	108	Bottom Side	10mm	Index 4	349000	1745	21.63	22.20	1.140	0.07	0.753	0.859
	FR1 n66_Ant 2	40M	BPSK	216	0	Bottom Side	10mm	Index 4	349000	1745	21.46	22.20	1.186	0.05	0.722	0.856
	FR1 n66_Ant 0	40M	BPSK	1	108	Front	10mm	Index 4	349000	1745	22.99	24.10	1.291	0.14	0.473	0.611
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	Index 4	349000	1745	22.80	24.10	1.349	0.11	0.451	0.608
	FR1 n66_Ant 0	40M	BPSK	1	108	Back	10mm	Index 4	349000	1745	22.99	24.10	1.291	-0.12	0.655	0.846
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	Index 4	349000	1745	22.80	24.10	1.349	-0.08	0.620	0.836
	FR1 n66_Ant 0	40M	BPSK	216	0	Back	10mm	Index 4	349000	1745	22.63	23.60	1.250	-0.15	0.633	0.791
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Side	10mm	Index 4	349000	1745	22.99	24.10	1.291	0.14	0.574	0.741
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Side	10mm	Index 4	349000	1745	22.80	24.10	1.349	-0.08	0.559	0.754
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Side	10mm	Index 4	349000	1745	22.99	24.10	1.291	-0.14	0.050	0.065
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Side	10mm	Index 4	349000	1745	22.80	24.10	1.349	0.09	0.043	0.058
	FR1 n66_Ant 0	40M	BPSK	1	108	Bottom Side	10mm	Index 4	349000	1745	22.99	24.10	1.291	0.08	0.465	0.600
	FR1 n66_Ant 0	40M	BPSK	108	54	Bottom Side	10mm	Index 4	349000	1745	22.80	24.10	1.349	-0.02	0.453	0.611
	FR1 n71_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	136100	680.5	24.67	25.50	1.211	0.05	0.221	0.268
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	Index 4	136100	680.5	24.56	25.50	1.242	0.08	0.214	0.266
55	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	136100	680.5	24.67	25.50	1.211	-0.11	0.238	0.288
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	Index 4	136100	680.5	24.56	25.50	1.242	0.01	0.227	0.282
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	136100	680.5	24.67	25.50	1.211	0.02	0.220	0.266
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Side	10mm	Index 4	136100	680.5	24.56	25.50	1.242	0.07	0.218	0.271
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Side	10mm	Index 4	136100	680.5	24.67	25.50	1.211	0.01	0.001	0.001
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Side	10mm	Index 4	136100	680.5	24.56	25.50	1.242	-0.06	0.001	0.001
	FR1 n71_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	136100	680.5	24.67	25.50	1.211	-0.09	0.064	0.077
	FR1 n71_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	136100	680.5	24.56	25.50	1.242	-0.1	0.066	0.082
	FR1 n71_Ant 1	20M	BPSK	1	53	Front	10mm	Index 4	136100	680.5	24.21	25.10	1.227	0.01	0.106	0.130
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	Index 4	136100	680.5	24.07	25.10	1.268	0.03	0.099	0.125
	FR1 n71_Ant 1	20M	BPSK	1	53	Back	10mm	Index 4	136100	680.5	24.21	25.10	1.227	-0.02	0.198	0.243
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	Index 4	136100	680.5	24.07	25.10	1.268	0.07	0.180	0.228
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Side	10mm	Index 4	136100	680.5	24.21	25.10	1.227	0.05	0.124	0.152
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Side	10mm	Index 4	136100	680.5	24.07	25.10	1.268	-0.08	0.113	0.143
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Side	10mm	Index 4	136100	680.5	24.21	25.10	1.227	-0.01	0.051	0.063
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Side	10mm	Index 4	136100	680.5	24.07	25.10	1.268	-0.06	0.061	0.077
	FR1 n71_Ant 1	20M	BPSK	1	53	Top Side	10mm	Index 4	136100	680.5	24.21	25.10	1.227	-0.18	0.121	0.149
	FR1 n71_Ant 1	20M	BPSK	50	28	Top Side	10mm	Index 4	136100	680.5	24.07	25.10	1.268	0.06	0.125	0.158



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	137	Front	10mm	Index 4	633332	3499.98	21.92	22.10	1.042	0.09	0.214	0.223
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	Index 4	633332	3499.98	21.89	22.10	1.050	0.05	0.203	0.213
	FR1 n77_Ant 6	100M	BPSK	1	137	Back	10mm	Index 4	633332	3499.98	21.92	22.10	1.042	0.03	0.540	0.563
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	Index 4	633332	3499.98	21.89	22.10	1.050	0.04	0.528	0.554
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Side	10mm	Index 4	633332	3499.98	21.92	22.10	1.042	0.08	0.744	0.775
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	Index 4	633332	3499.98	21.89	22.10	1.050	-0.1	0.702	0.737
	FR1 n77_Ant 6	100M	BPSK	270	0	Left Side	10mm	Index 4	633332	3499.98	21.75	22.10	1.084	-0.07	0.689	0.747
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Side	10mm	Index 4	633332	3499.98	21.92	22.10	1.042	-0.19	0.030	0.031
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	Index 4	633332	3499.98	21.89	22.10	1.050	0.05	0.036	0.038
	FR1 n77_Ant 6	100M	BPSK	1	137	Bottom Side	10mm	Index 4	633332	3499.98	21.92	22.10	1.042	-0.15	0.161	0.168
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	Index 4	633332	3499.98	21.89	22.10	1.050	0.14	0.120	0.126
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Left Side	10mm	Index 4	633332	3499.98	23.88	25.10	1.324	0	0.548	0.726
	FR1 n77_Ant 6	100M	BPSK	1	137	Front	10mm	Index 4	656000	3840	21.88	22.10	1.052	-0.16	0.297	0.312
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	Index 4	656000	3840	21.84	22.10	1.062	0.11	0.317	0.337
	FR1 n77_Ant 6	100M	BPSK	1	137	Back	10mm	Index 4	656000	3840	21.88	22.10	1.052	-0.07	0.575	0.605
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	Index 4	656000	3840	21.84	22.10	1.062	-0.04	0.563	0.598
56	FR1 n77_Ant 6	100M	BPSK	1	137	Left Side	10mm	Index 4	656000	3840	21.88	22.10	1.052	-0.07	0.850	0.894
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	Index 4	656000	3840	21.84	22.10	1.062	-0.19	0.821	0.872
	FR1 n77_Ant 6	100M	BPSK	270	0	Left Side	10mm	Index 4	656000	3840	21.81	22.10	1.069	-0.07	0.801	0.856
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Side	10mm	Index 4	656000	3840	21.88	22.10	1.052	0.01	0.055	0.058
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	Index 4	656000	3840	21.84	22.10	1.062	0.09	0.037	0.039
	FR1 n77_Ant 6	100M	BPSK	1	137	Bottom Side	10mm	Index 4	656000	3840	21.88	22.10	1.052	0.11	0.082	0.086
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	Index 4	656000	3840	21.84	22.10	1.062	-0.16	0.090	0.096
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Left Side	10mm	Index 4	656000	3840	23.94	25.10	1.306	-0.09	0.622	0.812
	FR1 n77_Ant 2	100M	BPSK	1	271	Front	10mm	Index 4	633332	3499.98	22.34	23.30	1.306	-0.02	0.112	0.140
	FR1 n77_Ant 2	100M	BPSK	135	138	Front	10mm	Index 4	633332	3499.98	22.14	23.30	1.019	0.05	0.127	0.166
	FR1 n77_Ant 2	100M	BPSK	1	271	Back	10mm	Index 4	633332	3499.98	22.34	23.30	1.306	-0.14	0.173	0.216
	FR1 n77_Ant 2	100M	BPSK	135	138	Back	10mm	Index 4	633332	3499.98	22.14	23.30	1.019	-0.03	0.148	0.193
	FR1 n77_Ant 2	100M	BPSK	1	271	Left Side	10mm	Index 4	633332	3499.98	22.34	23.30	1.306	0.12	0.030	0.037
	FR1 n77_Ant 2	100M	BPSK	135	138	Left Side	10mm	Index 4	633332	3499.98	22.14	23.30	1.019	0.13	0.031	0.040
	FR1 n77_Ant 2	100M	BPSK	1	271	Right Side	10mm	Index 4	633332	3499.98	22.34	23.30	1.306	0.03	0.320	0.399
	FR1 n77_Ant 2	100M	BPSK	135	138	Right Side	10mm	Index 4	633332	3499.98	22.14	23.30	1.019	0.05	0.326	0.426
	FR1 n77_Ant 2	100M	BPSK	1	271	Bottom Side	10mm	Index 4	633332	3499.98	22.34	23.30	1.306	-0.02	0.075	0.094
	FR1 n77_Ant 2	100M	BPSK	135	138	Bottom Side	10mm	Index 4	633332	3499.98	22.14	23.30	1.019	0.09	0.089	0.116
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	271	Right Side	10mm	Index 4	633332	3499.98	23.55	25.00	1.396	-0.17	0.215	0.300
	FR1 n77_Ant 2	100M	BPSK	1	271	Front	10mm	Index 4	656000	3840	22.74	23.30	1.191	0.06	0.115	0.131
	FR1 n77_Ant 2	100M	BPSK	135	138	Front	10mm	Index 4	656000	3840	22.27	22.30	1.050	-0.06	0.108	0.109
	FR1 n77_Ant 2	100M	BPSK	1	271	Back	10mm	Index 4	656000	3840	22.74	23.30	1.191	-0.14	0.202	0.230
	FR1 n77_Ant 2	100M	BPSK	135	138	Back	10mm	Index 4	656000	3840	22.27	22.30	1.050	-0.15	0.116	0.117
	FR1 n77_Ant 2	100M	BPSK	1	271	Left Side	10mm	Index 4	656000	3840	22.74	23.30	1.191	-0.16	0.033	0.038
	FR1 n77_Ant 2	100M	BPSK	135	138	Left Side	10mm	Index 4	656000	3840	22.27	22.30	1.050	-0.14	0.031	0.031
	FR1 n77_Ant 2	100M	BPSK	1	271	Right Side	10mm	Index 4	656000	3840	22.74	23.30	1.191	-0.12	0.250	0.284
	FR1 n77_Ant 2	100M	BPSK	135	138	Right Side	10mm	Index 4	656000	3840	22.27	22.30	1.050	0.17	0.224	0.226
	FR1 n77_Ant 2	100M	BPSK	1	271	Bottom Side	10mm	Index 4	656000	3840	22.74	23.30	1.191	-0.14	0.051	0.058
	FR1 n77_Ant 2	100M	BPSK	135	138	Bottom Side	10mm	Index 4	656000	3840	22.27	22.30	1.050	0.02	0.056	0.056
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	271	Right Side	10mm	Index 4	656000	3840	23.68	25.00	1.371	-0.05	0.185	0.251

**<WLAN SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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 3+4 (4)	7	13	2472	17.65	18.00	1.084	94.7	1.056	-0.12	0.235	0.269
				10mm	Ant 3+4 (3)	7	13	2472	17.65	18.00	1.084	94.7	1.056	-0.12	0.226	0.259
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	7	13	2472	17.65	18.00	1.084	94.7	1.056	-0.1	0.247	0.283
				10mm	Ant 3+4 (3)	7	13	2472	17.65	18.00	1.084	94.7	1.056	-0.1	0.322	0.369
57	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	7	13	2472	17.65	18.00	1.084	94.7	1.056	0.05	0.536	0.614
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3+4 (4)	7	13	2472	17.65	18.00	1.084	94.7	1.056	0.05	0.095	0.109
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3+4 (4)	7	13	2472	17.65	18.00	1.084	94.7	1.056	-0.08	0.167	0.191
				10mm	Ant 3+4 (3)	7	13	2472	17.65	18.00	1.084	94.7	1.056	-0.08	0.029	0.033
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	7	1	2412	17.55	18.00	1.109	94.7	1.056	0.06	0.275	0.322
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	7	6	2437	17.45	18.00	1.135	94.7	1.056	-0.05	0.485	0.581
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	7	11	2462	17.45	18.00	1.135	94.7	1.056	-0.14	0.295	0.354
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	7	12	2467	17.15	18.00	1.216	94.7	1.056	0.13	0.456	0.586
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3+4 (4)	8	13	2472	14.85	15.00	1.035	94.7	1.056	-0.08	0.122	0.133
				10mm	Ant 3+4 (3)	8	13	2472	14.89	15.00	1.026	94.7	1.056	-0.08	0.103	0.112
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	8	13	2472	14.85	15.00	1.035	94.7	1.056	-0.14	0.135	0.148
				10mm	Ant 3+4 (3)	8	13	2472	14.89	15.00	1.026	94.7	1.056	-0.14	0.181	0.196
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	8	13	2472	14.85	15.00	1.035	94.7	1.056	-0.07	0.240	0.262
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3+4 (4)	8	13	2472	14.89	15.00	1.026	94.7	1.056	0.03	0.044	0.048
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3+4 (4)	8	13	2472	14.85	15.00	1.035	94.7	1.056	-0.16	0.112	0.122
				10mm	Ant 3+4 (3)	8	13	2472	14.89	15.00	1.026	94.7	1.056	-0.16	0.063	0.069
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	8	1	2412	14.85	15.00	1.035	94.7	1.056	0.15	0.127	0.139
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	8	6	2437	14.75	15.00	1.059	94.7	1.056	0.19	0.225	0.251
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	8	11	2462	14.75	15.00	1.059	94.7	1.056	-0.09	0.137	0.153
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3+4 (3)	8	12	2467	14.75	15.00	1.059	94.7	1.056	0.06	0.211	0.236



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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)
58	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3+7(7)	7	46	5230	15.50	17.50	1.585	96.8	1.033	0.03	0.041	0.066
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	7	46	5230	15.50	17.50	1.585	96.8	1.033	0.02	0.264	0.432
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3+7(3)	7	46	5230	15.50	17.50	1.585	96.8	1.033	-0.15	0.105	0.172
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3+7(7)	7	46	5230	15.50	17.50	1.585	96.8	1.033	0.09	0.058	0.094
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3+7(7)	7	46	5230	15.50	17.50	1.585	96.8	1.033	0.12	0.119	0.194
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	7	38	5190	15.50	17.50	1.585	96.8	1.033	0.12	0.119	0.194
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3+7(7)	8/9	46	5230	15.25	17.00	1.496	96.8	1.033	0.03	0.038	0.059
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	8/9	46	5230	15.25	17.00	1.496	96.8	1.033	0.02	0.249	0.385
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 3+7(3)	8/9	46	5230	15.50	17.00	1.413	96.8	1.033	-0.15	0.105	0.153
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 3+7(7)	8/9	46	5230	15.25	17.00	1.496	96.8	1.033	0.09	0.054	0.083
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 3+7(7)	8/9	46	5230	15.25	17.00	1.496	96.8	1.033	0.12	0.112	0.173
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	8/9	38	5190	15.25	17.00	1.496	96.8	1.033	0.12	0.112	0.173
59	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	0.01	0.062	0.103
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	0.08	0.327	0.541
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3+7(3)	7	155	5775	14.90	16.50	1.445	88.1	1.135	0.05	0.194	0.318
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	-0.13	0.099	0.164
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	0.05	0.168	0.278
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	8/9	155	5775	14.86	15.50	1.159	88.1	1.135	0.01	0.062	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	8/9	155	5775	14.86	15.50	1.159	88.1	1.135	0.08	0.327	0.430
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 3+7(3)	8/9	155	5775	14.90	15.50	1.148	88.1	1.135	0.05	0.194	0.253
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 3+7(7)	8/9	155	5775	14.86	15.50	1.159	88.1	1.135	-0.13	0.099	0.130
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 3+7(7)	8/9	155	5775	14.86	15.50	1.159	88.1	1.135	0.05	0.168	0.221



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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	78	2480	19.40	21.00	1.445	76.83	1.084	-0.06	0.005	0.008
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	78	2480	19.40	21.00	1.446	76.83	1.084	-0.01	0.111	0.174
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	39	2441	19.05	21.00	1.567	76.83	1.084	-0.1	0.135	0.229
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	00	2402	19.06	21.00	1.564	76.83	1.084	0.07	0.126	0.214
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	3	78	2480	19.40	21.00	1.446	76.83	1.084	0.03	0.038	0.060
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	3	78	2480	19.40	21.00	1.446	76.83	1.084	0.05	0.001	0.002
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	78	2480	19.40	21.00	1.446	76.83	1.084	-0.15	0.1	0.157
	Bluetooth	1Mbps	Front	10mm	Ant 3	3	39	2441	19.25	21.00	1.497	76.83	1.084	0.02	0.067	0.109
	Bluetooth	1Mbps	Back	10mm	Ant 3	3	39	2441	19.25	21.00	1.497	76.83	1.084	-0.04	0.123	0.200
60	Bluetooth	1Mbps	Left Side	10mm	Ant 3	3	39	2441	19.25	21.00	1.497	76.83	1.084	-0.19	0.203	0.329
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	3	39	2441	19.25	21.00	1.497	76.83	1.084	-0.11	0.001	0.002
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	3	39	2441	19.25	21.00	1.497	76.83	1.084	0.06	0.001	0.002
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	3	00	2402	18.59	20.50	1.553	76.83	1.084	0.09	0.166	0.279
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	3	78	2480	18.71	20.50	1.511	76.83	1.084	-0.13	0.132	0.216
	Bluetooth	1Mbps	Front	10mm	Ant 3+4 (4)	3	39	2441	17.19	18.00	1.205	76.83	1.084	0.09	0.033	0.043
				10mm	Ant 3+4 (3)	3	39	2441	17.15	18.00	1.217	76.83	1.084	0.09	0.082	0.108
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	3	39	2441	17.19	18.00	1.205	76.83	1.084	0.11	0.048	0.063
				10mm	Ant 3+4 (3)	3	39	2441	17.15	18.00	1.217	76.83	1.084	0.11	0.099	0.131
	Bluetooth	1Mbps	Left Side	10mm	Ant 3+4 (4)	3	39	2441	17.19	18.00	1.205	76.83	1.084	0.19	0.006	0.008
				10mm	Ant 3+4 (3)	3	39	2441	17.15	18.00	1.217	76.83	1.084	0.19	0.097	0.128
	Bluetooth	1Mbps	Right Side	10mm	Ant 3+4 (4)	3	39	2441	17.19	18.00	1.205	76.83	1.084	0.05	0.001	0.001
				10mm	Ant 3+4 (3)	3	39	2441	17.15	18.00	1.217	76.83	1.084	0.05	0.023	0.030
	Bluetooth	1Mbps	Top Side	10mm	Ant 3+4 (4)	3	39	2441	17.19	18.00	1.205	76.83	1.084	-0.07	0.015	0.020
				10mm	Ant 3+4 (3)	3	39	2441	17.15	18.00	1.217	76.83	1.084	-0.07	0.067	0.088
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	3	00	2402	16.99	18.00	1.262	76.83	1.084	-0.17	0.041	0.056
				10mm	Ant 3+4 (3)	3	00	2402	16.80	18.00	1.319	76.83	1.084	-0.17	0.085	0.122
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	3	78	2480	17.46	18.00	1.133	76.83	1.084	0.02	0.04	0.049
				10mm	Ant 3+4 (3)	3	78	2480	16.74	18.00	1.337	76.83	1.084	0.02	0.087	0.126
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	78	2480	19.40	19.50	1.023	76.83	1.084	-0.06	0.005	0.006
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	78	2480	19.40	19.50	1.024	76.83	1.084	-0.01	0.111	0.123
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	39	2441	19.05	19.50	1.110	76.83	1.084	-0.1	0.135	0.162
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	00	2402	19.06	19.50	1.107	76.83	1.084	0.07	0.126	0.151
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	4	78	2480	19.40	19.50	1.024	76.83	1.084	0.03	0.038	0.042
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	4	78	2480	19.40	19.50	1.024	76.83	1.084	0.05	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	78	2480	19.40	19.50	1.024	76.83	1.084	-0.15	0.1	0.111
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	0.02	0.067	0.077
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	-0.04	0.123	0.141
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	-0.19	0.203	0.233
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	-0.11	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	0.06	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	00	2402	18.59	19.50	1.234	76.83	1.084	0.09	0.166	0.222
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	78	2480	18.71	19.50	1.200	76.83	1.084	-0.13	0.132	0.172
	Bluetooth	1Mbps	Front	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	0.09	0.033	0.043
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	0.09	0.082	0.108
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	0.11	0.048	0.063
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	0.11	0.099	0.131
	Bluetooth	1Mbps	Left Side	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	0.19	0.006	0.008
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	0.19	0.097	0.128
	Bluetooth	1Mbps	Right Side	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	0.05	0.001	0.001
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	0.05	0.023	0.030
	Bluetooth	1Mbps	Top Side	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	-0.07	0.015	0.020
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	-0.07	0.067	0.088
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	4	00	2402	16.99	18.00	1.262	76.83	1.084	-0.17	0.041	0.056
				10mm	Ant 3+4 (3)	4	00	2402	16.80	18.00	1.319	76.83	1.084	-0.17	0.085	0.122
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	4	78	2480	17.46	18.00	1.133	76.83	1.084	0.02	0.04	0.049
				10mm	Ant 3+4 (3)	4	78	2480	16.74	18.00	1.337	76.83	1.084	0.02	0.087	0.126





**15.3 Body Worn Accessory SAR**

**<GSM SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Index 5/6	251	848.8	28.80	30.50	1.479	-0.06	0.102	0.151
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5/6	251	848.8	28.80	30.50	1.479	-0.17	0.256	0.379
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5/6	128	824.2	28.60	30.50	1.549	-0.14	0.319	0.494
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5/6	189	836.4	28.78	30.50	1.486	0.02	0.210	0.312
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	Index 5/6	251	848.8	27.85	29.50	1.462	0.04	0.160	0.234
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5/6	251	848.8	27.85	29.50	1.462	-0.02	0.273	0.399
61	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5/6	128	824.2	27.68	29.50	1.521	-0.08	0.330	0.502
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5/6	189	836.4	27.61	29.50	1.545	-0.07	0.210	0.325
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 5/6	810	1909.8	25.07	26.30	1.327	0.05	0.308	0.409
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 5/6	810	1909.8	25.07	26.30	1.327	-0.05	0.457	0.607
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 5/6	512	1850.2	24.99	26.30	1.352	-0.12	0.353	0.477
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 5/6	661	1880	24.98	26.30	1.355	-0.11	0.326	0.442
	GSM1900_Ant 0	GPRS (3 Tx slots)	Front	10mm	Index 5/6	661	1880	26.53	27.50	1.250	0.08	0.312	0.390
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	10mm	Index 5/6	661	1880	26.53	27.50	1.250	0.17	0.339	0.424
	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	10mm	Index 5/6	512	1850.2	26.09	27.50	1.384	0.03	0.329	0.455
62	GSM1900_Ant 0	GPRS (3 Tx slots)	Back	10mm	Index 5/6	810	1909.8	26.39	27.50	1.291	-0.03	0.533	0.688

**<WCDMA SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	Index 5/6	9262	1852.4	23.29	24.60	1.352	-0.02	0.435	0.588
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5/6	9262	1852.4	23.29	24.60	1.352	0	0.536	0.725
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5/6	9400	1880	23.14	24.60	1.400	0.08	0.582	0.815
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5/6	9538	1907.6	23.23	24.60	1.371	0.01	0.655	0.898
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	9262	1852.4	22.53	23.10	1.140	0.15	0.348	0.397
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	9262	1852.4	22.53	23.10	1.140	-0.1	0.520	0.593
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	9400	1880	22.34	23.10	1.191	-0.1	0.629	0.749
63	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	9538	1907.6	22.41	23.10	1.172	-0.1	0.770	0.903
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Index 5	1312	1712.4	22.91	24.20	1.346	-0.01	0.467	0.629
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	1312	1712.4	22.91	24.20	1.346	0.07	0.579	0.779
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	1413	1732.6	22.86	24.20	1.361	0.16	0.604	0.822
64	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	1513	1752.6	22.86	24.20	1.361	-0.05	0.714	0.972
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Index 6	1312	1712.4	22.91	23.80	1.227	-0.01	0.467	0.573
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	1312	1712.4	22.91	23.80	1.227	0.07	0.579	0.711
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	1413	1732.6	22.86	23.80	1.242	0.16	0.604	0.750
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	1513	1752.6	22.86	23.80	1.242	-0.05	0.714	0.887
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	1312	1712.4	23.09	24.50	1.384	0.02	0.231	0.320
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	1312	1712.4	23.09	24.50	1.384	0.01	0.314	0.434
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	1413	1732.6	23.06	24.50	1.393	-0.08	0.435	0.606
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	1513	1752.6	23.05	24.50	1.396	-0.08	0.404	0.564
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	4182	836.4	23.99	25.40	1.384	0.09	0.189	0.261
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	4182	836.4	23.99	25.40	1.384	0.13	0.230	0.318
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	4132	826.4	23.97	25.40	1.390	-0.03	0.243	0.338
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	4233	846.6	23.98	25.40	1.387	-0.05	0.262	0.363
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Index 5/6	4132	826.4	23.74	25.20	1.400	-0.15	0.132	0.185
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5/6	4132	826.4	23.74	25.20	1.400	0.09	0.235	0.329
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5/6	4182	836.4	23.75	25.20	1.396	-0.07	0.239	0.334
65	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5/6	4233	846.6	23.61	25.20	1.442	-0.03	0.254	0.366

**<FDD LTE SAR>**

Plot	Band	BW	Modulation	RB	RB	Test	Gap	Output	Ch.	Freq.	Average	Tune-Up	Tune-up	Power	Measured	Reported
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# FCC SAR TEST REPORT

Report No. : FA121931-04C

No.		(MHz)		Size	offset	Position	(mm)	Power Index		(MHz)	Power (dBm)	Limit (dBm)	Scaling Factor	Drift (dB)	1g SAR (W/kg)	1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5	21350	2560	21.10	22.30	1.318	-0.12	0.596	0.786
	LTE Band 7_Ant 2	20M	QPSK	50	24	Front	10mm	Index 5	21350	2560	20.97	22.30	1.358	-0.03	0.601	0.816
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	21350	2560	21.10	22.30	1.318	-0.09	0.856	1.128
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	20850	2510	20.91	22.30	1.377	0.16	0.725	0.998
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	21100	2535	21.02	22.30	1.343	-0.03	0.796	1.069
66	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	21350	2560	20.97	22.30	1.358	-0.03	0.876	1.190
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	20850	2510	20.73	22.30	1.435	-0.14	0.735	1.055
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	21100	2535	20.86	22.30	1.393	-0.03	0.770	1.073
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5	21350	2560	21.08	22.30	1.324	-0.07	0.806	1.067
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	20850+21048	2510	20.53	22.30	1.503	0.05	0.755	1.135
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	Index 6	21350	2560	21.10	21.10	1.000	-0.12	0.596	0.596
	LTE Band 7_Ant 2	20M	QPSK	50	24	Front	10mm	Index 6	21350	2560	20.97	21.10	1.030	-0.03	0.601	0.619
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	21350	2560	21.10	21.10	1.000	-0.09	0.856	0.856
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	20850	2510	20.91	21.10	1.045	0.16	0.725	0.757
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	21100	2535	21.02	21.10	1.019	-0.03	0.796	0.811
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	21350	2560	20.97	21.10	1.030	-0.03	0.876	0.903
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	20850	2510	20.73	21.10	1.089	-0.14	0.735	0.800
	LTE Band 7_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	21100	2535	20.86	21.10	1.057	-0.03	0.770	0.814
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	Index 6	21350	2560	21.08	21.10	1.005	-0.07	0.806	0.810
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	20850+21048	2510	19.97	21.10	1.297	0.02	0.682	0.885
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	Index 5/6	20850	2510	21.76	23.20	1.393	-0.18	0.290	0.404
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	Index 5/6	20850	2510	21.64	23.10	1.400	0.16	0.336	0.470
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	20850	2510	21.76	23.20	1.393	0.16	0.327	0.456
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	Index 5/6	20850	2510	21.64	23.10	1.400	0.02	0.355	0.497
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	Index 5/6	21100	2535	21.50	23.10	1.445	-0.07	0.388	0.561
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	Index 5/6	21350	2560	21.58	23.10	1.419	-0.12	0.479	0.680
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	20850+21048	2510	21.73	23.20	1.403	0.09	0.468	0.657
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	23095	707.5	24.31	25.50	1.315	-0.04	0.151	0.199
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	Index 5/6	23095	707.5	23.36	24.50	1.300	0.1	0.121	0.157
67	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	23095	707.5	24.31	25.50	1.315	-0.19	0.238	0.313
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	Index 5/6	23095	707.5	23.36	24.50	1.300	0.13	0.161	0.209
	LTE Band 12_Ant 1	10M	QPSK	1	25	Front	10mm	Index 5/6	23095	707.5	23.87	25.20	1.358	0.18	0.121	0.164
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	Index 5/6	23095	707.5	22.89	24.20	1.352	0	0.096	0.130
	LTE Band 12_Ant 1	10M	QPSK	1	25	Back	10mm	Index 5/6	23095	707.5	23.87	25.20	1.358	-0.06	0.208	0.283
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	Index 5/6	23095	707.5	22.89	24.20	1.352	-0.12	0.165	0.223
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	23230	782	24.47	25.50	1.268	-0.12	0.251	0.318
	LTE Band 13_Ant 0	10M	QPSK	25	12	Front	10mm	Index 5/6	23230	782	23.55	24.50	1.245	0.11	0.204	0.254
68	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	23230	782	24.47	25.50	1.268	0.01	0.269	0.341
	LTE Band 13_Ant 0	10M	QPSK	25	12	Back	10mm	Index 5/6	23230	782	23.55	24.50	1.245	-0.03	0.206	0.256
	LTE Band 13_Ant 1	10M	QPSK	1	25	Front	10mm	Index 5/6	23230	782	23.94	25.20	1.337	0.03	0.123	0.164
	LTE Band 13_Ant 1	10M	QPSK	25	25	Front	10mm	Index 5/6	23230	782	23.01	24.20	1.315	-0.02	0.100	0.132
	LTE Band 13_Ant 1	10M	QPSK	1	25	Back	10mm	Index 5/6	23230	782	23.94	25.20	1.337	-0.04	0.228	0.305
	LTE Band 13_Ant 1	10M	QPSK	25	25	Back	10mm	Index 5/6	23230	782	23.01	24.20	1.315	-0.1	0.184	0.242
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	23330	793	24.30	25.50	1.318	-0.14	0.194	0.256
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	Index 5/6	23330	793	23.34	24.50	1.306	-0.14	0.155	0.202
69	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	23330	793	24.30	25.50	1.318	-0.15	0.249	0.328
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	Index 5/6	23330	793	23.34	24.50	1.306	0.07	0.192	0.251
	LTE Band 14_Ant 1	10M	QPSK	1	25	Front	10mm	Index 5/6	23330	793	23.84	25.20	1.368	0.07	0.110	0.150
	LTE Band 14_Ant 1	10M	QPSK	25	25	Front	10mm	Index 5/6	23330	793	22.92	24.20	1.343	0.05	0.089	0.120
	LTE Band 14_Ant 1	10M	QPSK	1	25	Back	10mm	Index 5/6	23330	793	23.84	25.20	1.368	-0.01	0.209	0.286
	LTE Band 14_Ant 1	10M	QPSK	25	25	Back	10mm	Index 5/6	23330	793	22.92	24.20	1.343	-0.16	0.169	0.227

Plot	Band	BW	Modulation	RB	RB	Test	Gap	Output Power	Ch.	Freq.	Average	Tune-Up	Tune-up	Power	Measured	Reported
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**FCC SAR TEST REPORT**

**Report No. : FA121931-04C**

No.	(MHz)	Size	offset	Position	(mm)	Index	(MHz)	Power (dBm)	Limit (dBm)	Scaling Factor	Drift (dB)	1g SAR (W/kg)	1g SAR (W/kg)			
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5/6	26590	1905	22.57	23.20	1.156	0.13	0.473	0.547
	LTE Band 25_Ant 2	20M	QPSK	50	50	Front	10mm	Index 5/6	26590	1905	22.04	23.20	1.306	-0.07	0.491	0.641
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	26590	1905	22.57	23.20	1.156	-0.12	0.554	0.640
	LTE Band 25_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5/6	26590	1905	22.04	23.20	1.306	-0.16	0.571	0.746
	LTE Band 25_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5/6	26140	1860	22.06	23.20	1.300	-0.17	0.504	0.655
	LTE Band 25_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5/6	26340	1880	22.09	23.20	1.291	-0.19	0.556	0.718
	LTE Band 25_Ant 0	20M	QPSK	1	49	Front	10mm	Index 5	26140	1860	23.23	24.60	1.371	0.06	0.312	0.428
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	Index 5	26140	1860	22.31	23.60	1.346	-0.13	0.200	0.269
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5	26140	1860	23.23	24.60	1.371	-0.16	0.736	1.009
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5	26340	1880	23.12	24.60	1.406	-0.04	0.723	1.017
70	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5	26590	1905	23.09	24.60	1.416	0.01	0.803	1.137
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	Index 5	26140	1860	22.31	23.60	1.346	0	0.527	0.709
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	Index 5	26140	1860	22.27	23.60	1.358	-0.13	0.534	0.725
	LTE Band 25_Ant 0	20M	QPSK	1	49	Front	10mm	Index 6	26140	1860	23.23	23.60	1.089	0.06	0.312	0.340
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	Index 6	26140	1860	22.31	23.60	1.346	-0.13	0.200	0.269
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 6	26140	1860	23.23	23.60	1.089	-0.16	0.736	0.801
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 6	26340	1880	23.12	23.60	1.117	-0.04	0.723	0.807
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 6	26590	1905	23.09	23.60	1.125	0.01	0.803	0.903
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	Index 6	26140	1860	22.31	23.60	1.346	0	0.527	0.709
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	Index 6	26140	1860	22.27	23.60	1.358	-0.13	0.534	0.725
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	Index 5/6	26865	831.5	24.20	25.50	1.349	-0.02	0.222	0.299
	LTE Band 26_Ant 0	15M	QPSK	36	20	Front	10mm	Index 5/6	26865	831.5	23.31	24.50	1.315	0.09	0.180	0.237
71	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	Index 5/6	26865	831.5	24.20	25.50	1.349	-0.03	0.278	0.375
	LTE Band 26_Ant 0	15M	QPSK	36	20	Back	10mm	Index 5/6	26865	831.5	23.31	24.50	1.315	-0.12	0.192	0.253
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	20600+20501	844	24.24	25.50	1.337	0.06	0.265	0.354
	LTE Band 26_Ant 1	15M	QPSK	1	37	Front	10mm	Index 5/6	26865	831.5	23.66	25.00	1.361	-0.17	0.143	0.195
	LTE Band 26_Ant 1	15M	QPSK	36	20	Front	10mm	Index 5/6	26865	831.5	22.75	24.00	1.334	0.14	0.116	0.155
	LTE Band 26_Ant 1	15M	QPSK	1	37	Back	10mm	Index 5/6	26865	831.5	23.66	25.00	1.361	0.08	0.263	0.358
	LTE Band 26_Ant 1	15M	QPSK	36	20	Back	10mm	Index 5/6	26865	831.5	22.75	24.00	1.334	-0.17	0.212	0.283
	LTE Band 5B_Ant 1	10M	QPSK	1	49	Back	10mm	Index 5/6	20450+20549	829	23.45	25.00	1.429	-0.01	0.244	0.349
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	Index 5	27710	2310	21.60	23.00	1.380	-0.01	0.564	0.779
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	Index 5	27710	2310	21.32	23.00	1.472	-0.07	0.490	0.721
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	Index 5	27710	2310	21.60	23.00	1.380	-0.06	0.778	1.074
72	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	Index 5	27710	2310	21.32	23.00	1.472	0.02	0.806	1.187
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	Index 5	27710	2310	21.39	23.00	1.449	-0.03	0.800	1.159
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	Index 6	27710	2310	21.60	21.80	1.047	-0.01	0.564	0.591
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	Index 6	27710	2310	21.32	21.80	1.117	-0.07	0.490	0.547
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	Index 6	27710	2310	21.60	21.80	1.047	-0.06	0.778	0.815
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	Index 6	27710	2310	21.32	21.80	1.117	0.02	0.806	0.900
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	Index 6	27710	2310	21.39	21.80	1.099	-0.03	0.800	0.879
	LTE Band 30_Ant 0	10M	QPSK	1	25	Front	10mm	Index 5/6	27710	2310	22.62	24.40	1.507	0.15	0.226	0.340
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	Index 5/6	27710	2310	21.69	23.40	1.483	-0.04	0.182	0.270
	LTE Band 30_Ant 0	10M	QPSK	1	25	Back	10mm	Index 5/6	27710	2310	22.62	24.40	1.507	0.04	0.351	0.529
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	Index 5/6	27710	2310	21.69	23.40	1.483	-0.09	0.276	0.409



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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	49	Front	10mm	Index 5/6	132572	1770	22.52	23.80	1.343	-0.12	0.412	0.553
	LTE Band 66_Ant 2	20M	QPSK	50	50	Front	10mm	Index 5/6	132572	1770	22.24	23.80	1.432	0.16	0.451	0.646
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 5/6	132572	1770	22.52	23.80	1.343	-0.14	0.470	0.631
	LTE Band 66_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5/6	132572	1770	22.24	23.80	1.432	-0.03	0.509	0.729
	LTE Band 66_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5/6	132072	1720	22.17	23.80	1.455	-0.12	0.564	0.821
	LTE Band 66_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5/6	132322	1745	22.22	23.80	1.439	-0.18	0.560	0.806
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5/6	132572	1770	22.19	23.80	1.449	-0.14	0.554	0.803
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Back	10mm	Index 5/6	132047+132140	1717.5	22.29	23.80	1.416	-0.02	0.545	0.772
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	132572+132374	1770	22.07	23.80	1.489	-0.13	0.549	0.818
	LTE Band 66_Ant 0	20M	QPSK	1	49	Front	10mm	Index 5/6	132072	1720	23.11	24.40	1.346	-0.03	0.234	0.315
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5/6	132072	1720	22.22	23.40	1.312	-0.15	0.190	0.249
	LTE Band 66_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	132072	1720	23.11	24.40	1.346	0	0.395	0.532
	LTE Band 66_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	132322	1745	22.98	24.40	1.387	-0.1	0.631	0.875
73	LTE Band 66_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	132572	1770	22.86	24.40	1.426	-0.04	0.625	0.891
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5/6	132072	1720	22.22	23.40	1.312	-0.11	0.321	0.421
	LTE Band 66_Ant 0	20M	QPSK	100	0	Back	10mm	Index 5/6	132072	1720	22.16	23.40	1.330	0.04	0.314	0.418
	LTE Band 66B_Ant 0	15M	QPSK	1	74	Back	10mm	Index 5/6	132047+132140	1717.5	22.52	24.40	1.542	0.09	0.534	0.823
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	132322+132124	1745	23.20	24.40	1.318	0.03	0.628	0.828
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	Index 5/6	133322	683	24.19	25.50	1.352	0.13	0.181	0.245
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5/6	133322	683	23.32	24.50	1.312	0.04	0.148	0.194
74	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	133322	683	24.19	25.50	1.352	-0.1	0.240	0.324
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5/6	133322	683	23.32	24.50	1.312	0.03	0.170	0.223
	LTE Band 71_Ant 1	20M	QPSK	1	49	Front	10mm	Index 5/6	133322	683	23.66	25.00	1.361	0.17	0.095	0.129
	LTE Band 71_Ant 1	20M	QPSK	50	50	Front	10mm	Index 5/6	133322	683	22.77	24.00	1.327	0.16	0.076	0.101
	LTE Band 71_Ant 1	20M	QPSK	1	49	Back	10mm	Index 5/6	133322	683	23.66	25.00	1.361	-0.09	0.175	0.238
	LTE Band 71_Ant 1	20M	QPSK	50	50	Back	10mm	Index 5/6	133322	683	22.77	24.00	1.327	0.14	0.142	0.188



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	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)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5	39750	2506	23.74	25.50	1.500	62.9	1.006	-0.11	0.481	0.726
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	Index 5	39750	2506	23.30	24.50	1.318	62.9	1.006	-0.04	0.436	0.578
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	39750	2506	23.74	25.50	1.500	62.9	1.006	-0.03	0.772	1.165
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	40185	2549.5	23.58	25.50	1.556	62.9	1.006	0.01	0.671	1.050
75	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	40620	2593	23.59	25.50	1.552	62.9	1.006	0.01	0.758	1.184
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	41055	2636.5	23.58	25.50	1.556	62.9	1.006	-0.04	0.559	0.875
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	41490	2680	23.51	25.50	1.581	62.9	1.006	-0.08	0.742	1.180
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 5	39750	2506	23.30	24.50	1.318	62.9	1.006	-0.17	0.637	0.845
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 5	40185	2549.5	22.98	24.50	1.419	62.9	1.006	-0.06	0.559	0.798
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 5	40620	2593	23.20	24.50	1.349	62.9	1.006	0.1	0.632	0.857
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 5	41055	2636.5	23.05	24.50	1.396	62.9	1.006	0.08	0.466	0.654
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 5	41490	2680	23.04	24.50	1.400	62.9	1.006	0.17	0.618	0.871
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5	39750	2506	23.32	24.50	1.312	62.9	1.006	-0.16	0.629	0.830
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	40620	2593	25.80	27.10	1.349	42.9	1.009	-0.05	0.822	1.119
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	39750+39948	2506	22.88	23.00	1.028	62.9	1.006	0.03	0.742	0.767
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Index 6	39750	2506	23.74	24.30	1.138	62.9	1.006	-0.11	0.481	0.550
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	Index 6	39750	2506	23.30	24.30	1.259	62.9	1.006	-0.04	0.436	0.552
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	39750	2506	23.74	24.30	1.138	62.9	1.006	-0.03	0.772	0.884
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	40185	2549.5	23.58	24.30	1.180	62.9	1.006	0.01	0.671	0.797
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	40620	2593	23.59	24.30	1.178	62.9	1.006	0.01	0.758	0.898
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	41055	2636.5	23.58	24.30	1.180	62.9	1.006	-0.04	0.559	0.664
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	41490	2680	23.51	24.30	1.199	62.9	1.006	-0.08	0.742	0.895
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 6	39750	2506	23.30	24.30	1.259	62.9	1.006	-0.17	0.637	0.807
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 6	40185	2549.5	22.98	24.30	1.355	62.9	1.006	-0.06	0.559	0.762
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 6	40620	2593	23.20	24.30	1.288	62.9	1.006	0.1	0.632	0.819
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 6	41055	2636.5	23.05	24.30	1.334	62.9	1.006	0.08	0.466	0.625
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	Index 6	41490	2680	23.04	24.30	1.337	62.9	1.006	0.17	0.618	0.831
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	Index 6	39750	2506	23.32	24.30	1.253	62.9	1.006	-0.16	0.629	0.793
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	40620	2593	25.80	25.90	1.023	42.9	1.009	-0.05	0.822	0.849
	LTE Band 41C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	39750+39948	2506	22.88	23.00	1.028	62.9	1.006	0.03	0.742	0.767
	LTE Band 41_Ant 0	20M	QPSK	1	49	Front	10mm	Index 5/6	39750	2506	22.69	24.50	1.517	62.9	1.006	-0.19	0.208	0.317
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5/6	39750	2506	21.79	23.50	1.483	62.9	1.006	-0.02	0.176	0.262
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	39750	2506	22.69	24.50	1.517	62.9	1.006	-0.01	0.281	0.429
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	40185	2549.5	22.60	24.50	1.549	62.9	1.006	0.08	0.243	0.379
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	40620	2593	22.55	24.50	1.567	62.9	1.006	-0.07	0.271	0.427
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	41055	2636.5	22.52	24.50	1.578	62.9	1.006	0.12	0.203	0.321
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	41490	2680	22.52	24.50	1.578	62.9	1.006	-0.01	0.269	0.427
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5/6	39750	2506	21.79	23.50	1.483	62.9	1.006	-0.09	0.238	0.355
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	39750	2506	24.71	26.60	1.545	62.9	1.006	-0.06	0.276	0.429
	LTE Band 41C_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	39750+39948	2506	21.54	23.00	1.400	62.9	1.006	0.05	0.183	0.258



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	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)
	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	Index 5	56640	3690	23.89	25.50	1.449	62.9	1.006	-0.04	0.319	0.465
	LTE Band 48_Ant 6	20M	QPSK	50	0	Front	10mm	Index 5	56150	3641	23.45	24.50	1.274	62.9	1.006	0.04	0.283	0.363
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5	56640	3690	23.89	25.50	1.449	62.9	1.006	0	0.640	0.933
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5	55340	3560	23.63	25.50	1.538	62.9	1.006	-0.06	0.561	0.868
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5	55830	3609	23.73	25.50	1.503	62.9	1.006	0.02	0.583	0.882
76	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5	56150	3641	23.81	25.50	1.476	62.9	1.006	0.12	0.643	0.955
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 5	56150	3641	23.45	24.50	1.274	62.9	1.006	-0.05	0.593	0.760
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 5	55340	3560	23.29	24.50	1.321	62.9	1.006	0.04	0.576	0.766
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 5	55830	3609	23.42	24.50	1.282	62.9	1.006	0.01	0.603	0.778
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 5	56640	3690	23.39	24.50	1.291	62.9	1.006	0.08	0.618	0.803
	LTE Band 48_Ant 6	20M	QPSK	100	0	Back	10mm	Index 5	56640	3690	23.41	24.50	1.285	62.9	1.006	-0.06	0.601	0.777
	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	Index 6	56640	3690	23.89	25.20	1.352	62.9	1.006	-0.04	0.319	0.434
	LTE Band 48_Ant 6	20M	QPSK	50	0	Front	10mm	Index 6	56150	3641	23.45	24.50	1.274	62.9	1.006	0.04	0.283	0.363
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 6	56640	3690	23.89	25.20	1.352	62.9	1.006	0	0.640	0.871
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 6	55340	3560	23.63	25.20	1.435	62.9	1.006	-0.06	0.561	0.810
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 6	55830	3609	23.73	25.20	1.403	62.9	1.006	0.02	0.583	0.823
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 6	56150	3641	23.81	25.20	1.377	62.9	1.006	0.12	0.643	0.891
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 6	56150	3641	23.45	24.50	1.274	62.9	1.006	-0.05	0.593	0.760
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 6	55340	3560	23.29	24.50	1.321	62.9	1.006	0.04	0.576	0.766
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 6	55830	3609	23.42	24.50	1.282	62.9	1.006	0.01	0.603	0.778
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 6	56640	3690	23.39	24.50	1.291	62.9	1.006	0.08	0.618	0.803
	LTE Band 48_Ant 6	20M	QPSK	100	0	Back	10mm	Index 6	56640	3690	23.41	24.50	1.285	62.9	1.006	-0.06	0.601	0.777
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5/6	56640	3690	22.06	22.90	1.213	62.9	1.006	0.03	0.112	0.137
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5/6	55340	3560	21.49	22.90	1.384	62.9	1.006	0.02	0.114	0.159
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5/6	55830	3609	21.83	22.90	1.279	62.9	1.006	0.16	0.110	0.142
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5/6	56150	3641	21.96	22.90	1.242	62.9	1.006	0	0.114	0.142
	LTE Band 48_Ant 2	20M	QPSK	50	0	Front	10mm	Index 5/6	56640	3690	21.09	21.90	1.205	62.9	1.006	0.05	0.086	0.104
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	56640	3690	22.06	22.90	1.213	62.9	1.006	-0.02	0.108	0.132
	LTE Band 48_Ant 2	20M	QPSK	50	0	Back	10mm	Index 5/6	56640	3690	21.09	21.90	1.205	62.9	1.006	-0.08	0.091	0.110



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Cap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5/6	167300	836.5	24.64	25.50	1.219	0.08	0.175	0.213
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5/6	167300	836.5	24.50	25.50	1.259	0.06	0.182	0.229
	FR1 n5_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5/6	167300	836.5	24.64	25.50	1.219	-0.04	0.212	0.258
77	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5/6	167300	836.5	24.50	25.50	1.259	-0.18	0.321	0.404
	FR1 n5_Ant 1	20M	BPSK	1	53	Front	10mm	Index 5/6	167300	836.5	24.09	25.10	1.262	-0.1	0.152	0.192
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	Index 5/6	167300	836.5	23.96	25.10	1.300	-0.17	0.151	0.196
	FR1 n5_Ant 1	20M	BPSK	1	53	Back	10mm	Index 5/6	167300	836.5	24.09	25.10	1.262	-0.12	0.303	0.382
	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	Index 5/6	167300	836.5	23.96	25.10	1.300	-0.04	0.258	0.335
	FR1 n7_Ant 2	20M	BPSK	1	53	Front	10mm	Index 5	502000	2510	21.22	22.60	1.374	-0.18	0.471	0.647
	FR1 n7_Ant 2	20M	BPSK	50	28	Front	10mm	Index 5	502000	2510	21.16	22.60	1.393	0.08	0.459	0.639
	FR1 n7_Ant 2	20M	BPSK	1	53	Back	10mm	Index 5	502000	2510	21.22	22.60	1.374	0.02	0.637	0.876
78	FR1 n7_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5	502000	2510	21.16	22.60	1.393	-0.05	0.847	1.180
	FR1 n7_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5	507000	2535	21.12	22.60	1.406	-0.17	0.665	0.935
	FR1 n7_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5	512000	2560	21.16	22.60	1.393	0.18	0.631	0.879
	FR1 n7_Ant 2	20M	BPSK	100	0	Back	10mm	Index 5	502000	2510	21.14	22.60	1.400	0.09	0.804	1.125
	FR1 n7_Ant 2	20M	BPSK	1	53	Front	10mm	Index 6	502000	2510	21.22	21.40	1.042	-0.18	0.471	0.491
	FR1 n7_Ant 2	20M	BPSK	50	28	Front	10mm	Index 6	502000	2510	21.16	21.40	1.057	0.08	0.459	0.485
	FR1 n7_Ant 2	20M	BPSK	1	53	Back	10mm	Index 6	502000	2510	21.22	21.40	1.042	0.02	0.637	0.664
	FR1 n7_Ant 2	20M	BPSK	50	28	Back	10mm	Index 6	502000	2510	21.16	21.40	1.057	-0.05	0.847	0.895
	FR1 n7_Ant 2	20M	BPSK	50	28	Back	10mm	Index 6	507000	2535	21.12	21.40	1.067	-0.17	0.665	0.709
	FR1 n7_Ant 2	20M	BPSK	50	28	Back	10mm	Index 6	512000	2560	21.16	21.40	1.057	0.18	0.631	0.667
	FR1 n7_Ant 2	20M	BPSK	100	0	Back	10mm	Index 6	502000	2510	21.14	21.40	1.062	0.09	0.804	0.854
	FR1 n7_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5/6	502000	2510	21.55	23.00	1.396	-0.05	0.178	0.249
	FR1 n7_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5/6	502000	2510	21.50	23.00	1.413	-0.03	0.168	0.237
	FR1 n7_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5/6	502000	2510	21.55	23.00	1.396	-0.18	0.378	0.528
	FR1 n7_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5/6	507000	2535	21.50	23.00	1.413	-0.02	0.221	0.312
	FR1 n7_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5/6	512000	2560	21.51	23.00	1.409	0.03	0.233	0.328
	FR1 n7_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5/6	502000	2510	21.50	23.00	1.413	-0.13	0.248	0.350
	FR1 n12_Ant 0	15M	BPSK	1	40	Front	10mm	Index 5/6	141500	707.5	24.57	25.50	1.239	0.01	0.186	0.230
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	Index 5/6	141500	707.5	24.57	25.50	1.239	0.01	0.179	0.221
	FR1 n12_Ant 0	15M	BPSK	1	40	Back	10mm	Index 5/6	141500	707.5	24.57	25.50	1.239	-0.14	0.201	0.249
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	Index 5/6	141500	707.5	24.57	25.50	1.239	0.06	0.200	0.248
	FR1 n12_Ant 1	15M	BPSK	1	40	Front	10mm	Index 5/6	141500	707.5	24.05	25.10	1.274	-0.01	0.109	0.139
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	Index 5/6	141500	707.5	24.11	25.10	1.256	-0.08	0.116	0.146
79	FR1 n12_Ant 1	15M	BPSK	1	40	Back	10mm	Index 5/6	141500	707.5	24.05	25.10	1.274	-0.07	0.228	0.290
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	Index 5/6	141500	707.5	24.11	25.10	1.256	-0.12	0.221	0.278



# FCC SAR TEST REPORT

Report No. : FA121931-04C

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 5/6	381000	1905	21.71	23.10	1.377	-0.07	0.500	0.689
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 5/6	381000	1905	21.90	23.10	1.318	0.16	0.513	0.676
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 5/6	381000	1905	21.71	23.10	1.377	0.09	0.510	0.702
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5/6	381000	1905	21.90	23.10	1.318	-0.15	0.544	0.717
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5/6	372000	1860	21.82	23.10	1.343	-0.14	0.515	0.692
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5/6	376500	1882.5	21.79	23.10	1.352	0.12	0.519	0.702
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5	376500	1882.5	23.30	24.50	1.318	-0.06	0.567	0.747
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5	376500	1882.5	23.17	24.50	1.358	0.12	0.415	0.564
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5	376500	1882.5	23.30	24.50	1.318	-0.09	0.777	1.024
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5	372000	1860	23.24	24.50	1.337	0.18	0.749	1.001
80	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5	381000	1905	23.25	24.50	1.334	0	0.893	1.191
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5	376500	1882.5	23.17	24.50	1.358	-0.14	0.741	1.007
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	Index 5	376500	1882.5	22.64	24.50	1.535	-0.14	0.702	1.077
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 6	376500	1882.5	23.30	23.30	1.000	-0.06	0.567	0.567
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 6	376500	1882.5	23.17	23.30	1.030	0.12	0.415	0.428
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 6	376500	1882.5	23.30	23.30	1.000	-0.09	0.777	0.777
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 6	372000	1860	23.24	23.30	1.014	0.18	0.749	0.759
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 6	381000	1905	23.25	23.30	1.012	0	0.893	0.903
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 6	376500	1882.5	23.17	23.30	1.030	-0.14	0.741	0.764
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	Index 6	376500	1882.5	22.64	23.30	1.164	-0.14	0.702	0.817
	FR1 n30_Ant 2	10M	BPSK	1	26	Front	10mm	Index 5	462000	2310	22.17	23.40	1.327	0.15	0.575	0.763
	FR1 n30_Ant 2	10M	BPSK	25	0	Front	10mm	Index 5	462000	2310	22.18	23.40	1.324	0.14	0.563	0.746
81	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index 5	462000	2310	22.17	23.40	1.327	-0.08	0.892	1.184
	FR1 n30_Ant 2	10M	BPSK	25	0	Back	10mm	Index 5	462000	2310	22.18	23.40	1.324	-0.17	0.853	1.130
	FR1 n30_Ant 2	10M	BPSK	50	0	Back	10mm	Index 5	462000	2310	22.11	23.40	1.346	0.05	0.839	1.129
	FR1 n30_Ant 2	10M	BPSK	1	26	Front	10mm	Index 6	462000	2310	22.17	22.20	1.007	0.15	0.575	0.579
	FR1 n30_Ant 2	10M	BPSK	25	0	Front	10mm	Index 6	462000	2310	22.18	22.20	1.005	0.14	0.563	0.566
	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index 6	462000	2310	22.17	22.20	1.007	-0.08	0.892	0.898
	FR1 n30_Ant 2	10M	BPSK	25	0	Back	10mm	Index 6	462000	2310	22.18	22.20	1.005	-0.17	0.853	0.857
	FR1 n30_Ant 2	10M	BPSK	50	0	Back	10mm	Index 6	462000	2310	22.11	22.20	1.021	0.05	0.839	0.857
	FR1 n30_Ant 0	10M	BPSK	1	26	Front	10mm	Index 5/6	462000	2310	22.92	24.50	1.439	0.08	0.295	0.424
	FR1 n30_Ant 0	10M	BPSK	25	14	Front	10mm	Index 5/6	462000	2310	22.77	24.50	1.489	-0.06	0.307	0.457
	FR1 n30_Ant 0	10M	BPSK	1	26	Back	10mm	Index 5/6	462000	2310	22.92	24.50	1.439	0.02	0.340	0.489
	FR1 n30_Ant 0	10M	BPSK	25	14	Back	10mm	Index 5/6	462000	2310	22.77	24.50	1.489	-0.09	0.314	0.468
	FR1 n41_Ant 1	100M	BPSK	1	137	Front	10mm	Index 5	518598	2592.99	21.94	23.50	1.432	0.14	0.405	0.580
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Index 5	518598	2592.99	21.87	23.50	1.455	-0.08	0.396	0.576
	FR1 n41_Ant 1	100M	BPSK	1	137	Back	10mm	Index 5	518598	2592.99	21.94	23.50	1.432	-0.09	0.773	1.107
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Index 5	518598	2592.99	21.87	23.50	1.455	-0.07	0.751	1.093
	FR1 n41_Ant 1	100M	BPSK	270	0	Back	10mm	Index 5	518598	2592.99	21.86	23.50	1.459	0.12	0.739	1.078
82	FR1 n41_HPUE_Ant 1	100M	BPSK	1	137	Back	10mm	Index 5	518598	2592.99	25.02	26.50	1.406	-0.1	0.814	1.145
	FR1 n41_Ant 1	100M	BPSK	1	137	Front	10mm	Index 6	518598	2592.99	20.82	22.30	1.41	-0.16	0.335	0.471
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Index 6	518598	2592.99	20.88	22.30	1.39	0.05	0.330	0.458
	FR1 n41_Ant 1	100M	BPSK	1	137	Back	10mm	Index 6	518598	2592.99	20.82	22.30	1.41	-0.02	0.634	0.891
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Index 6	518598	2592.99	20.88	22.30	1.39	-0.17	0.621	0.861
	FR1 n41_Ant 1	100M	BPSK	270	0	Back	10mm	Index 6	518598	2592.99	20.72	22.30	1.44	0.04	0.616	0.886
	FR1 n41_HPUE_Ant 1	100M	BPSK	1	137	Back	10mm	Index 6	518598	2592.99	23.57	25.30	1.489	-0.07	0.511	0.761
	FR1 n41_Ant 5	100M	BPSK	1	137	Front	10mm	Index 5/6	518598	2592.99	21.50	23.00	1.413	-0.03	0.239	0.338
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	Index 5/6	518598	2592.99	21.43	23.00	1.435	-0.08	0.218	0.313
	FR1 n41_Ant 5	100M	BPSK	1	137	Back	10mm	Index 5/6	518598	2592.99	21.50	23.00	1.413	-0.09	0.451	0.637
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	Index 5/6	518598	2592.99	21.43	23.00	1.435	-0.17	0.401	0.576
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	137	Back	10mm	Index 5/6	518598	2592.99	24.46	26.00	1.426	-0.14	0.470	0.670





Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n66_Ant 2	40M	BPSK	1	108	Front	10mm	Index 5/6	349000	1745	21.78	23.40	1.452	0.07	0.402	0.584
	FR1 n66_Ant 2	40M	BPSK	108	108	Front	10mm	Index 5/6	349000	1745	21.63	23.40	1.503	0.18	0.388	0.583
	FR1 n66_Ant 2	40M	BPSK	1	108	Back	10mm	Index 5/6	349000	1745	21.78	23.40	1.452	-0.11	0.580	0.842
	FR1 n66_Ant 2	40M	BPSK	108	108	Back	10mm	Index 5/6	349000	1745	21.63	23.40	1.503	-0.04	0.572	0.860
	FR1 n66_Ant 0	40M	BPSK	1	108	Front	10mm	Index 5	349000	1745	22.99	24.20	1.321	0.14	0.473	0.625
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	Index 5	349000	1745	22.80	24.20	1.380	0.11	0.451	0.623
83	FR1 n66_Ant 0	40M	BPSK	1	108	Back	10mm	Index 5	349000	1745	22.99	24.20	1.321	-0.12	0.655	0.865
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	Index 5	349000	1745	22.80	24.20	1.380	-0.08	0.620	0.856
	FR1 n66_Ant 0	40M	BPSK	216	0	Back	10mm	Index 5	349000	1745	22.63	23.80	1.309	-0.15	0.621	0.813
	FR1 n66_Ant 0	40M	BPSK	1	108	Front	10mm	Index 6	349000	1745	22.99	24.10	1.291	0.14	0.473	0.611
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	Index 6	349000	1745	22.80	24.10	1.349	0.11	0.451	0.608
	FR1 n66_Ant 0	40M	BPSK	1	108	Back	10mm	Index 6	349000	1745	22.99	24.10	1.291	-0.12	0.655	0.846
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	Index 6	349000	1745	22.80	24.10	1.349	-0.08	0.620	0.836
	FR1 n66_Ant 0	40M	BPSK	216	0	Back	10mm	Index 6	349000	1745	22.63	23.70	1.279	-0.15	0.621	0.794
	FR1 n71_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5/6	136100	680.5	24.67	25.50	1.211	0.05	0.221	0.268
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5/6	136100	680.5	24.56	25.50	1.242	0.08	0.214	0.266
84	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5/6	136100	680.5	24.67	25.50	1.211	-0.11	0.238	0.288
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5/6	136100	680.5	24.56	25.50	1.242	0.01	0.227	0.282
	FR1 n71_Ant 1	20M	BPSK	1	53	Front	10mm	Index 5/6	136100	680.5	24.21	25.10	1.227	0.01	0.106	0.130
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	Index 5/6	136100	680.5	24.07	25.10	1.268	0.03	0.099	0.125
	FR1 n71_Ant 1	20M	BPSK	1	53	Back	10mm	Index 5/6	136100	680.5	24.21	25.10	1.227	-0.02	0.198	0.243
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	Index 5/6	136100	680.5	24.07	25.10	1.268	0.07	0.180	0.228
	FR1 n77_Ant 6	100M	BPSK	1	137	Front	10mm	Index 5/6	633332	3499.98	21.92	23.30	1.374	0.09	0.214	0.294
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	Index 5/6	633332	3499.98	21.89	23.30	1.384	0.05	0.203	0.281
	FR1 n77_Ant 6	100M	BPSK	1	137	Back	10mm	Index 5/6	633332	3499.98	21.92	23.30	1.374	0.03	0.560	0.769
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	Index 5/6	633332	3499.98	21.89	23.30	1.384	0.04	0.528	0.731
85	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Back	10mm	Index 5/6	633332	3499.98	25.89	26.30	1.099	-0.15	0.760	0.835
	FR1 n77_Ant 6	100M	BPSK	1	137	Front	10mm	Index 5/6	656000	3840	21.88	23.30	1.387	-0.16	0.297	0.412
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	Index 5/6	656000	3840	21.84	23.30	1.400	0.11	0.318	0.445
	FR1 n77_Ant 6	100M	BPSK	1	137	Back	10mm	Index 5/6	656000	3840	21.88	23.30	1.387	-0.07	0.575	0.797
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	Index 5/6	656000	3840	21.84	23.30	1.400	-0.04	0.563	0.788
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Back	10mm	Index 5/6	656000	3840	25.77	26.30	1.130	-0.13	0.658	0.743
	FR1 n77_Ant 2	100M	BPSK	1	271	Front	10mm	Index 5/6	633332	3499.98	22.34	23.30	1.306	-0.02	0.112	0.140
	FR1 n77_Ant 2	100M	BPSK	135	138	Front	10mm	Index 5/6	633332	3499.98	22.14	23.30	1.019	0.05	0.127	0.166
	FR1 n77_Ant 2	100M	BPSK	1	271	Back	10mm	Index 5/6	633332	3499.98	22.34	23.30	1.306	-0.14	0.173	0.216
	FR1 n77_Ant 2	100M	BPSK	135	138	Back	10mm	Index 5/6	633332	3499.98	22.14	23.30	1.019	-0.03	0.148	0.193
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	271	Back	10mm	Index 5/6	633332	3499.98	23.55	25.00	1.396	-0.06	0.114	0.159
	FR1 n77_Ant 2	100M	BPSK	1	271	Front	10mm	Index 5/6	656000	3840	22.74	23.30	1.138	0.06	0.115	0.131
	FR1 n77_Ant 2	100M	BPSK	135	138	Front	10mm	Index 5/6	656000	3840	22.27	23.30	1.002	-0.06	0.108	0.137
	FR1 n77_Ant 2	100M	BPSK	1	271	Back	10mm	Index 5/6	656000	3840	22.74	23.30	1.138	-0.14	0.202	0.230
	FR1 n77_Ant 2	100M	BPSK	135	138	Back	10mm	Index 5/6	656000	3840	22.27	23.30	1.002	-0.15	0.116	0.147
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	271	Back	10mm	Index 5/6	656000	3840	23.55	25.00	1.371	-0.05	0.133	0.186



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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 3+4 (4)	5	1	2412	22.95	23.00	1.012	94.7	1.056	-0.07	0.472	0.504
				10mm	Ant 3+4 (3)	5	1	2412	22.55	23.00	1.109	94.7	1.056	-0.07	0.454	0.532
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	5	1	2412	22.95	23.00	1.012	94.7	1.056	-0.12	0.502	0.536
				10mm	Ant 3+4 (3)	5	1	2412	22.55	23.00	1.109	94.7	1.056	-0.12	0.410	0.480
86	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	5	6	2437	22.85	23.00	1.035	94.7	1.056	0.13	0.753	0.823
				10mm	Ant 3+4 (3)	5	6	2437	22.55	23.00	1.109	94.7	1.056	0.13	0.636	0.745
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	5	11	2462	22.85	23.00	1.035	94.7	1.056	0.19	0.456	0.498
				10mm	Ant 3+4 (3)	5	11	2462	22.65	23.00	1.084	94.7	1.056	0.19	0.371	0.425
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	5	12	2467	22.55	23.00	1.109	94.7	1.056	0.03	0.421	0.493
				10mm	Ant 3+4 (3)	5	12	2467	22.55	23.00	1.109	94.7	1.056	0.03	0.254	0.298
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3+4 (4)	6	13	2472	18.35	19.50	1.303	94.7	1.056	-0.07	0.272	0.374
				10mm	Ant 3+4 (3)	6	13	2472	18.55	19.50	1.245	94.7	1.056	-0.07	0.254	0.334
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	6	13	2472	18.35	19.50	1.303	94.7	1.056	-0.12	0.397	0.546
				10mm	Ant 3+4 (3)	6	13	2472	18.55	19.50	1.245	94.7	1.056	-0.12	0.310	0.407
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	6	1	2412	18.95	19.50	1.135	94.7	1.056	0.06	0.362	0.434
				10mm	Ant 3+4 (3)	6	1	2412	18.45	19.50	1.274	94.7	1.056	0.06	0.204	0.274
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	6	6	2437	18.75	19.50	1.189	94.7	1.056	-0.11	0.354	0.444
				10mm	Ant 3+4 (3)	6	6	2437	18.25	19.50	1.334	94.7	1.056	-0.11	0.255	0.359
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	6	11	2462	18.85	19.50	1.161	94.7	1.056	0.19	0.356	0.437
				10mm	Ant 3+4 (3)	6	11	2462	18.25	19.50	1.334	94.7	1.056	0.19	0.271	0.382
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3+4 (4)	6	12	2467	18.35	19.50	1.303	94.7	1.056	0.03	0.321	0.442
				10mm	Ant 3+4 (3)	6	12	2467	17.85	19.50	1.462	94.7	1.056	0.03	0.262	0.405





Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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 3+7(7)	5	54	5270	18.45	20.00	1.429	96.8	1.033	0.05	0.137	0.202
87	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	5	54	5270	18.45	20.00	1.429	96.8	1.033	-0.05	0.748	1.104
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	5	62	5310	15.95	16.00	1.012	96.8	1.033	0.03	0.362	0.378
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 3+7(7)	6	54	5270	18.45	19.00	1.135	96.8	1.033	0.05	0.137	0.161
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	6	54	5270	18.45	19.00	1.135	96.8	1.033	-0.05	0.748	0.877
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	6	62	5310	15.95	16.00	1.012	96.8	1.033	0.03	0.362	0.378
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	7	58	5290	14.51	16.50	1.581	88.1	1.135	0.03	0.045	0.080
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	7	58	5290	14.51	16.50	1.581	88.1	1.135	0.1	0.279	0.501
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	8	58	5290	14.15	16.00	1.531	88.1	1.135	0.03	0.041	0.071
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	8	58	5290	14.15	16.00	1.531	88.1	1.135	0.1	0.257	0.447
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	9	58	5290	14.15	16.00	1.531	88.1	1.135	0.03	0.041	0.071
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	9	58	5290	14.15	16.00	1.531	88.1	1.135	0.1	0.257	0.447
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	5	122	5610	17.15	18.00	1.216	88.1	1.135	0.03	0.114	0.157
88	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	5	122	5610	17.15	18.00	1.216	88.1	1.135	-0.08	0.759	1.048
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	5	138	5690	16.85	18.00	1.303	88.1	1.135	0.01	0.652	0.964
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	5	106	5530	15.75	16.00	1.059	88.1	1.135	0.01	0.511	0.614
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	6	122	5610	17.15	17.50	1.084	88.1	1.135	0.03	0.114	0.140
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	6	122	5610	17.15	17.50	1.084	88.1	1.135	-0.08	0.759	0.934
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	6	138	5690	16.85	17.50	1.161	88.1	1.135	0.01	0.652	0.859
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	6	106	5530	15.75	16.00	1.059	88.1	1.135	0.01	0.511	0.614
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 3+7(7)	7	114	5570	13.41	15.00	1.442	87	1.149	-0.01	0.066	0.109
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 3+7(7)	7	114	5570	13.41	15.00	1.442	87	1.149	-0.03	0.297	0.492
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 3+7(7)	8	114	5570	13.41	14.50	1.285	87	1.149	-0.01	0.066	0.097
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 3+7(7)	8	114	5570	13.41	14.50	1.285	87	1.149	-0.03	0.297	0.439
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	Ant 3+7(7)	9	114	5570	13.41	14.50	1.285	87	1.149	-0.01	0.066	0.097
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	Ant 3+7(7)	9	114	5570	13.41	14.50	1.285	87	1.149	-0.03	0.297	0.439
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	5	155	5775	17.85	19.00	1.303	88.1	1.135	0.11	0.099	0.146
89	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	5	155	5775	17.85	19.00	1.303	88.1	1.135	0.08	0.762	1.127
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	5	159	5795	17.45	19.00	1.429	96.8	1.033	-0.06	0.740	1.092
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	6	155	5775	17.85	18.50	1.161	88.1	1.135	0.11	0.099	0.131
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	6	155	5775	17.85	18.50	1.161	88.1	1.135	0.08	0.758	0.999
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 3+7(7)	6	159	5795	17.45	18.50	1.274	96.8	1.033	-0.06	0.740	0.973
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	0.01	0.062	0.103
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	0.08	0.327	0.541
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	7	155	5775	14.86	16.50	1.459	88.1	1.135	0.18	0.298	0.493
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	8	155	5775	14.86	15.50	1.159	88.1	1.135	0.01	0.062	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	8	155	5775	14.86	15.50	1.159	88.1	1.135	0.08	0.327	0.430
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	8	155	5775	14.86	15.50	1.159	88.1	1.135	0.18	0.298	0.392
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 3+7(7)	9	155	5775	14.86	15.50	1.159	88.1	1.135	0.01	0.062	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	9	155	5775	14.86	15.50	1.159	88.1	1.135	0.08	0.327	0.430
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 3+7(7)	9	155	5775	14.86	15.50	1.159	88.1	1.135	0.18	0.298	0.392



<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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)	APD
	WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 3+7 (7)	5/6/7/8/9	15	6025	10.00	10.00	1.000	85.1	1.175	0.07	0.001	0.001	0.025
				10mm	Ant 3+7 (3)	5/6/7/8/9	15	6025	9.50	10.00	1.122	85.1	1.175	0.07	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 3+7 (7)	5/6/7/8/9	15	6025	10.00	10.00	1.000	85.1	1.175	0.16	0.031	0.036	0.025
				10mm	Ant 3+7 (3)	5/6/7/8/9	15	6025	9.50	10.00	1.122	85.1	1.175	0.16	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 3+7 (7)	5/6/7/8/9	47	6185	9.80	10.00	1.047	85.1	1.175	0.02	0.072	0.089	0.852
				10mm	Ant 3+7 (3)	5/6/7/8/9	47	6185	9.60	10.00	1.096	85.1	1.175	0.02	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 3+7 (7)	5/6/7/8/9	111	6505	11.00	11.00	1.000	85.1	1.175	-0.05	0.092	0.108	0.852
				10mm	Ant 3+7 (3)	5/6/7/8/9	111	6505	10.50	11.00	1.122	85.1	1.175	-0.05	0.001	0.001	0.025
90	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 3+7 (7)	5/6/7/8/9	175	6825	9.30	9.50	1.047	85.1	1.175	0.12	0.115	0.141	0.777
				10mm	Ant 3+7 (3)	5/6/7/8/9	175	6825	9.50	9.50	1.000	85.1	1.175	0.12	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 3+7 (7)	5/6/7/8/9	207	6985	9.00	9.00	1.000	85.1	1.175	0.02	0.035	0.041	0.201
				10mm	Ant 3+7 (3)	5/6/7/8/9	207	6985	8.10	9.00	1.230	85.1	1.175	0.02	0.001	0.001	0.025

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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	2/3	78	2480	19.40	21.00	1.446	76.83	1.084	-0.06	0.005	0.008
	Bluetooth	1Mbps	Back	10mm	Ant 4	2/3	78	2480	19.40	21.00	1.446	76.83	1.084	-0.04	0.14	0.219
91	Bluetooth	1Mbps	Back	10mm	Ant 4	2/3	39	2441	19.05	21.00	1.567	76.83	1.084	-0.1	0.15	0.255
	Bluetooth	1Mbps	Back	10mm	Ant 4	2/3	00	2402	19.06	21.00	1.564	76.83	1.084	0.03	0.142	0.241
	Bluetooth	1Mbps	Front	10mm	Ant 3	2/3	39	2441	19.25	21.00	1.497	76.83	1.084	0.02	0.067	0.109
	Bluetooth	1Mbps	Back	10mm	Ant 3	2/3	39	2441	19.25	21.00	1.497	76.83	1.084	-0.04	0.123	0.200
	Bluetooth	1Mbps	Back	10mm	Ant 3	2/3	00	2402	18.59	20.50	1.553	76.83	1.084	0.1	0.104	0.175
	Bluetooth	1Mbps	Back	10mm	Ant 3	2/3	78	2480	18.71	20.50	1.511	76.83	1.084	-0.15	0.107	0.175
	Bluetooth	1Mbps	Front	10mm	Ant 3+4 (4)	2/3	39	2441	17.19	18.00	1.205	76.83	1.084	0.09	0.033	0.043
				10mm	Ant 3+4 (3)	2/3	39	2441	17.15	18.00	1.217	76.83	1.084	0.09	0.082	0.108
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	2/3	39	2441	17.19	18.00	1.205	76.83	1.084	0.11	0.048	0.063
				10mm	Ant 3+4 (3)	2/3	39	2441	17.15	18.00	1.217	76.83	1.084	0.11	0.099	0.131
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	2/3	00	2402	16.99	18.00	1.262	76.83	1.084	-0.17	0.041	0.056
				10mm	Ant 3+4 (3)	2/3	00	2402	16.80	18.00	1.319	76.83	1.084	-0.17	0.085	0.122
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	2/3	78	2480	17.46	18.00	1.133	76.83	1.084	0.02	0.04	0.049
				10mm	Ant 3+4 (3)	2/3	78	2480	16.74	18.00	1.337	76.83	1.084	0.02	0.087	0.126
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	78	2480	19.05	19.50	1.110	76.83	1.084	-0.06	0.005	0.006
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	78	2480	19.40	19.50	1.024	76.83	1.084	-0.01	0.111	0.123
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	39	2441	19.05	19.50	1.110	76.83	1.084	-0.1	0.135	0.162
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	00	2402	19.06	19.50	1.107	76.83	1.084	0.07	0.126	0.151
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	0.02	0.067	0.077
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	19.25	19.50	1.060	76.83	1.084	-0.04	0.123	0.141
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	00	2402	18.59	19.50	1.234	76.83	1.084	0.09	0.097	0.130
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	78	2480	18.71	19.50	1.200	76.83	1.084	-0.13	0.098	0.127
	Bluetooth	1Mbps	Front	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	0.09	0.033	0.043
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	0.09	0.082	0.108
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	4	39	2441	17.19	18.00	1.205	76.83	1.084	0.11	0.048	0.063
				10mm	Ant 3+4 (3)	4	39	2441	17.15	18.00	1.217	76.83	1.084	0.11	0.099	0.131
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	4	00	2402	16.99	18.00	1.262	76.83	1.084	-0.17	0.041	0.056
				10mm	Ant 3+4 (3)	4	00	2402	16.80	18.00	1.319	76.83	1.084	-0.17	0.085	0.122
	Bluetooth	1Mbps	Back	10mm	Ant 3+4 (4)	4	78	2480	17.46	18.00	1.133	76.83	1.084	0.02	0.04	0.049
				10mm	Ant 3+4 (3)	4	78	2480	16.74	18.00	1.337	76.83	1.084	0.02	0.087	0.126



15.4 Product Specific SAR

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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 2	20M	QPSK	50	50	Bottom Side	0mm	Index 5/6	132572	1770	22.24	23.80	1.432	-0.19	2.010	2.879
	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index 5/6	132072	1720	22.17	23.80	1.455	-0.03	1.900	2.765
	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index 5/6	132322	1745	22.22	23.80	1.439	0.02	2.010	2.892
92	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index 5/6	132572	1770	22.24	23.80	1.432	-0.09	2.070	2.965
	LTE Band 66_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index 5/6	132072	1720	22.17	23.80	1.455	-0.06	1.940	2.824

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
93	FR1 n41_Ant 1-	100M	BPSK	1	137	Top Side	0mm	Index 5	518598	2592.99	21.94	23.50	1.432	-0.14	1.900	2.721
	FR1 n41_HPUE_Ant 1-	100M	BPSK	1	137	Top Side	0mm	Index 5	518598	2592.99	25.02	26.50	1.406	-0.12	1.790	2.517

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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 3+7(7)	5	54	5270	18.45	20.00	1.429	96.8	1.033	0.08	0.283	0.418
94	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3+7(7)	5	54	5270	18.45	20.00	1.429	96.8	1.033	0.1	1.370	2.022
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 3+7(3)	5	54	5270	18.10	20.00	1.549	96.8	1.033	-0.12	0.746	1.194
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 3+7(7)	5	54	5270	18.45	20.00	1.429	96.8	1.033	0.07	0.132	0.195
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3+7(7)	5	54	5270	18.45	20.00	1.429	96.8	1.033	0.11	0.164	0.242
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3+7(7)	5	62	5310	15.95	16.00	1.012	96.8	1.033	-0.02	0.705	0.737
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	Ant 3+7(7)	6	54	5270	18.45	19.00	1.135	96.8	1.033	0.08	0.283	0.332
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3+7(7)	6	54	5270	18.45	19.00	1.135	96.8	1.033	0.1	1.370	1.606
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	Ant 3+7(3)	6	54	5270	17.15	19.00	1.531	96.8	1.033	-0.12	0.746	1.180
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	Ant 3+7(7)	6	54	5270	18.45	19.00	1.135	96.8	1.033	0.07	0.132	0.155
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	Ant 3+7(7)	6	54	5270	18.45	19.00	1.135	96.8	1.033	0.11	0.164	0.192
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3+7(7)	6	62	5310	15.75	16.00	1.059	96.8	1.033	-0.02	0.705	0.771
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	7	58	5290	14.51	16.50	1.581	88.1	1.135	0.01	0.121	0.216
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	7	58	5290	14.51	16.50	1.581	88.1	1.135	0.03	0.547	0.981
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	7	58	5290	14.50	16.50	1.585	88.1	1.135	-0.08	0.276	0.496
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	7	58	5290	14.51	16.50	1.581	88.1	1.135	0.07	0.083	0.148
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	7	58	5290	14.51	16.50	1.581	88.1	1.135	0.12	0.096	0.172
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	8	58	5290	14.15	16.00	1.531	88.1	1.135	0.01	0.111	0.193
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	8	58	5290	14.15	16.00	1.531	88.1	1.135	0.03	0.503	0.874
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	8	58	5290	14.50	16.00	1.413	88.1	1.135	-0.08	0.276	0.442
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	8	58	5290	14.15	16.00	1.531	88.1	1.135	0.07	0.076	0.132
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	8	58	5290	14.15	16.00	1.531	88.1	1.135	0.12	0.088	0.153
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	9	58	5290	14.15	16.00	1.531	88.1	1.135	0.01	0.111	0.193
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	9	58	5290	14.15	16.00	1.531	88.1	1.135	0.03	0.503	0.874
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	9	58	5290	14.50	16.00	1.413	88.1	1.135	-0.08	0.276	0.442
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	9	58	5290	14.15	16.00	1.531	88.1	1.135	0.07	0.076	0.132
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	9	58	5290	14.15	16.00	1.531	88.1	1.135	0.12	0.088	0.153



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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)
95	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	5	122	5610	17.15	18.00	1.216	88.1	1.135	-0.09	0.158	0.218
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	5	122	5610	17.15	18.00	1.216	88.1	1.135	0.09	1.310	1.808
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	5	122	5610	17.15	18.00	1.216	88.1	1.135	0.01	0.539	0.744
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	5	122	5610	17.15	18.00	1.216	88.1	1.135	0.11	0.211	0.291
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	5	122	5610	17.15	18.00	1.216	88.1	1.135	-0.03	0.253	0.349
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	5	138	5690	16.85	18.00	1.303	88.1	1.135	-0.12	1.130	1.671
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	5	106	5530	15.75	16.00	1.059	88.1	1.135	-0.12	1.130	1.359
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	6	122	5610	17.15	17.50	1.084	88.1	1.135	-0.09	0.158	0.194
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	6	122	5610	17.15	17.50	1.084	88.1	1.135	0.09	1.310	1.612
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	6	122	5610	17.15	17.50	1.084	88.1	1.135	0.01	0.539	0.663
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	6	122	5610	17.15	17.50	1.084	88.1	1.135	0.11	0.211	0.260
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	6	122	5610	17.15	17.50	1.084	88.1	1.135	-0.03	0.253	0.311
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	6	138	5690	16.85	17.50	1.161	88.1	1.135	-0.12	1.130	1.490
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	6	106	5530	15.75	16.00	1.059	88.1	1.135	-0.12	1.130	1.359
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 3+7(7)	7	114	5570	13.41	15.00	1.442	87	1.149	0.15	0.081	0.134
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 3+7(7)	7	114	5570	13.41	15.00	1.442	87	1.149	0.04	0.518	0.858
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Side	0mm	Ant 3+7(3)	7	114	5570	13.50	15.00	1.413	87	1.149	-0.03	0.246	0.399
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 3+7(7)	7	114	5570	13.41	15.00	1.442	87	1.149	0.12	0.100	0.166
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 3+7(7)	7	114	5570	13.41	15.00	1.442	87	1.149	-0.11	0.088	0.146
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 3+7(7)	8	114	5570	13.41	14.50	1.285	87	1.149	0.15	0.081	0.120
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 3+7(7)	8	114	5570	13.41	14.50	1.285	87	1.149	0.04	0.518	0.765
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Side	0mm	Ant 3+7(3)	8	114	5570	13.50	14.50	1.259	87	1.149	-0.03	0.246	0.356
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 3+7(7)	8	114	5570	13.41	14.50	1.285	87	1.149	0.12	0.100	0.148
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 3+7(7)	8	114	5570	13.41	14.50	1.285	87	1.149	-0.11	0.088	0.130
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	0mm	Ant 3+7(7)	9	114	5570	13.41	14.50	1.285	87	1.149	0.15	0.081	0.120
96	WLAN5GHz	802.11ac-VHT160 MCS0	Back	0mm	Ant 3+7(7)	9	114	5570	13.41	14.50	1.285	87	1.149	0.04	0.518	0.765
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Side	0mm	Ant 3+7(3)	9	114	5570	13.50	14.50	1.259	87	1.149	-0.03	0.246	0.356
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Side	0mm	Ant 3+7(7)	9	114	5570	13.41	14.50	1.285	87	1.149	0.12	0.100	0.148
	WLAN5GHz	802.11ac-VHT160 MCS0	Top Side	0mm	Ant 3+7(7)	9	114	5570	13.41	14.50	1.285	87	1.149	-0.11	0.088	0.130
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	5	155	5775	17.85	19.00	1.303	88.1	1.135	0.05	0.222	0.328
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	5	155	5775	17.85	19.00	1.303	88.1	1.135	-0.14	1.380	2.041
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	5	155	5775	17.90	19.00	1.288	88.1	1.135	-0.03	0.718	1.050
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	5	155	5775	17.85	19.00	1.303	88.1	1.135	0.06	0.264	0.390
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	5	155	5775	17.85	19.00	1.303	88.1	1.135	0.12	0.399	0.590
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3+7(7)	5	159	5795	17.45	19.00	1.429	96.8	1.033	0.11	1.220	1.801
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 3+7(7)	6	155	5775	17.85	18.50	1.161	88.1	1.135	0.05	0.222	0.293
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 3+7(7)	6	155	5775	17.85	18.50	1.161	88.1	1.135	-0.14	1.380	1.819
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 3+7(3)	6	155	5775	17.90	18.50	1.148	88.1	1.135	-0.03	0.718	0.936
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 3+7(7)	6	155	5775	17.85	18.50	1.161	88.1	1.135	0.06	0.264	0.348
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 3+7(7)	6	155	5775	17.85	18.50	1.161	88.1	1.135	0.12	0.399	0.526
WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	Ant 3+7(7)	6	159	5795	17.45	18.50	1.274	96.8	1.033	0.11	1.220	1.605	



<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	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)	APD
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 3+7 (7)	5/6/7/8/9	15	6025	10.00	10.00	1.000	85.1	1.175	0.06	0.018	0.021	0.451
				0mm	Ant 3+7 (3)	5/6/7/8/9	15	6025	9.50	10.00	1.122	85.1	1.175	0.06	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 3+7 (7)	5/6/7/8/9	15	6025	10.00	10.00	1.000	85.1	1.175	-0.14	0.090	0.106	2.255
				0mm	Ant 3+7 (3)	5/6/7/8/9	15	6025	9.50	10.00	1.122	85.1	1.175	-0.14	0.036	0.047	0.897
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 3+7 (3)	5/6/7/8/9	15	6025	9.50	10.00	1.122	85.1	1.175	0.05	0.055	0.073	1.378
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 3+7 (7)	5/6/7/8/9	15	6025	10.00	10.00	1.000	85.1	1.175	0.01	0.012	0.014	0.296
	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	0mm	Ant 3+7 (7)	5/6/7/8/9	15	6025	10.00	10.00	1.000	85.1	1.175	0.07	0.026	0.031	0.657
				0mm	Ant 3+7 (3)	5/6/7/8/9	15	6025	9.50	10.00	1.122	85.1	1.175	0.07	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 3+7 (7)	5/6/7/8/9	47	6185	9.80	10.00	1.047	85.1	1.175	-0.13	0.107	0.132	2.681
				0mm	Ant 3+7 (3)	5/6/7/8/9	47	6185	9.60	10.00	1.096	85.1	1.175	-0.13	0.001	0.001	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 3+7 (7)	5/6/7/8/9	111	6505	11.00	11.00	1.000	85.1	1.175	0	0.128	0.150	3.208
				0mm	Ant 3+7 (3)	5/6/7/8/9	111	6505	10.50	11.00	1.122	85.1	1.175	0	0.056	0.074	1.413
97	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 3+7 (7)	5/6/7/8/9	175	6825	9.30	9.50	1.047	85.1	1.175	0.19	0.147	0.181	3.684
				0mm	Ant 3+7 (3)	5/6/7/8/9	175	6825	9.50	9.50	1.000	85.1	1.175	0.19	0.012	0.014	0.301
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 3+7 (7)	5/6/7/8/9	207	6985	9.00	9.00	1.000	85.1	1.175	0.02	0.084	0.099	2.105
				0mm	Ant 3+7 (3)	5/6/7/8/9	207	6985	8.10	9.00	1.230	85.1	1.175	0.02	0.006	0.009	0.150

15.5 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grip Step (A)	iPDn (W/m <sup>2</sup> )	iPD ratio (dB) (≥ -1)	Normal psPD (W/m <sup>2</sup> )	Total psPD (W/m <sup>2</sup> )
WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	15	6025	9.50	0.0625	3.61	1.809302448	3.24	3.77
WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 3+7 (7)	15	6025	9.50	0.25	2.38		1.37	1.44
WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	207	6985	8.10	0.0625	5.27	2.332598987	2.68	3.2
WLAN6GHz	802.11ax-HE160 MCS0	Back	8.59mm	Ant 3+7 (7)	207	6985	8.10	0.25	3.08		1.6	1.7

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grip Step (A)	Scaling Factor for measurement uncertainty	Power Drift (dB)	Normal psPD (W/m <sup>2</sup> )	Scaled Normal psPD (W/m <sup>2</sup> )	Total psPD (W/m <sup>2</sup> )	Scaled Total psPD (W/m <sup>2</sup> )
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	15	6025	10.00	10.00	1.000	85.10	1.175	0.0625	1.5535	0.17	3.24	5.91	3.77	6.88
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	47	6185	9.80	10.00	1.047	85.10	1.175	0.0625	1.5535	0.08	2.42	4.63	3.25	6.21
98	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	111	6505	11.00	11.00	1.000	85.10	1.175	0.0625	1.5535	0.15	3.24	5.91	3.81	6.95
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	175	6825	9.30	9.50	1.047	85.10	1.175	0.0625	1.5535	-0.13	2.92	5.58	3.62	6.92
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 3+7 (7)	207	6985	9.00	9.00	1.000	85.10	1.175	0.0625	1.5535	0.17	2.68	4.89	3.2	5.84
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+7 (7)	15	6025	14.20	15.00	1.202	85.10	1.175	0.0625	1.5535	0.07	1.01	2.22	1.14	2.50
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+7 (7)	47	6185	13.70	15.00	1.349	85.10	1.175	0.0625	1.5535	-0.01	0.624	1.54	0.651	1.60
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+7 (7)	111	6505	12.60	13.50	1.230	85.10	1.175	0.0625	1.5535	0	0.879	1.97	1.03	2.31
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+7 (7)	175	6825	14.10	15.00	1.230	85.10	1.175	0.0625	1.5535	0	0.354	0.79	0.459	1.03
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+7 (7)	207	6985	15.40	15.50	1.023	85.10	1.175	0.0625	1.5535	0.15	0.767	1.43	0.88	1.64





**15.6 Repeated SAR Measurement**

No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1513	1752.6	22.86	23.00	1.033	-0.03	0.864	-	0.892
2nd	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1513	1752.6	22.86	23.00	1.033	0.05	0.851	1.02	0.879
1st	LTE Band 7_Ant 2	20M_QPSK_100_0	Bottom Side	10mm	Index 4	21350	2560	21.08	21.10	1.005	0.02	0.887	-	0.891
2nd	LTE Band 7_Ant 2	20M_QPSK_100_0	Bottom Side	10mm	Index 4	21350	2560	21.08	21.10	1.005	0.02	0.873	1.02	0.877
1st	FR1 n25_Ant 0	20M_BPSK_1_53	Back	10mm	Index 4	381000	1905	23.25	23.30	1.012	0	0.893	-	0.903
2nd	FR1 n25_Ant 0	20M_BPSK_1_53	Back	10mm	Index 4	381000	1905	23.25	23.30	1.012	0	0.873	1.02	0.883
1st	FR1 n30_Ant 2	10M_BPSK_1_26	Back	10mm	Index 4	462000	2310	22.17	22.20	1.007	-0.08	0.892	-	0.898
2nd	FR1 n30_Ant 2	10M_BPSK_1_26	Back	10mm	Index 4	462000	2310	22.17	22.20	1.007	0.09	0.883	1.01	0.889
1st	FR1 n77_Ant 6	100M_BPSK_1_137	Left Side	10mm	Index 4	656000	3840	21.88	22.10	1.052	-0.07	0.850	-	0.894
2nd	FR1 n77_Ant 6	100M_BPSK_1_137	Left Side	10mm	Index 4	656000	3840	21.88	22.10	1.052	-0.05	0.834	1.02	0.877

No.	Band	Mode	Test Position	Gap (mm)	Output Power Index	Ch.	Freq. (MHz)	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 2	20M_QPSK_50_50	Bottom Side	0mm	Index 5/6	132572	1770	22.24	23.80	1.432	-0.09	2.070	-	2.965
2nd	LTE Band 66_Ant 2	20M_QPSK_50_50	Bottom Side	0mm	Index 5/6	132572	1770	22.24	23.80	1.432	-0.09	2.030	1.02	2.907

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	12	2467	16.95	17.50	1.135	94.7	1.056	0.18	0.922	-	1.105
				0mm	Ant 3+4 (3)	1	12	2467	16.55	17.50	1.245	94.7	1.056	0.18	0.219		0.288
2nd	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3+4 (4)	1	12	2467	16.95	17.50	1.135	94.7	1.056	0.18	0.915	1.01	1.097
				0mm	Ant 3+4 (3)	1	12	2467	16.55	17.50	1.245	94.7	1.056	0.18	0.187		0.246
1st	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	00	2402	19.06	19.50	1.107	76.83	1.084	-0.09	0.900	-	1.080
2nd	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	00	2402	19.06	19.50	1.107	76.83	1.084	-0.09	0.871	1.03	1.045

**General Note:**

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



**15.7 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  
 Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

**<LTE Band 41 Linearity Data for Head>**

TX 0		
	LTE Band 41_Ant 2 (Power Class 3)	LTE Band 41_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	25.5	27.5
Reported 1g SAR (W/kg)	0.191	0.213
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	224.60	243.49
Linearity SAR(W/kg)	0.21	
% deviation from expected linearity		2.86%

TX 1		
	LTE Band 41_Ant 0 (Power Class 3)	LTE Band 41_Ant 0 (Power Class 2)
Maximum Tune up Power (dBm)	24.5	26.6
Reported 1g SAR (W/kg)	0.208	0.208
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	178.40	197.92
Linearity SAR(W/kg)	0.23	
% deviation from expected linearity		-9.86%

**<LTE Band 41 Linearity Data for Hotspot>**

TX 0		
	LTE Band 41_Ant 2 (Power Class 3)	LTE Band 41_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	24.3	25.9
Reported 1g SAR (W/kg)	0.898	0.849
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	170.37	168.46
Linearity SAR(W/kg)	0.89	
% deviation from expected linearity		-4.38%

TX 1		
	LTE Band 41_Ant 0 (Power Class 3)	LTE Band 41_Ant 0 (Power Class 2)
Maximum Tune up Power (dBm)	23.4	25
Reported 1g SAR (W/kg)	0.873	0.903
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	138.49	136.93
Linearity SAR(W/kg)	0.86	
% deviation from expected linearity		4.61%



**<LTE Band 41 Linearity Data for Body-worn>**

TX 0		
	LTE Band 41_Ant 2	LTE Band 41_Ant 2
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.5	27.1
Reported 1g SAR (W/kg)	1.184	1.119
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	224.60	222.07
Linearity SAR(W/kg)	1.17	
% deviation from expected linearity		-4.41%

TX 1		
	LTE Band 41_Ant 0	LTE Band 41_Ant 0
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24.5	26.6
Reported 1g SAR (W/kg)	0.429	0.429
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	178.40	197.92
Linearity SAR(W/kg)	0.48	
% deviation from expected linearity		-9.86%





**15.8 FR1 n41/n77 Power Class 2 and Power Class 3 Linearity**

This device support Power Class 2 and Power Class 3 operations for FR1 n41/n77. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each FR1 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.

Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

**<FR1 n41 Linearity Data for Head>**

TX 0		
	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	22.4	25.4
Reported 1g SAR (W/kg)	1.093	1.003
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	173.78	173.37
Linearity SAR(W/kg)	1.09	
% deviation from expected linearity		-8.02%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	18.5	21.5
Reported 1g SAR (W/kg)	1.105	1.039
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	70.79	70.63
Linearity SAR(W/kg)	1.10	
% deviation from expected linearity		-5.75%

**<FR1 n77 Linearity Data for Head>**

TX 0		
	FR1 n77_Ant 6 (Power Class 3)	FR1 n77_Ant 6 (Power Class 2)
Maximum Tune up Power (dBm)	25.3	27
Reported 1g SAR (W/kg)	0.615	0.418
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	338.84	250.59
Linearity SAR(W/kg)	0.45	
% deviation from expected linearity		-8.10%

TX		
	FR1 n77_Ant 2 (Power Class 3)	FR1 n77_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	23.3	25
Reported 1g SAR (W/kg)	0.055	0.039
Duty Cycle	100.00%	0.500
Frame Averaged (mW)	213.80	158.11
Linearity SAR(W/kg)	0.04	
% deviation from expected linearity		-4.12%

**<FR1 n41 Linearity Data for Hotspot>**

TX 0		
	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	21.8	24.8
Reported 1g SAR (W/kg)	0.883	0.836
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	151.36	151.00
Linearity SAR(W/kg)	0.88	
% deviation from expected linearity		-5.10%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	20.9	23.9
Reported 1g SAR (W/kg)	0.885	0.818
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	123.03	122.74
Linearity SAR(W/kg)	0.88	
% deviation from expected linearity		-7.35%

**<FR1 n77 Linearity Data for Hotspot>**

TX 0		
	FR1 n77_Ant 6 (Power Class 3)	FR1 n77_Ant 6 (Power Class 2)
Maximum Tune up Power (dBm)	22.1	25.1
Reported 1g SAR (W/kg)	0.894	0.812
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	162.18	161.80
Linearity SAR(W/kg)	0.89	
% deviation from expected linearity		-8.96%

TX 1		
	FR1 n77_Ant 2 (Power Class 3)	FR1 n77_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	23.3	25
Reported 1g SAR (W/kg)	0.426	0.3
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	213.80	158.11
Linearity SAR(W/kg)	0.32	
% deviation from expected linearity		-4.78%

**<FR1 n41 Linearity Data for Body-worn>**

TX 0		
	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	23	26
Reported 1g SAR (W/kg)	0.637	0.67
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	199.53	199.05
Linearity SAR(W/kg)	0.64	
% deviation from expected linearity		5.43%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	23.5	26.5
Reported 1g SAR (W/kg)	1.107	1.145
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	223.87	223.34
Linearity SAR(W/kg)	1.10	
% deviation from expected linearity		3.68%

**<FR1 n77 Linearity Data for Body-worn>**

TX 0		
	FR1 n77_Ant 6 (Power Class 3)	FR1 n77_Ant 6 (Power Class 2)
Maximum Tune up Power (dBm)	23.3	26.3
Reported 1g SAR (W/kg)	0.769	0.835
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	213.80	213.29
Linearity SAR(W/kg)	0.77	
% deviation from expected linearity		8.84%

TX 1		
	FR1 n77_Ant 2 (Power Class 3)	FR1 n77_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	23.3	25
Reported 1g SAR (W/kg)	0.23	0.186
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	213.80	158.11
Linearity SAR(W/kg)	0.17	
% deviation from expected linearity		9.35%



**16. Simultaneous Transmission Analysis**

Portable Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi	BT	
				Power	Power	
Head	WWAN standalone	WWAN	Index 2			
	WiFi standalone	WiFi 2.4G MIMO/CDD (Ant4+3)			Index 1	
		WiFi 5G MIMO (Ant7+3)				
		WiFi 6E MIMO (Ant7+3)				
		WiFi 2.4G MIMO (Ant4+3) + WiFi 5G MIMO (Ant7+3)				
		WiFi 2.4G MIMO (Ant4+3) + WiFi 6E MIMO (Ant7+3)				
	BT standalone	Bluetooth (Ant4) (BDR/EDR Only)				Index 1
		Bluetooth (Ant3) (BDR/EDR Only)				
		Bluetooth (Ant4+3) (BDR/EDR Only)				
	WiFi +BT	WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4)			Index 1	Index 1
		WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant3)				
		WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4+3)				
		WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4)				
		WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant3)				
		WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4+3)				
	WWAN + WiFi	WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)		Index 3 / Index 7 (Hostpot on)	Index 3	
		WWAN + WiFi 5G MIMO (Ant7+3)				
		WWAN + WiFi 6E MIMO (Ant7+3)				
		WWAN + WiFi 2.4G MIMO (Ant4+3) + WiFi 5G MIMO (Ant7+3)				
		WWAN + WiFi 2.4G MIMO (Ant4+3) + WiFi 6E MIMO (Ant7+3)				
	WWAN + BT	WWAN + Bluetooth (Ant4) (BDR/EDR Only)		Index 3 / Index 7 (Hostpot on)		Index 1
		WWAN + Bluetooth (Ant3) (BDR/EDR Only)				
		WWAN + Bluetooth (Ant4+3) (BDR/EDR Only)				
	WWAN + WiFi + BT	WWAN + WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4)		Index 3 / Index 7 (Hostpot on)	Index 3	Index 1
WWAN + WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant3)						
WWAN + WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4+3)						
WWAN + WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4)						
WWAN + WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant3)						
WWAN + WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4+3)						



Portable Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi	BT	
				Power	Power	
Body	WWAN standalone	WWAN	Index 5			
	WiFi standalone	WiFi 2.4G MIMO/CDD (Ant4+3)		Index 5	Index 5	
		WiFi 5G MIMO (Ant7+3)				
		WiFi 6E MIMO (Ant7+3)				
		WiFi 2.4G MIMO (Ant4+3) + WiFi 5G MIMO (Ant7+3)				
		WiFi 2.4G MIMO (Ant4+3) + WiFi 6E MIMO (Ant7+3)				
	BT standalone	Bluetooth (Ant4) (BDR/EDR Only)				Index 2
		Bluetooth (Ant3) (BDR/EDR Only)				
		Bluetooth (Ant4+3) (BDR/EDR Only)				
	WiFi +BT	WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4)		Index 5	Index 5	Index 3
		WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant3)				
		WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4+3)				
		WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4)				
		WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant3)				
	WWAN + WiFi	WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)	Index 6 / Index 4 (Hotspot on)		Index 7	
		WWAN + WiFi 5G MIMO (Ant7+3)				
		WWAN + WiFi 6E MIMO (Ant7+3)				
		WWAN + WiFi 2.4G MIMO (Ant4+3) + WiFi 5G MIMO (Ant7+3)				
		WWAN + WiFi 2.4G MIMO (Ant4+3) + WiFi 6E MIMO (Ant7+3)				
	WWAN + BT	WWAN + Bluetooth (Ant4) (BDR/EDR Only)	Index 6 / Index 4 (Hotspot on)			Index 3
		WWAN + Bluetooth (Ant3) (BDR/EDR Only)				
		WWAN + Bluetooth (Ant4+3) (BDR/EDR Only)				
	WWAN + WiFi +BT	WWAN + WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4)	Index 6 / Index 4 (Hotspot on)		Index 9	Index 4
		WWAN + WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant3)				
WWAN + WiFi 5G MIMO (Ant7+3) + Bluetooth (Ant4+3)						
WWAN + WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4)						
WWAN + WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant3)						
WWAN + WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4+3)						

**General Note:**

1. 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 RF Exposure report FA121931-04A
2. The Sim-Tx configuration combination include in operation description will be match the title in the below Sum-Tx evaluation table.
3. This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
4. The worst case WLAN reported SAR for each configuration was used for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
5. The Scaled SAR summation is calculated based on the same configuration and test position.
6. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - i) Scalar SAR summation < 1.6W/kg.
  - ii)  $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$ , 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.
  - iii) If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary.
  - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
7. For WWAN power, when the device is in head mode and hotspot function is enabled, the device will select power index 7 which is further lower than power index 3, as described in the operational description. In this report, standalone and simultaneous SAR compliance for the mentioned scenario was justified at power index 3 conservatively.
8. WiFi 2.4/5/6 GHz does not support SISO mode, so standalone SAR was only tested in MIMO mode operation

### **16.1 5G NR + LTE + WLAN + BT Sim-Tx analysis**

The power ratio factors are  $g_1$  and  $g_2$  for LTE and NR respectively. The main purpose of these power ratio factors is to split the available SAR budget among different RATs, so  $g_1 + g_2 \leq 1$ . The value of  $g_1$  is computed based on the need of the anchor (LTE) and can be changed if the anchor changes its power request. Based on the SAR Budget portion allocated to the anchor, the value of  $g_2$  will be computed. At steady state (where all RATs are being on for a while), the allocated power ratio factors will guarantee that the total exposure ratio never exceeds the highest exposure of either one.

$$g_1 * LTE_{exposure} + g_2 * NR_{exposure} \leq 1.0,$$

$$\text{then, } g_1 * LTE_{exposure} + g_2 * NR_{exposure} \leq \max ( LTE_{exposure} , NR_{exposure} )$$

Compliance of simultaneous transmission of LTE+5G NR+WiFi+BT can be justified from the compliance of LTE+WiFi +BT and 5G NR+WiFi+BT

### **16.2 Head Exposure Conditions**

#### **<WLAN Index 1, BT Index 1>**

Exposure Position	1	2	3	4	5	2+3 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)	2+5 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 3+4 1g SAR (W/kg)			
Right Cheek at 0mm	0.514	0.959	0.063	0.050	0.091	<b>1.022</b>	<b>1.009</b>	<b>1.050</b>
Right Tilted at 0mm	0.488	0.784	0.047	0.025	0.076	<b>0.831</b>	<b>0.809</b>	<b>0.860</b>
Left Cheek at 0mm	1.105	0.453	0.146	0.039	0.179	<b>0.599</b>	<b>0.492</b>	<b>0.632</b>
Left Tilted at 0mm	1.004	0.545	0.109	0.019	0.092	<b>0.654</b>	<b>0.564</b>	<b>0.637</b>

#### **<WLAN Index 2>**

Exposure Position	1	1	1+2 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)	
	Right Cheek at 0mm	0.458	
Right Tilted at 0mm	0.435	0.784	<b>1.219</b>
Left Cheek at 0mm	0.985	0.453	<b>1.438</b>
Left Tilted at 0mm	0.895	0.545	<b>1.440</b>



**<WWAN Index 3, WLAN Index 3, BT Index 1>**

WWAN Band	Exposure Position	1	5	7	9	10	11	1+5	1+7	1+7+9	1+7+10	1+7+11
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+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)
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_Ant 0	Right Cheek	0.214	0.292	0.506	0.063	0.050	0.091	0.506	0.720	0.783	0.770	0.811
	Right Tilted	0.104	0.267	0.396	0.047	0.025	0.076	0.371	0.500	0.547	0.525	0.576
	Left Cheek	0.237	0.606	0.299	0.146	0.039	0.179	0.843	0.536	0.682	0.575	0.715
	Left Tilted	0.126	0.475	0.330	0.109	0.019	0.092	0.601	0.456	0.565	0.475	0.548
GSM1900_Ant 2	Right Cheek	0.187	0.292	0.506	0.063	0.050	0.091	0.479	0.693	0.756	0.743	0.784
	Right Tilted	0.074	0.267	0.396	0.047	0.025	0.076	0.341	0.470	0.517	0.495	0.546
	Left Cheek	0.091	0.606	0.299	0.146	0.039	0.179	0.697	0.390	0.536	0.429	0.569
	Left Tilted	0.005	0.475	0.330	0.109	0.019	0.092	0.480	0.335	0.444	0.354	0.427
WCDMA II_Ant 2	Right Cheek	0.225	0.292	0.506	0.063	0.050	0.091	0.517	0.731	0.794	0.781	0.822
	Right Tilted	0.078	0.267	0.396	0.047	0.025	0.076	0.345	0.474	0.521	0.499	0.550
	Left Cheek	0.105	0.606	0.299	0.146	0.039	0.179	0.711	0.404	0.550	0.443	0.583
	Left Tilted	0.101	0.475	0.330	0.109	0.019	0.092	0.576	0.431	0.540	0.450	0.523
WCDMA IV_Ant 2	Right Cheek	0.198	0.292	0.506	0.063	0.050	0.091	0.490	0.704	0.767	0.754	0.795
	Right Tilted	0.031	0.267	0.396	0.047	0.025	0.076	0.298	0.427	0.474	0.452	0.503
	Left Cheek	0.058	0.606	0.299	0.146	0.039	0.179	0.664	0.357	0.503	0.396	0.536
	Left Tilted	0.036	0.475	0.330	0.109	0.019	0.092	0.511	0.366	0.475	0.385	0.458
WCDMA V_Ant 0	Right Cheek	0.271	0.292	0.506	0.063	0.050	0.091	0.563	0.777	0.840	0.827	0.868
	Right Tilted	0.140	0.267	0.396	0.047	0.025	0.076	0.407	0.536	0.583	0.561	0.612
	Left Cheek	0.370	0.606	0.299	0.146	0.039	0.179	0.976	0.669	0.815	0.708	0.848
	Left Tilted	0.125	0.475	0.330	0.109	0.019	0.092	0.600	0.455	0.564	0.474	0.547
LTE Band 7_Ant 2	Right Cheek	0.279	0.292	0.506	0.063	0.050	0.091	0.571	0.785	0.848	0.835	0.876
	Right Tilted	0.181	0.267	0.396	0.047	0.025	0.076	0.448	0.577	0.624	0.602	0.653
	Left Cheek	0.238	0.606	0.299	0.146	0.039	0.179	0.844	0.537	0.683	0.576	0.716
	Left Tilted	0.203	0.475	0.330	0.109	0.019	0.092	0.678	0.533	0.642	0.552	0.625
LTE Band 12_Ant 0	Right Cheek	0.206	0.292	0.506	0.063	0.050	0.091	0.498	0.712	0.775	0.762	0.803
	Right Tilted	0.158	0.267	0.396	0.047	0.025	0.076	0.425	0.554	0.601	0.579	0.630
	Left Cheek	0.235	0.606	0.299	0.146	0.039	0.179	0.841	0.534	0.680	0.573	0.713
	Left Tilted	0.132	0.475	0.330	0.109	0.019	0.092	0.607	0.462	0.571	0.481	0.554
LTE Band 13_Ant 0	Right Cheek	0.208	0.292	0.506	0.063	0.050	0.091	0.500	0.714	0.777	0.764	0.805
	Right Tilted	0.172	0.267	0.396	0.047	0.025	0.076	0.439	0.568	0.615	0.593	0.644
	Left Cheek	0.322	0.606	0.299	0.146	0.039	0.179	0.928	0.621	0.767	0.660	0.800
	Left Tilted	0.139	0.475	0.330	0.109	0.019	0.092	0.614	0.469	0.578	0.488	0.561
LTE Band 14_Ant 0	Right Cheek	0.210	0.292	0.506	0.063	0.050	0.091	0.502	0.716	0.779	0.766	0.807
	Right Tilted	0.183	0.267	0.396	0.047	0.025	0.076	0.450	0.579	0.626	0.604	0.655
	Left Cheek	0.363	0.606	0.299	0.146	0.039	0.179	0.969	0.662	0.808	0.701	0.841
	Left Tilted	0.157	0.475	0.330	0.109	0.019	0.092	0.632	0.487	0.596	0.506	0.579
LTE Band 25_Ant 2	Right Cheek	0.306	0.292	0.506	0.063	0.050	0.091	0.598	0.812	0.875	0.862	0.903
	Right Tilted	0.059	0.267	0.396	0.047	0.025	0.076	0.326	0.455	0.502	0.480	0.531
	Left Cheek	0.121	0.606	0.299	0.146	0.039	0.179	0.727	0.420	0.566	0.459	0.599
	Left Tilted	0.098	0.475	0.330	0.109	0.019	0.092	0.573	0.428	0.537	0.447	0.520
LTE Band 26_Ant 0	Right Cheek	0.321	0.292	0.506	0.063	0.050	0.091	0.613	0.827	0.890	0.877	0.918
	Right Tilted	0.208	0.267	0.396	0.047	0.025	0.076	0.475	0.604	0.651	0.629	0.680
	Left Cheek	0.332	0.606	0.299	0.146	0.039	0.179	0.938	0.631	0.777	0.670	0.810
	Left Tilted	0.181	0.475	0.330	0.109	0.019	0.092	0.656	0.511	0.620	0.530	0.603
LTE Band 30_Ant 2	Right Cheek	0.136	0.292	0.506	0.063	0.050	0.091	0.428	0.642	0.705	0.692	0.733
	Right Tilted	0.051	0.267	0.396	0.047	0.025	0.076	0.318	0.447	0.494	0.472	0.523
	Left Cheek	0.091	0.606	0.299	0.146	0.039	0.179	0.697	0.390	0.536	0.429	0.569
	Left Tilted	0.065	0.475	0.330	0.109	0.019	0.092	0.540	0.395	0.504	0.414	0.487
LTE Band 41_Ant 2	Right Cheek	0.194	0.292	0.506	0.063	0.050	0.091	0.486	0.700	0.763	0.750	0.791
	Right Tilted	0.084	0.267	0.396	0.047	0.025	0.076	0.351	0.480	0.527	0.505	0.556
	Left Cheek	0.136	0.606	0.299	0.146	0.039	0.179	0.742	0.435	0.581	0.474	0.614



# FCC SAR TEST REPORT

Report No. : FA121931-04C

	Left Tilted	0.076	0.475	0.330	0.109	0.019	0.092	0.551	0.406	0.515	0.425	0.498
LTE Band 48_Ant 6	Right Cheek	0.187	0.292	0.506	0.063	0.050	0.091	0.479	0.693	0.756	0.743	0.784
	Right Tilted	0.182	0.267	0.396	0.047	0.025	0.076	0.449	0.578	0.625	0.603	0.654
	Left Cheek	0.347	0.606	0.299	0.146	0.039	0.179	0.953	0.646	0.792	0.685	0.825
	Left Tilted	0.101	0.475	0.330	0.109	0.019	0.092	0.576	0.431	0.540	0.450	0.523
LTE Band 66_Ant 2	Right Cheek	0.201	0.292	0.506	0.063	0.050	0.091	0.493	0.707	0.770	0.757	0.798
	Right Tilted	0.095	0.267	0.396	0.047	0.025	0.076	0.362	0.491	0.538	0.516	0.567
	Left Cheek	0.104	0.606	0.299	0.146	0.039	0.179	0.710	0.403	0.549	0.442	0.582
	Left Tilted	0.094	0.475	0.330	0.109	0.019	0.092	0.569	0.424	0.533	0.443	0.516
LTE Band 71_Ant 0	Right Cheek	0.112	0.292	0.506	0.063	0.050	0.091	0.404	0.618	0.681	0.668	0.709
	Right Tilted	0.089	0.267	0.396	0.047	0.025	0.076	0.356	0.485	0.532	0.510	0.561
	Left Cheek	0.230	0.606	0.299	0.146	0.039	0.179	0.836	0.529	0.675	0.568	0.708
	Left Tilted	0.150	0.475	0.330	0.109	0.019	0.092	0.625	0.480	0.589	0.499	0.572
FR1 n5_Ant 0	Right Cheek	0.224	0.292	0.506	0.063	0.050	0.091	0.516	0.730	0.793	0.780	0.821
	Right Tilted	0.142	0.267	0.396	0.047	0.025	0.076	0.409	0.538	0.585	0.563	0.614
	Left Cheek	0.305	0.606	0.299	0.146	0.039	0.179	0.911	0.604	0.750	0.643	0.783
	Left Tilted	0.186	0.475	0.330	0.109	0.019	0.092	0.661	0.516	0.625	0.535	0.608
FR1 n7_Ant 2	Right Cheek	0.301	0.292	0.506	0.063	0.050	0.091	0.593	0.807	0.870	0.857	0.898
	Right Tilted	0.117	0.267	0.396	0.047	0.025	0.076	0.384	0.513	0.560	0.538	0.589
	Left Cheek	0.173	0.606	0.299	0.146	0.039	0.179	0.779	0.472	0.618	0.511	0.651
	Left Tilted	0.146	0.475	0.330	0.109	0.019	0.092	0.621	0.476	0.585	0.495	0.568
FR1 n12_Ant 0	Right Cheek	0.219	0.292	0.506	0.063	0.050	0.091	0.511	0.725	0.788	0.775	0.816
	Right Tilted	0.134	0.267	0.396	0.047	0.025	0.076	0.401	0.530	0.577	0.555	0.606
	Left Cheek	0.254	0.606	0.299	0.146	0.039	0.179	0.860	0.553	0.699	0.592	0.732
	Left Tilted	0.148	0.475	0.330	0.109	0.019	0.092	0.623	0.478	0.587	0.497	0.570
FR1 n25_Ant 2	Right Cheek	0.295	0.292	0.506	0.063	0.050	0.091	0.587	0.801	0.864	0.851	0.892
	Right Tilted	0.134	0.267	0.396	0.047	0.025	0.076	0.401	0.530	0.577	0.555	0.606
	Left Cheek	0.124	0.606	0.299	0.146	0.039	0.179	0.730	0.423	0.569	0.462	0.602
	Left Tilted	0.133	0.475	0.330	0.109	0.019	0.092	0.608	0.463	0.572	0.482	0.555
FR1 n30_Ant 2	Right Cheek	0.228	0.292	0.506	0.063	0.050	0.091	0.520	0.734	0.797	0.784	0.825
	Right Tilted	0.144	0.267	0.396	0.047	0.025	0.076	0.411	0.540	0.587	0.565	0.616
	Left Cheek	0.159	0.606	0.299	0.146	0.039	0.179	0.765	0.458	0.604	0.497	0.637
	Left Tilted	0.101	0.475	0.330	0.109	0.019	0.092	0.576	0.431	0.540	0.450	0.523
FR1 n41_Ant 1	Right Cheek	0.780	0.292	0.506	0.063	0.050	0.091	1.072	1.286	1.349	1.336	1.377
	Right Tilted	0.897	0.267	0.396	0.047	0.025	0.076	1.164	1.293	1.340	1.318	1.369
	Left Cheek	0.301	0.606	0.299	0.146	0.039	0.179	0.907	0.600	0.746	0.639	0.779
	Left Tilted	0.334	0.475	0.330	0.109	0.019	0.092	0.809	0.664	0.773	0.683	0.756
FR1 n66_Ant 2	Right Cheek	0.210	0.292	0.506	0.063	0.050	0.091	0.502	0.716	0.779	0.766	0.807
	Right Tilted	0.097	0.267	0.396	0.047	0.025	0.076	0.364	0.493	0.540	0.518	0.569
	Left Cheek	0.108	0.606	0.299	0.146	0.039	0.179	0.714	0.407	0.553	0.446	0.586
	Left Tilted	0.110	0.475	0.330	0.109	0.019	0.092	0.585	0.440	0.549	0.459	0.532
FR1 n71_Ant 0	Right Cheek	0.192	0.292	0.506	0.063	0.050	0.091	0.484	0.698	0.761	0.748	0.789
	Right Tilted	0.112	0.267	0.396	0.047	0.025	0.076	0.379	0.508	0.555	0.533	0.584
	Left Cheek	0.151	0.606	0.299	0.146	0.039	0.179	0.757	0.450	0.596	0.489	0.629
	Left Tilted	0.114	0.475	0.330	0.109	0.019	0.092	0.589	0.444	0.553	0.463	0.536
FR1 n77_Ant 6	Right Cheek	0.347	0.292	0.506	0.063	0.050	0.091	0.639	0.853	0.916	0.903	0.944
	Right Tilted	0.311	0.267	0.396	0.047	0.025	0.076	0.578	0.707	0.754	0.732	0.783
	Left Cheek	0.615	0.606	0.299	0.146	0.039	0.179	1.221	0.914	1.060	0.953	1.093
	Left Tilted	0.225	0.475	0.330	0.109	0.019	0.092	0.700	0.555	0.664	0.574	0.647





**<WWAN Index 3, WLAN Index 3, BT Index 1>**

WWAN Band	Exposure Position	1	5	7	9	10	11	1+5	1+7	1+7+9	1+7+10	1+7+11
		WWAN	2.4GHz WLAN	5/6GHz WLAN	Bluetooth	Bluetooth	Bluetooth	Summed	Summed	Summed	Summed	Summed
		1g SAR (W/kg)	Ant 4+3	Ant 7+3	Ant 4	Ant 3	Ant 4+3	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	0.892	0.292	0.506	0.063	0.050	0.091	1.184	1.398	1.461	1.448	1.489
	Right Tilted	0.831	0.267	0.396	0.047	0.025	0.076	1.098	1.227	1.274	1.252	1.303
	Left Cheek	0.743	0.606	0.299	0.146	0.039	0.179	1.349	1.042	1.188	1.081	1.221
	Left Tilted	0.718	0.475	0.330	0.109	0.019	0.092	1.193	1.048	1.157	1.067	1.140
GSM1900_Ant 0	Right Cheek	0.078	0.292	0.506	0.063	0.050	0.091	0.370	0.584	0.647	0.634	0.675
	Right Tilted	0.054	0.267	0.396	0.047	0.025	0.076	0.321	0.450	0.497	0.475	0.526
	Left Cheek	0.216	0.606	0.299	0.146	0.039	0.179	0.822	0.515	0.661	0.554	0.694
	Left Tilted	0.065	0.475	0.330	0.109	0.019	0.092	0.540	0.395	0.504	0.414	0.487
WCDMA II_Ant 0	Right Cheek	0.129	0.292	0.506	0.063	0.050	0.091	0.421	0.635	0.698	0.685	0.726
	Right Tilted	0.113	0.267	0.396	0.047	0.025	0.076	0.380	0.509	0.556	0.534	0.585
	Left Cheek	0.303	0.606	0.299	0.146	0.039	0.179	0.909	0.602	0.748	0.641	0.781
	Left Tilted	0.127	0.475	0.330	0.109	0.019	0.092	0.602	0.457	0.566	0.476	0.549
WCDMA IV_Ant 0	Right Cheek	0.152	0.292	0.506	0.063	0.050	0.091	0.444	0.658	0.721	0.708	0.749
	Right Tilted	0.149	0.267	0.396	0.047	0.025	0.076	0.416	0.545	0.592	0.570	0.621
	Left Cheek	0.316	0.606	0.299	0.146	0.039	0.179	0.922	0.615	0.761	0.654	0.794
	Left Tilted	0.134	0.475	0.330	0.109	0.019	0.092	0.609	0.464	0.573	0.483	0.556
WCDMA V_Ant 1	Right Cheek	0.892	0.292	0.506	0.063	0.050	0.091	1.184	1.398	1.461	1.448	1.489
	Right Tilted	0.709	0.267	0.396	0.047	0.025	0.076	0.976	1.105	1.152	1.130	1.181
	Left Cheek	0.392	0.606	0.299	0.146	0.039	0.179	0.998	0.691	0.837	0.730	0.870
	Left Tilted	0.298	0.475	0.330	0.109	0.019	0.092	0.773	0.628	0.737	0.647	0.720
LTE Band 7_Ant 0	Right Cheek	0.178	0.292	0.506	0.063	0.050	0.091	0.470	0.684	0.747	0.734	0.775
	Right Tilted	0.212	0.267	0.396	0.047	0.025	0.076	0.479	0.608	0.655	0.633	0.684
	Left Cheek	0.366	0.606	0.299	0.146	0.039	0.179	0.972	0.665	0.811	0.704	0.844
	Left Tilted	0.133	0.475	0.330	0.109	0.019	0.092	0.608	0.463	0.572	0.482	0.555
LTE Band 12_Ant 1	Right Cheek	0.344	0.292	0.506	0.063	0.050	0.091	0.636	0.850	0.913	0.900	0.941
	Right Tilted	0.316	0.267	0.396	0.047	0.025	0.076	0.583	0.712	0.759	0.737	0.788
	Left Cheek	0.200	0.606	0.299	0.146	0.039	0.179	0.806	0.499	0.645	0.538	0.678
	Left Tilted	0.174	0.475	0.330	0.109	0.019	0.092	0.649	0.504	0.613	0.523	0.596
LTE Band 13_Ant 1	Right Cheek	0.430	0.292	0.506	0.063	0.050	0.091	0.722	0.936	0.999	0.986	1.027
	Right Tilted	0.349	0.267	0.396	0.047	0.025	0.076	0.616	0.745	0.792	0.770	0.821
	Left Cheek	0.282	0.606	0.299	0.146	0.039	0.179	0.888	0.581	0.727	0.620	0.760
	Left Tilted	0.265	0.475	0.330	0.109	0.019	0.092	0.740	0.595	0.704	0.614	0.687
LTE Band 14_Ant 1	Right Cheek	0.674	0.292	0.506	0.063	0.050	0.091	0.966	1.180	1.243	1.230	1.271
	Right Tilted	0.532	0.267	0.396	0.047	0.025	0.076	0.799	0.928	0.975	0.953	1.004
	Left Cheek	0.428	0.606	0.299	0.146	0.039	0.179	1.034	0.727	0.873	0.766	0.906
	Left Tilted	0.398	0.475	0.330	0.109	0.019	0.092	0.873	0.728	0.837	0.747	0.820
LTE Band 25_Ant 0	Right Cheek	0.123	0.292	0.506	0.063	0.050	0.091	0.415	0.629	0.692	0.679	0.720
	Right Tilted	0.077	0.267	0.396	0.047	0.025	0.076	0.344	0.473	0.520	0.498	0.549
	Left Cheek	0.381	0.606	0.299	0.146	0.039	0.179	0.987	0.680	0.826	0.719	0.859
	Left Tilted	0.175	0.475	0.330	0.109	0.019	0.092	0.650	0.505	0.614	0.524	0.597
LTE Band 26_Ant 1	Right Cheek	0.463	0.292	0.506	0.063	0.050	0.091	0.755	0.969	1.032	1.019	1.060
	Right Tilted	0.534	0.267	0.396	0.047	0.025	0.076	0.801	0.930	0.977	0.955	1.006
	Left Cheek	0.346	0.606	0.299	0.146	0.039	0.179	0.952	0.645	0.791	0.684	0.824
	Left Tilted	0.436	0.475	0.330	0.109	0.019	0.092	0.911	0.766	0.875	0.785	0.858
LTE Band 30_Ant 0	Right Cheek	0.118	0.292	0.506	0.063	0.050	0.091	0.410	0.624	0.687	0.674	0.715
	Right Tilted	0.083	0.267	0.396	0.047	0.025	0.076	0.350	0.479	0.526	0.504	0.555
	Left Cheek	0.240	0.606	0.299	0.146	0.039	0.179	0.846	0.539	0.685	0.578	0.718
	Left Tilted	0.113	0.475	0.330	0.109	0.019	0.092	0.588	0.443	0.552	0.462	0.535
LTE Band 41_Ant 0	Right Cheek	0.077	0.292	0.506	0.063	0.050	0.091	0.369	0.583	0.646	0.633	0.674
	Right Tilted	0.090	0.267	0.396	0.047	0.025	0.076	0.357	0.486	0.533	0.511	0.562
	Left Cheek	0.208	0.606	0.299	0.146	0.039	0.179	0.814	0.507	0.653	0.546	0.686



**FCC SAR TEST REPORT**

Report No. : FA121931-04C

	Left Tilted	0.071	0.475	0.330	0.109	0.019	0.092	0.546	0.401	0.510	0.420	0.493
LTE Band 48_Ant 2	Right Cheek	0.117	0.292	0.506	0.063	0.050	0.091	0.409	0.623	0.686	0.673	0.714
	Right Tilted	0.001	0.267	0.396	0.047	0.025	0.076	0.268	0.397	0.444	0.422	0.473
	Left Cheek	0.048	0.606	0.299	0.146	0.039	0.179	0.654	0.347	0.493	0.386	0.526
	Left Tilted	0.049	0.475	0.330	0.109	0.019	0.092	0.524	0.379	0.488	0.398	0.471
LTE Band 66_Ant 0	Right Cheek	0.109	0.292	0.506	0.063	0.050	0.091	0.401	0.615	0.678	0.665	0.706
	Right Tilted	0.161	0.267	0.396	0.047	0.025	0.076	0.428	0.557	0.604	0.582	0.633
	Left Cheek	0.312	0.606	0.299	0.146	0.039	0.179	0.918	0.611	0.757	0.650	0.790
	Left Tilted	0.229	0.475	0.330	0.109	0.019	0.092	0.704	0.559	0.668	0.578	0.651
LTE Band 71_Ant 1	Right Cheek	0.310	0.292	0.506	0.063	0.050	0.091	0.602	0.816	0.879	0.866	0.907
	Right Tilted	0.200	0.267	0.396	0.047	0.025	0.076	0.467	0.596	0.643	0.621	0.672
	Left Cheek	0.189	0.606	0.299	0.146	0.039	0.179	0.795	0.488	0.634	0.527	0.667
	Left Tilted	0.136	0.475	0.330	0.109	0.019	0.092	0.611	0.466	0.575	0.485	0.558
FR1 n5_Ant 1	Right Cheek	0.718	0.292	0.506	0.063	0.050	0.091	1.010	1.224	1.287	1.274	1.315
	Right Tilted	0.709	0.267	0.396	0.047	0.025	0.076	0.976	1.105	1.152	1.130	1.181
	Left Cheek	0.497	0.606	0.299	0.146	0.039	0.179	1.103	0.796	0.942	0.835	0.975
	Left Tilted	0.512	0.475	0.330	0.109	0.019	0.092	0.987	0.842	0.951	0.861	0.934
FR1 n7_Ant 0	Right Cheek	0.185	0.292	0.506	0.063	0.050	0.091	0.477	0.691	0.754	0.741	0.782
	Right Tilted	0.220	0.267	0.396	0.047	0.025	0.076	0.487	0.616	0.663	0.641	0.692
	Left Cheek	0.557	0.606	0.299	0.146	0.039	0.179	1.163	0.856	1.002	0.895	1.035
	Left Tilted	0.131	0.475	0.330	0.109	0.019	0.092	0.606	0.461	0.570	0.480	0.553
FR1 n12_Ant 1	Right Cheek	0.526	0.292	0.506	0.063	0.050	0.091	0.818	1.032	1.095	1.082	1.123
	Right Tilted	0.443	0.267	0.396	0.047	0.025	0.076	0.710	0.839	0.886	0.864	0.915
	Left Cheek	0.255	0.606	0.299	0.146	0.039	0.179	0.861	0.554	0.700	0.593	0.733
	Left Tilted	0.294	0.475	0.330	0.109	0.019	0.092	0.769	0.624	0.733	0.643	0.716
FR1 n25_Ant 0	Right Cheek	0.222	0.292	0.506	0.063	0.050	0.091	0.514	0.728	0.791	0.778	0.819
	Right Tilted	0.174	0.267	0.396	0.047	0.025	0.076	0.441	0.570	0.617	0.595	0.646
	Left Cheek	0.438	0.606	0.299	0.146	0.039	0.179	1.044	0.737	0.883	0.776	0.916
	Left Tilted	0.188	0.475	0.330	0.109	0.019	0.092	0.663	0.518	0.627	0.537	0.610
FR1 n30_Ant 0	Right Cheek	0.172	0.292	0.506	0.063	0.050	0.091	0.464	0.678	0.741	0.728	0.769
	Right Tilted	0.134	0.267	0.396	0.047	0.025	0.076	0.401	0.530	0.577	0.555	0.606
	Left Cheek	0.353	0.606	0.299	0.146	0.039	0.179	0.959	0.652	0.798	0.691	0.831
	Left Tilted	0.180	0.475	0.330	0.109	0.019	0.092	0.655	0.510	0.619	0.529	0.602
FR1 n41_Ant 5	Right Cheek	0.253	0.292	0.506	0.063	0.050	0.091	0.545	0.759	0.822	0.809	0.850
	Right Tilted	0.108	0.267	0.396	0.047	0.025	0.076	0.375	0.504	0.551	0.529	0.580
	Left Cheek	0.888	0.606	0.299	0.146	0.039	0.179	1.494	1.187	1.333	1.226	1.366
	Left Tilted	0.221	0.475	0.330	0.109	0.019	0.092	0.696	0.551	0.660	0.570	0.643
FR1 n66_Ant 0	Right Cheek	0.108	0.292	0.506	0.063	0.050	0.091	0.400	0.614	0.677	0.664	0.705
	Right Tilted	0.114	0.267	0.396	0.047	0.025	0.076	0.381	0.510	0.557	0.535	0.586
	Left Cheek	0.311	0.606	0.299	0.146	0.039	0.179	0.917	0.610	0.756	0.649	0.789
	Left Tilted	0.102	0.475	0.330	0.109	0.019	0.092	0.577	0.432	0.541	0.451	0.524
FR1 n71_Ant 1	Right Cheek	0.364	0.292	0.506	0.063	0.050	0.091	0.656	0.870	0.933	0.920	0.961
	Right Tilted	0.398	0.267	0.396	0.047	0.025	0.076	0.665	0.794	0.841	0.819	0.870
	Left Cheek	0.225	0.606	0.299	0.146	0.039	0.179	0.831	0.524	0.670	0.563	0.703
	Left Tilted	0.239	0.475	0.330	0.109	0.019	0.092	0.714	0.569	0.678	0.588	0.661
FR1 n77_Ant 2	Right Cheek	0.055	0.292	0.506	0.063	0.050	0.091	0.347	0.561	0.624	0.611	0.652
	Right Tilted	0.044	0.267	0.396	0.047	0.025	0.076	0.311	0.44	0.487	0.465	0.516
	Left Cheek	0.049	0.606	0.299	0.146	0.039	0.179	0.655	0.348	0.494	0.387	0.527
	Left Tilted	0.048	0.475	0.330	0.109	0.019	0.092	0.523	0.378	0.487	0.397	0.470



**<WWAN Index 3, WLAN Index 4>**

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 0	Right Cheek	0.214	0.110	0.506	<b>0.830</b>
	Right Tilted	0.104	0.094	0.396	<b>0.594</b>
	Left Cheek	0.237	0.174	0.299	<b>0.710</b>
	Left Tilted	0.126	0.104	0.262	<b>0.492</b>
GSM1900_Ant 2	Right Cheek	0.187	0.110	0.506	<b>0.803</b>
	Right Tilted	0.074	0.094	0.396	<b>0.564</b>
	Left Cheek	0.091	0.174	0.299	<b>0.564</b>
	Left Tilted	0.005	0.104	0.330	<b>0.439</b>
WCDMA II_Ant 2	Right Cheek	0.225	0.110	0.506	<b>0.841</b>
	Right Tilted	0.078	0.094	0.396	<b>0.568</b>
	Left Cheek	0.105	0.174	0.299	<b>0.578</b>
	Left Tilted	0.101	0.104	0.330	<b>0.535</b>
WCDMA IV_Ant 2	Right Cheek	0.198	0.110	0.506	<b>0.814</b>
	Right Tilted	0.031	0.094	0.396	<b>0.521</b>
	Left Cheek	0.058	0.174	0.299	<b>0.531</b>
	Left Tilted	0.036	0.104	0.330	<b>0.470</b>
WCDMA V_Ant 0	Right Cheek	0.271	0.110	0.506	<b>0.887</b>
	Right Tilted	0.140	0.094	0.396	<b>0.630</b>
	Left Cheek	0.370	0.174	0.299	<b>0.843</b>
	Left Tilted	0.125	0.104	0.330	<b>0.559</b>
LTE Band 7_Ant 2	Right Cheek	0.279	0.110	0.506	<b>0.895</b>
	Right Tilted	0.181	0.094	0.396	<b>0.671</b>
	Left Cheek	0.238	0.174	0.299	<b>0.711</b>
	Left Tilted	0.203	0.104	0.330	<b>0.637</b>
LTE Band 12_Ant 0	Right Cheek	0.206	0.110	0.506	<b>0.822</b>
	Right Tilted	0.158	0.094	0.396	<b>0.648</b>
	Left Cheek	0.235	0.174	0.299	<b>0.708</b>
	Left Tilted	0.132	0.104	0.330	<b>0.566</b>
LTE Band 13_Ant 0	Right Cheek	0.208	0.110	0.506	<b>0.824</b>
	Right Tilted	0.172	0.094	0.396	<b>0.662</b>
	Left Cheek	0.322	0.174	0.299	<b>0.795</b>
	Left Tilted	0.139	0.104	0.330	<b>0.573</b>
LTE Band 14_Ant 0	Right Cheek	0.210	0.110	0.506	<b>0.826</b>
	Right Tilted	0.183	0.094	0.396	<b>0.673</b>
	Left Cheek	0.363	0.174	0.299	<b>0.836</b>
	Left Tilted	0.157	0.104	0.330	<b>0.591</b>
LTE Band 25_Ant 2	Right Cheek	0.306	0.110	0.506	<b>0.922</b>
	Right Tilted	0.059	0.094	0.396	<b>0.549</b>
	Left Cheek	0.121	0.174	0.299	<b>0.594</b>
	Left Tilted	0.098	0.104	0.330	<b>0.532</b>
LTE Band 26_Ant 0	Right Cheek	0.321	0.110	0.506	<b>0.937</b>
	Right Tilted	0.208	0.094	0.396	<b>0.698</b>
	Left Cheek	0.332	0.174	0.299	<b>0.805</b>
	Left Tilted	0.181	0.104	0.330	<b>0.615</b>
LTE Band 30_Ant 2	Right Cheek	0.136	0.110	0.506	<b>0.752</b>
	Right Tilted	0.051	0.094	0.396	<b>0.541</b>
	Left Cheek	0.091	0.174	0.299	<b>0.564</b>
	Left Tilted	0.065	0.104	0.330	<b>0.499</b>
LTE Band 41_Ant 2	Right Cheek	0.194	0.110	0.506	<b>0.810</b>
	Right Tilted	0.084	0.094	0.396	<b>0.574</b>
	Left Cheek	0.136	0.174	0.299	<b>0.609</b>



	Left Tilted	0.076	0.104	0.330	<b>0.510</b>
LTE Band 48_Ant 6	Right Cheek	0.187	0.110	0.506	<b>0.803</b>
	Right Tilted	0.182	0.094	0.396	<b>0.672</b>
	Left Cheek	0.347	0.174	0.299	<b>0.820</b>
	Left Tilted	0.101	0.104	0.330	<b>0.535</b>
	Right Cheek	0.201	0.110	0.506	<b>0.817</b>
LTE Band 66_Ant 2	Right Tilted	0.095	0.094	0.396	<b>0.585</b>
	Left Cheek	0.104	0.174	0.299	<b>0.577</b>
	Left Tilted	0.094	0.104	0.330	<b>0.528</b>
	Right Cheek	0.112	0.110	0.506	<b>0.728</b>
LTE Band 71_Ant 0	Right Tilted	0.089	0.094	0.396	<b>0.579</b>
	Left Cheek	0.230	0.174	0.299	<b>0.703</b>
	Left Tilted	0.150	0.104	0.330	<b>0.584</b>
	Right Cheek	0.224	0.110	0.506	<b>0.840</b>
FR1 n5_Ant 0	Right Tilted	0.142	0.094	0.396	<b>0.632</b>
	Left Cheek	0.305	0.174	0.299	<b>0.778</b>
	Left Tilted	0.186	0.104	0.330	<b>0.620</b>
	Right Cheek	0.301	0.110	0.506	<b>0.917</b>
FR1 n7_Ant 2	Right Tilted	0.117	0.094	0.396	<b>0.607</b>
	Left Cheek	0.173	0.174	0.299	<b>0.646</b>
	Left Tilted	0.146	0.104	0.330	<b>0.580</b>
	Right Cheek	0.219	0.110	0.506	<b>0.835</b>
FR1 n12_Ant 0	Right Tilted	0.134	0.094	0.396	<b>0.624</b>
	Left Cheek	0.254	0.174	0.299	<b>0.727</b>
	Left Tilted	0.148	0.104	0.330	<b>0.582</b>
	Right Cheek	0.295	0.110	0.506	<b>0.911</b>
FR1 n25_Ant 2	Right Tilted	0.134	0.094	0.396	<b>0.624</b>
	Left Cheek	0.124	0.174	0.299	<b>0.597</b>
	Left Tilted	0.133	0.104	0.330	<b>0.567</b>
	Right Cheek	0.228	0.110	0.506	<b>0.844</b>
FR1 n30_Ant 2	Right Tilted	0.144	0.094	0.396	<b>0.634</b>
	Left Cheek	0.159	0.174	0.299	<b>0.632</b>
	Left Tilted	0.101	0.104	0.330	<b>0.535</b>
	Right Cheek	0.780	0.110	0.506	<b>1.396</b>
FR1 n41_Ant 1	Right Tilted	0.897	0.094	0.396	<b>1.387</b>
	Left Cheek	0.301	0.174	0.299	<b>0.774</b>
	Left Tilted	0.334	0.104	0.330	<b>0.768</b>
	Right Cheek	0.210	0.110	0.506	<b>0.826</b>
FR1 n66_Ant 2	Right Tilted	0.097	0.094	0.396	<b>0.587</b>
	Left Cheek	0.108	0.174	0.299	<b>0.581</b>
	Left Tilted	0.110	0.104	0.330	<b>0.544</b>
	Right Cheek	0.192	0.110	0.506	<b>0.808</b>
FR1 n71_Ant 0	Right Tilted	0.112	0.094	0.396	<b>0.602</b>
	Left Cheek	0.151	0.174	0.299	<b>0.624</b>
	Left Tilted	0.114	0.104	0.330	<b>0.548</b>
	Right Cheek	0.347	0.110	0.506	<b>0.963</b>
FR1 n77_Ant 6	Right Tilted	0.311	0.094	0.396	<b>0.801</b>
	Left Cheek	0.615	0.174	0.299	<b>1.088</b>
	Left Tilted	0.225	0.104	0.330	<b>0.659</b>



**<WWAN Index 3, WLAN Index 4>**

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Right Cheek	0.892	0.110	0.506	1.508
	Right Tilted	0.831	0.094	0.396	1.321
	Left Cheek	0.743	0.174	0.299	1.216
	Left Tilted	0.718	0.104	0.262	1.084
GSM1900_Ant 0	Right Cheek	0.078	0.110	0.506	0.694
	Right Tilted	0.054	0.094	0.396	0.544
	Left Cheek	0.216	0.174	0.299	0.689
	Left Tilted	0.065	0.104	0.262	0.431
WCDMA II_Ant 0	Right Cheek	0.129	0.110	0.506	0.745
	Right Tilted	0.113	0.094	0.396	0.603
	Left Cheek	0.303	0.174	0.299	0.776
	Left Tilted	0.127	0.104	0.262	0.493
WCDMA IV_Ant 0	Right Cheek	0.152	0.110	0.506	0.768
	Right Tilted	0.149	0.094	0.396	0.639
	Left Cheek	0.316	0.174	0.299	0.789
	Left Tilted	0.134	0.104	0.262	0.500
WCDMA V_Ant 1	Right Cheek	0.892	0.110	0.506	1.508
	Right Tilted	0.709	0.094	0.396	1.199
	Left Cheek	0.392	0.174	0.299	0.865
	Left Tilted	0.298	0.104	0.262	0.664
LTE Band 7_Ant 0	Right Cheek	0.178	0.110	0.506	0.794
	Right Tilted	0.212	0.094	0.396	0.702
	Left Cheek	0.366	0.174	0.299	0.839
	Left Tilted	0.133	0.104	0.262	0.499
LTE Band 12_Ant 1	Right Cheek	0.344	0.110	0.506	0.960
	Right Tilted	0.316	0.094	0.396	0.806
	Left Cheek	0.200	0.174	0.299	0.673
	Left Tilted	0.174	0.104	0.262	0.540
LTE Band 13_Ant 1	Right Cheek	0.430	0.110	0.506	1.046
	Right Tilted	0.349	0.094	0.396	0.839
	Left Cheek	0.282	0.174	0.299	0.755
	Left Tilted	0.265	0.104	0.262	0.631
LTE Band 14_Ant 1	Right Cheek	0.674	0.110	0.506	1.290
	Right Tilted	0.532	0.094	0.396	1.022
	Left Cheek	0.428	0.174	0.299	0.901
	Left Tilted	0.398	0.104	0.262	0.764
LTE Band 25_Ant 0	Right Cheek	0.123	0.110	0.506	0.739
	Right Tilted	0.077	0.094	0.396	0.567
	Left Cheek	0.381	0.174	0.299	0.854
	Left Tilted	0.175	0.104	0.262	0.541
LTE Band 26_Ant 1	Right Cheek	0.463	0.110	0.506	1.079
	Right Tilted	0.534	0.094	0.396	1.024
	Left Cheek	0.346	0.174	0.299	0.819
	Left Tilted	0.436	0.104	0.262	0.802
LTE Band 30_Ant 0	Right Cheek	0.118	0.110	0.506	0.734
	Right Tilted	0.083	0.094	0.396	0.573
	Left Cheek	0.240	0.174	0.299	0.713
	Left Tilted	0.113	0.104	0.262	0.479
LTE Band 41_Ant 0	Right Cheek	0.077	0.110	0.506	0.693
	Right Tilted	0.090	0.094	0.396	0.580
	Left Cheek	0.208	0.174	0.299	0.681



	Left Tilted	0.071	0.104	0.262	<b>0.437</b>
LTE Band 48_Ant 2	Right Cheek	0.117	0.110	0.506	<b>0.733</b>
	Right Tilted	0.001	0.094	0.396	<b>0.491</b>
	Left Cheek	0.048	0.174	0.299	<b>0.521</b>
	Left Tilted	0.049	0.104	0.262	<b>0.415</b>
LTE Band 66_Ant 0	Right Cheek	0.109	0.110	0.506	<b>0.725</b>
	Right Tilted	0.161	0.094	0.396	<b>0.651</b>
	Left Cheek	0.312	0.174	0.299	<b>0.785</b>
	Left Tilted	0.229	0.104	0.262	<b>0.595</b>
LTE Band 71_Ant 1	Right Cheek	0.310	0.110	0.506	<b>0.926</b>
	Right Tilted	0.200	0.094	0.396	<b>0.690</b>
	Left Cheek	0.189	0.174	0.299	<b>0.662</b>
	Left Tilted	0.136	0.104	0.262	<b>0.502</b>
FR1 n5_Ant 1	Right Cheek	0.718	0.110	0.506	<b>1.334</b>
	Right Tilted	0.709	0.094	0.396	<b>1.199</b>
	Left Cheek	0.497	0.174	0.299	<b>0.970</b>
	Left Tilted	0.512	0.104	0.262	<b>0.878</b>
FR1 n7_Ant 0	Right Cheek	0.185	0.110	0.506	<b>0.801</b>
	Right Tilted	0.220	0.094	0.396	<b>0.710</b>
	Left Cheek	0.557	0.174	0.299	<b>1.030</b>
	Left Tilted	0.131	0.104	0.262	<b>0.497</b>
FR1 n12_Ant 1	Right Cheek	0.526	0.110	0.506	<b>1.142</b>
	Right Tilted	0.443	0.094	0.396	<b>0.933</b>
	Left Cheek	0.255	0.174	0.299	<b>0.728</b>
	Left Tilted	0.294	0.104	0.262	<b>0.660</b>
FR1 n25_Ant 0	Right Cheek	0.222	0.110	0.506	<b>0.838</b>
	Right Tilted	0.174	0.094	0.396	<b>0.664</b>
	Left Cheek	0.438	0.174	0.299	<b>0.911</b>
	Left Tilted	0.188	0.104	0.262	<b>0.554</b>
FR1 n30_Ant 0	Right Cheek	0.172	0.110	0.506	<b>0.788</b>
	Right Tilted	0.134	0.094	0.396	<b>0.624</b>
	Left Cheek	0.353	0.174	0.299	<b>0.826</b>
	Left Tilted	0.180	0.104	0.262	<b>0.546</b>
FR1 n41_Ant 5	Right Cheek	0.253	0.110	0.506	<b>0.869</b>
	Right Tilted	0.108	0.094	0.396	<b>0.598</b>
	Left Cheek	0.888	0.174	0.299	<b>1.361</b>
	Left Tilted	0.221	0.104	0.262	<b>0.587</b>
FR1 n66_Ant 0	Right Cheek	0.108	0.110	0.506	<b>0.724</b>
	Right Tilted	0.114	0.094	0.396	<b>0.604</b>
	Left Cheek	0.311	0.174	0.299	<b>0.784</b>
	Left Tilted	0.102	0.104	0.262	<b>0.468</b>
FR1 n71_Ant 1	Right Cheek	0.364	0.110	0.506	<b>0.980</b>
	Right Tilted	0.398	0.094	0.396	<b>0.888</b>
	Left Cheek	0.225	0.174	0.299	<b>0.698</b>
	Left Tilted	0.239	0.104	0.262	<b>0.605</b>
FR1 n77_Ant 2	Right Cheek	0.055	0.110	0.506	<b>0.671</b>
	Right Tilted	0.044	0.094	0.396	<b>0.534</b>
	Left Cheek	0.049	0.174	0.299	<b>0.522</b>
	Left Tilted	0.048	0.104	0.262	<b>0.414</b>



**16.3 Hotspot Exposure Conditions**

**<WWAN Index 4, WLAN Index 7>**

WWAN Band	Exposure Position	1	5	7	1+5 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850_Ant 0	Front	0.151	0.269	0.103	<b>0.420</b>	<b>0.254</b>
	Back	0.494	0.369	0.541	<b>0.863</b>	<b>1.035</b>
	Left side	0.129	0.614	0.318	<b>0.743</b>	<b>0.447</b>
	Right side	0.048	0.109	0.164	<b>0.157</b>	<b>0.212</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.098			<b>0.098</b>	<b>0.098</b>
GSM1900_Ant 2	Front	0.310	0.269	0.103	<b>0.579</b>	<b>0.413</b>
	Back	0.460	0.369	0.541	<b>0.829</b>	<b>1.001</b>
	Left side	0.156	0.614	0.318	<b>0.770</b>	<b>0.474</b>
	Right side	0.193	0.109	0.164	<b>0.302</b>	<b>0.357</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.907			<b>0.907</b>	<b>0.907</b>
WCDMA II_Ant 2	Front	0.446	0.269	0.103	<b>0.715</b>	<b>0.549</b>
	Back	0.681	0.369	0.541	<b>1.050</b>	<b>1.222</b>
	Left side	0.005	0.614	0.318	<b>0.619</b>	<b>0.323</b>
	Right side	0.240	0.109	0.164	<b>0.349</b>	<b>0.404</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.878			<b>0.878</b>	<b>0.878</b>
WCDMA IV_Ant 2	Front	0.477	0.269	0.103	<b>0.746</b>	<b>0.580</b>
	Back	0.737	0.369	0.541	<b>1.106</b>	<b>1.278</b>
	Left side	0.234	0.614	0.318	<b>0.848</b>	<b>0.552</b>
	Right side	0.377	0.109	0.164	<b>0.486</b>	<b>0.541</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.892			<b>0.892</b>	<b>0.892</b>
WCDMA V_Ant 0	Front	0.261	0.269	0.103	<b>0.530</b>	<b>0.364</b>
	Back	0.363	0.369	0.541	<b>0.732</b>	<b>0.904</b>
	Left side	0.264	0.614	0.318	<b>0.878</b>	<b>0.582</b>
	Right side	0.105	0.109	0.164	<b>0.214</b>	<b>0.269</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.317			<b>0.317</b>	<b>0.317</b>
LTE Band 7_Ant 2	Front	0.619	0.269	0.103	<b>0.888</b>	<b>0.722</b>
	Back	0.903	0.369	0.541	<b>1.272</b>	<b>1.444</b>
	Left side	0.040	0.614	0.318	<b>0.654</b>	<b>0.358</b>
	Right side	0.899	0.109	0.164	<b>1.008</b>	<b>1.063</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.895			<b>0.895</b>	<b>0.895</b>
LTE Band 12_Ant 0	Front	0.199	0.269	0.103	<b>0.468</b>	<b>0.302</b>
	Back	0.313	0.369	0.541	<b>0.682</b>	<b>0.854</b>
	Left side	0.243	0.614	0.318	<b>0.857</b>	<b>0.561</b>
	Right side	0.159	0.109	0.164	<b>0.268</b>	<b>0.323</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.251			<b>0.251</b>	<b>0.251</b>
LTE Band 13_Ant 0	Front	0.318	0.269	0.103	<b>0.587</b>	<b>0.421</b>
	Back	0.341	0.369	0.541	<b>0.710</b>	<b>0.882</b>
	Left side	0.288	0.614	0.318	<b>0.902</b>	<b>0.606</b>
	Right side	0.213	0.109	0.164	<b>0.322</b>	<b>0.377</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.288			<b>0.288</b>	<b>0.288</b>
LTE Band 14_Ant 0	Front	0.256	0.269	0.103	<b>0.525</b>	<b>0.359</b>





	Back	0.328	0.369	0.541	<b>0.697</b>	<b>0.869</b>
	Left side	0.303	0.614	0.318	<b>0.917</b>	<b>0.621</b>
	Right side	0.224	0.109	0.164	<b>0.333</b>	<b>0.388</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.211			<b>0.211</b>	<b>0.211</b>
LTE Band 25_Ant 2	Front	0.481	0.269	0.103	<b>0.750</b>	<b>0.584</b>
	Back	0.565	0.369	0.541	<b>0.934</b>	<b>1.106</b>
	Left side	0.286	0.614	0.318	<b>0.900</b>	<b>0.604</b>
	Right side	0.312	0.109	0.164	<b>0.421</b>	<b>0.476</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.908			<b>0.908</b>	<b>0.908</b>
LTE Band 26_Ant 0	Front	0.299	0.269	0.103	<b>0.568</b>	<b>0.402</b>
	Back	0.375	0.369	0.541	<b>0.744</b>	<b>0.916</b>
	Left side	0.290	0.614	0.318	<b>0.904</b>	<b>0.608</b>
	Right side	0.101	0.109	0.164	<b>0.210</b>	<b>0.265</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.159			<b>0.159</b>	<b>0.159</b>
LTE Band 30_Ant 2	Front	0.591	0.269	0.103	<b>0.860</b>	<b>0.694</b>
	Back	0.900	0.369	0.541	<b>1.269</b>	<b>1.441</b>
	Left side	0.028	0.614	0.318	<b>0.642</b>	<b>0.346</b>
	Right side	0.869	0.109	0.164	<b>0.978</b>	<b>1.033</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.854			<b>0.854</b>	<b>0.854</b>
LTE Band 41_Ant 2	Front	0.560	0.269	0.103	<b>0.829</b>	<b>0.663</b>
	Back	0.898	0.369	0.541	<b>1.267</b>	<b>1.439</b>
	Left side	0.062	0.614	0.318	<b>0.676</b>	<b>0.380</b>
	Right side	0.801	0.109	0.164	<b>0.910</b>	<b>0.965</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.879			<b>0.879</b>	<b>0.879</b>
LTE Band 48_Ant 6	Front	0.353	0.269	0.103	<b>0.622</b>	<b>0.456</b>
	Back	0.767	0.369	0.541	<b>1.136</b>	<b>1.308</b>
	Left side	0.893	0.614	0.318	<b>1.507</b>	<b>1.211</b>
	Right side	0.086	0.109	0.164	<b>0.195</b>	<b>0.250</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.072			<b>0.072</b>	<b>0.072</b>
LTE Band 66_Ant 2	Front	0.492	0.269	0.103	<b>0.761</b>	<b>0.595</b>
	Back	0.516	0.369	0.541	<b>0.885</b>	<b>1.057</b>
	Left side	0.246	0.614	0.318	<b>0.860</b>	<b>0.564</b>
	Right side	0.294	0.109	0.164	<b>0.403</b>	<b>0.458</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.892			<b>0.892</b>	<b>0.892</b>
LTE Band 71_Ant 0	Front	0.245	0.269	0.103	<b>0.514</b>	<b>0.348</b>
	Back	0.324	0.369	0.541	<b>0.693</b>	<b>0.865</b>
	Left side	0.273	0.614	0.318	<b>0.887</b>	<b>0.591</b>
	Right side	0.168	0.109	0.164	<b>0.277</b>	<b>0.332</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.049			<b>0.049</b>	<b>0.049</b>
FR1 n5_Ant 0	Front	0.229	0.269	0.103	<b>0.498</b>	<b>0.332</b>
	Back	0.404	0.369	0.541	<b>0.773</b>	<b>0.945</b>
	Left side	0.179	0.614	0.318	<b>0.793</b>	<b>0.497</b>
	Right side	0.077	0.109	0.164	<b>0.186</b>	<b>0.241</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.236			<b>0.236</b>	<b>0.236</b>
FR1 n7_Ant 2	Front	0.491	0.269	0.103	<b>0.760</b>	<b>0.594</b>
	Back	0.895	0.369	0.541	<b>1.264</b>	<b>1.436</b>
	Left side	0.097	0.614	0.318	<b>0.711</b>	<b>0.415</b>





	Right side	0.870	0.109	0.164	<b>0.979</b>	<b>1.034</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.752			<b>0.752</b>	<b>0.752</b>
FR1 n12_Ant 0	Front	0.230	0.269	0.103	<b>0.499</b>	<b>0.333</b>
	Back	0.249	0.369	0.541	<b>0.618</b>	<b>0.790</b>
	Left side	0.240	0.614	0.318	<b>0.854</b>	<b>0.558</b>
	Right side	0.177	0.109	0.164	<b>0.286</b>	<b>0.341</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.234			<b>0.234</b>	<b>0.234</b>
FR1 n25_Ant 2	Front	0.522	0.269	0.103	<b>0.791</b>	<b>0.625</b>
	Back	0.544	0.369	0.541	<b>0.913</b>	<b>1.085</b>
	Left side	0.287	0.614	0.318	<b>0.901</b>	<b>0.605</b>
	Right side	0.406	0.109	0.164	<b>0.515</b>	<b>0.570</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.843			<b>0.843</b>	<b>0.843</b>
FR1 n30_Ant 2	Front	0.579	0.269	0.103	<b>0.848</b>	<b>0.682</b>
	Back	0.898	0.369	0.541	<b>1.267</b>	<b>1.439</b>
	Left side	0.036	0.614	0.318	<b>0.650</b>	<b>0.354</b>
	Right side	0.746	0.109	0.164	<b>0.855</b>	<b>0.910</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.764			<b>0.764</b>	<b>0.764</b>
FR1 n41_Ant 1	Front	0.341	0.269	0.103	<b>0.610</b>	<b>0.444</b>
	Back	0.646	0.369	0.541	<b>1.015</b>	<b>1.187</b>
	Left side	0.146	0.614	0.318	<b>0.760</b>	<b>0.464</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.885	0.191	0.278	<b>1.076</b>	<b>1.163</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 2	Front	0.443	0.269	0.103	<b>0.712</b>	<b>0.546</b>
	Back	0.652	0.369	0.541	<b>1.021</b>	<b>1.193</b>
	Left side	0.174	0.614	0.318	<b>0.788</b>	<b>0.492</b>
	Right side	0.390	0.109	0.164	<b>0.499</b>	<b>0.554</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.864			<b>0.864</b>	<b>0.864</b>
FR1 n71_Ant 0	Front	0.268	0.269	0.103	<b>0.537</b>	<b>0.371</b>
	Back	0.288	0.369	0.541	<b>0.657</b>	<b>0.829</b>
	Left side	0.271	0.614	0.318	<b>0.885</b>	<b>0.589</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.082			<b>0.082</b>	<b>0.082</b>
FR1 n77_Ant 6	Front	0.337	0.269	0.103	<b>0.606</b>	<b>0.440</b>
	Back	0.605	0.369	0.541	<b>0.974</b>	<b>1.146</b>
	Left side	0.894	0.614	0.318	<b>1.508</b>	<b>1.212</b>
	Right side	0.058	0.109	0.164	<b>0.167</b>	<b>0.222</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.168			<b>0.168</b>	<b>0.168</b>



**<WWAN Index 4, WLAN Index 7>**

WWAN Band	Exposure Position	1	5	7	1+5 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)		
GSM850_Ant 1	Front	0.234	0.269	0.103	<b>0.503</b>	<b>0.337</b>
	Back	0.502	0.369	0.541	<b>0.871</b>	<b>1.043</b>
	Left side	0.190	0.614	0.318	<b>0.804</b>	<b>0.508</b>
	Right side	0.085	0.109	0.164	<b>0.194</b>	<b>0.249</b>
	Top side	0.306	0.191	0.278	<b>0.497</b>	<b>0.584</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
GSM1900_Ant 0	Front	0.390	0.269	0.103	<b>0.659</b>	<b>0.493</b>
	Back	0.688	0.369	0.541	<b>1.057</b>	<b>1.229</b>
	Left side	0.363	0.614	0.318	<b>0.977</b>	<b>0.681</b>
	Right side	0.036	0.109	0.164	<b>0.145</b>	<b>0.200</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.253			<b>0.253</b>	<b>0.253</b>
WCDMA II_Ant 0	Front	0.397	0.269	0.103	<b>0.666</b>	<b>0.500</b>
	Back	0.903	0.369	0.541	<b>1.272</b>	<b>1.444</b>
	Left side	0.599	0.614	0.318	<b>1.213</b>	<b>0.917</b>
	Right side	0.005	0.109	0.164	<b>0.114</b>	<b>0.169</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.372			<b>0.372</b>	<b>0.372</b>
WCDMA IV_Ant 0	Front	0.320	0.269	0.103	<b>0.589</b>	<b>0.423</b>
	Back	0.606	0.369	0.541	<b>0.975</b>	<b>1.147</b>
	Left side	0.387	0.614	0.318	<b>1.001</b>	<b>0.705</b>
	Right side	0.203	0.109	0.164	<b>0.312</b>	<b>0.367</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.205			<b>0.205</b>	<b>0.205</b>
WCDMA V_Ant 1	Front	0.185	0.269	0.103	<b>0.454</b>	<b>0.288</b>
	Back	0.366	0.369	0.541	<b>0.735</b>	<b>0.907</b>
	Left side	0.150	0.614	0.318	<b>0.764</b>	<b>0.468</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.228	0.191	0.278	<b>0.419</b>	<b>0.506</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 7_Ant 0	Front	0.365	0.269	0.103	<b>0.634</b>	<b>0.468</b>
	Back	0.386	0.369	0.541	<b>0.755</b>	<b>0.927</b>
	Left side	0.907	0.614	0.318	<b>1.521</b>	<b>1.225</b>
	Right side	0.085	0.109	0.164	<b>0.194</b>	<b>0.249</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.507			<b>0.507</b>	<b>0.507</b>
LTE Band 12_Ant 1	Front	0.164	0.269	0.103	<b>0.433</b>	<b>0.267</b>
	Back	0.283	0.369	0.541	<b>0.652</b>	<b>0.824</b>
	Left side	0.162	0.614	0.318	<b>0.776</b>	<b>0.480</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.166	0.191	0.278	<b>0.357</b>	<b>0.444</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 13_Ant 1	Front	0.164	0.269	0.103	<b>0.433</b>	<b>0.267</b>
	Back	0.305	0.369	0.541	<b>0.674</b>	<b>0.846</b>
	Left side	0.112	0.614	0.318	<b>0.726</b>	<b>0.430</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.160	0.191	0.278	<b>0.351</b>	<b>0.438</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 14_Ant 1	Front	0.150	0.269	0.103	<b>0.419</b>	<b>0.253</b>
	Back	0.286	0.369	0.541	<b>0.655</b>	<b>0.827</b>
	Left side	0.126	0.614	0.318	<b>0.740</b>	<b>0.444</b>



	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.172	0.191	0.278	<b>0.363</b>	<b>0.450</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 25_Ant 0	Front	0.340	0.269	0.103	<b>0.609</b>	<b>0.443</b>
	Back	0.903	0.369	0.541	<b>1.272</b>	<b>1.444</b>
	Left side	0.579	0.614	0.318	<b>1.193</b>	<b>0.897</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.518			<b>0.518</b>	<b>0.518</b>
LTE Band 26_Ant 1	Front	0.195	0.269	0.103	<b>0.464</b>	<b>0.298</b>
	Back	0.358	0.369	0.541	<b>0.727</b>	<b>0.899</b>
	Left side	0.121	0.614	0.318	<b>0.735</b>	<b>0.439</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.188			<b>0.188</b>	<b>0.188</b>
LTE Band 30_Ant 0	Front	0.340	0.269	0.103	<b>0.609</b>	<b>0.443</b>
	Back	0.529	0.369	0.541	<b>0.898</b>	<b>1.070</b>
	Left side	0.682	0.614	0.318	<b>1.296</b>	<b>1.000</b>
	Right side	0.002	0.109	0.164	<b>0.111</b>	<b>0.166</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.203			<b>0.203</b>	<b>0.203</b>
LTE Band 41_Ant 0	Front	0.248	0.269	0.103	<b>0.517</b>	<b>0.351</b>
	Back	0.334	0.369	0.541	<b>0.703</b>	<b>0.875</b>
	Left side	0.873	0.614	0.318	<b>1.487</b>	<b>1.191</b>
	Right side	0.062	0.109	0.164	<b>0.171</b>	<b>0.226</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.425			<b>0.425</b>	<b>0.425</b>
LTE Band 48_Ant 2	Front	0.137	0.269	0.103	<b>0.406</b>	<b>0.240</b>
	Back	0.132	0.369	0.541	<b>0.501</b>	<b>0.673</b>
	Left side	0.061	0.614	0.318	<b>0.675</b>	<b>0.379</b>
	Right side	0.306	0.109	0.164	<b>0.415</b>	<b>0.470</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.072			<b>0.072</b>	<b>0.072</b>
LTE Band 66_Ant 0	Front	0.315	0.269	0.103	<b>0.584</b>	<b>0.418</b>
	Back	0.532	0.369	0.541	<b>0.901</b>	<b>1.073</b>
	Left side	0.831	0.614	0.318	<b>1.445</b>	<b>1.149</b>
	Right side	0.051	0.109	0.164	<b>0.160</b>	<b>0.215</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.252			<b>0.252</b>	<b>0.252</b>
LTE Band 71_Ant 1	Front	0.129	0.269	0.103	<b>0.398</b>	<b>0.232</b>
	Back	0.238	0.369	0.541	<b>0.607</b>	<b>0.779</b>
	Left side	0.218	0.614	0.318	<b>0.832</b>	<b>0.536</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.159	0.191	0.278	<b>0.350</b>	<b>0.437</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n5_Ant 1	Front	0.196	0.269	0.103	<b>0.465</b>	<b>0.299</b>
	Back	0.382	0.369	0.541	<b>0.751</b>	<b>0.923</b>
	Left side	0.121	0.614	0.318	<b>0.735</b>	<b>0.439</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.220	0.191	0.278	<b>0.411</b>	<b>0.498</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n7_Ant 0	Front	0.189	0.269	0.103	<b>0.458</b>	<b>0.292</b>
	Back	0.400	0.369	0.541	<b>0.769</b>	<b>0.941</b>
	Left side	0.888	0.614	0.318	<b>1.502</b>	<b>1.206</b>
	Right side	0.109	0.109	0.164	<b>0.218</b>	<b>0.273</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>



	Bottom side	0.594			<b>0.594</b>	<b>0.594</b>
FR1 n12_Ant 1	Front	0.146	0.269	0.103	<b>0.415</b>	<b>0.249</b>
	Back	0.290	0.369	0.541	<b>0.659</b>	<b>0.831</b>
	Left side	0.134	0.614	0.318	<b>0.748</b>	<b>0.452</b>
	Right side	0.001	0.109	0.164	<b>0.110</b>	<b>0.165</b>
	Top side	0.188	0.191	0.278	<b>0.379</b>	<b>0.466</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n25_Ant 0	Front	0.567	0.269	0.103	<b>0.836</b>	<b>0.670</b>
	Back	0.903	0.369	0.541	<b>1.272</b>	<b>1.444</b>
	Left side	0.505	0.614	0.318	<b>1.119</b>	<b>0.823</b>
	Right side	0.039	0.109	0.164	<b>0.148</b>	<b>0.203</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.425			<b>0.425</b>	<b>0.425</b>
FR1 n30_Ant 0	Front	0.457	0.269	0.103	<b>0.726</b>	<b>0.560</b>
	Back	0.489	0.369	0.541	<b>0.858</b>	<b>1.030</b>
	Left side	0.778	0.614	0.318	<b>1.392</b>	<b>1.096</b>
	Right side	0.106	0.109	0.164	<b>0.215</b>	<b>0.270</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.326			<b>0.326</b>	<b>0.326</b>
FR1 n41_Ant 5	Front	0.256	0.269	0.103	<b>0.525</b>	<b>0.359</b>
	Back	0.408	0.369	0.541	<b>0.777</b>	<b>0.949</b>
	Left side	0.050	0.614	0.318	<b>0.664</b>	<b>0.368</b>
	Right side	0.883	0.109	0.164	<b>0.992</b>	<b>1.047</b>
	Top side	0.102	0.191	0.278	<b>0.293</b>	<b>0.380</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 0	Front	0.611	0.269	0.103	<b>0.880</b>	<b>0.714</b>
	Back	0.846	0.369	0.541	<b>1.215</b>	<b>1.387</b>
	Left side	0.754	0.614	0.318	<b>1.368</b>	<b>1.072</b>
	Right side	0.065	0.109	0.164	<b>0.174</b>	<b>0.229</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.611			<b>0.611</b>	<b>0.611</b>
FR1 n71_Ant 1	Front	0.130	0.269	0.103	<b>0.399</b>	<b>0.233</b>
	Back	0.243	0.369	0.541	<b>0.612</b>	<b>0.784</b>
	Left side	0.152	0.614	0.318	<b>0.766</b>	<b>0.470</b>
	Right side	0.077	0.109	0.164	<b>0.186</b>	<b>0.241</b>
	Top side	0.158	0.191	0.278	<b>0.349</b>	<b>0.436</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n77_Ant 2	Front	0.166	0.269	0.103	<b>0.435</b>	<b>0.269</b>
	Back	0.230	0.369	0.541	<b>0.599</b>	<b>0.771</b>
	Left side	0.040	0.614	0.318	<b>0.654</b>	<b>0.358</b>
	Right side	0.426	0.109	0.164	<b>0.535</b>	<b>0.59</b>
	Top side		0.191	0.278	<b>0.191</b>	<b>0.278</b>
	Bottom side	0.116			<b>0.116</b>	<b>0.116</b>



**<WWAN Index 4, WLAN Index 9, BT Index 4>**

WWAN Band	Exposure Position	1	7	9	10	11	1+7+9 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)	1+7+11 Summed 1g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 7+3	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 0	Front	0.151	0.082	0.006	0.077	0.108	0.239	0.310	0.341
	Back	0.494	0.430	0.162	0.141	0.131	1.086	1.065	1.055
	Left side	0.129	0.253	0.042	0.233	0.128	0.424	0.615	0.510
	Right side	0.048	0.130	0.001	0.001	0.030	0.179	0.179	0.208
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.098					0.098	0.098	0.098
GSM1900_Ant 2	Front	0.310	0.082	0.006	0.077	0.108	0.398	0.469	0.500
	Back	0.460	0.430	0.162	0.141	0.131	1.052	1.031	1.021
	Left side	0.156	0.253	0.042	0.233	0.128	0.451	0.642	0.537
	Right side	0.193	0.130	0.001	0.001	0.030	0.324	0.324	0.353
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.907					0.907	0.907	0.907
WCDMA II_Ant 2	Front	0.446	0.082	0.006	0.077	0.108	0.534	0.605	0.636
	Back	0.681	0.430	0.162	0.141	0.131	1.273	1.252	1.242
	Left side	0.005	0.253	0.042	0.233	0.128	0.300	0.491	0.386
	Right side	0.240	0.130	0.001	0.001	0.030	0.371	0.371	0.400
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.878					0.878	0.878	0.878
WCDMA IV_Ant 2	Front	0.477	0.082	0.006	0.077	0.108	0.565	0.636	0.667
	Back	0.737	0.430	0.162	0.141	0.131	1.329	1.308	1.298
	Left side	0.234	0.253	0.042	0.233	0.128	0.529	0.720	0.615
	Right side	0.377	0.130	0.001	0.001	0.030	0.508	0.508	0.537
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.892					0.892	0.892	0.892
WCDMA V_Ant 0	Front	0.261	0.082	0.006	0.077	0.108	0.349	0.420	0.451
	Back	0.363	0.430	0.162	0.141	0.131	0.955	0.934	0.924
	Left side	0.264	0.253	0.042	0.233	0.128	0.559	0.750	0.645
	Right side	0.105	0.130	0.001	0.001	0.030	0.236	0.236	0.265
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.317					0.317	0.317	0.317
LTE Band 7_Ant 2	Front	0.619	0.082	0.006	0.077	0.108	0.707	0.778	0.809
	Back	0.903	0.430	0.162	0.141	0.131	1.495	1.474	1.464
	Left side	0.040	0.253	0.042	0.233	0.128	0.335	0.526	0.421
	Right side	0.899	0.130	0.001	0.001	0.030	1.030	1.030	1.059
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.895					0.895	0.895	0.895
LTE Band 12_Ant 0	Front	0.199	0.082	0.006	0.077	0.108	0.287	0.358	0.389
	Back	0.313	0.430	0.162	0.141	0.131	0.905	0.884	0.874
	Left side	0.243	0.253	0.042	0.233	0.128	0.538	0.729	0.624
	Right side	0.159	0.130	0.001	0.001	0.030	0.290	0.290	0.319
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.251					0.251	0.251	0.251
LTE Band 13_Ant 0	Front	0.318	0.082	0.006	0.077	0.108	0.406	0.477	0.508
	Back	0.341	0.430	0.162	0.141	0.131	0.933	0.912	0.902
	Left side	0.288	0.253	0.042	0.233	0.128	0.583	0.774	0.669
	Right side	0.213	0.130	0.001	0.001	0.030	0.344	0.344	0.373
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.288					0.288	0.288	0.288
LTE Band 14_Ant 0	Front	0.256	0.082	0.006	0.077	0.108	0.344	0.415	0.446
	Back	0.328	0.430	0.162	0.141	0.131	0.920	0.899	0.889
	Left side	0.303	0.253	0.042	0.233	0.128	0.598	0.789	0.684



	Right side	0.224	0.130	0.001	0.001	0.030	<b>0.355</b>	<b>0.355</b>	<b>0.384</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.211					<b>0.211</b>	<b>0.211</b>	<b>0.211</b>
LTE Band 25_Ant 2	Front	0.481	0.082	0.006	0.077	0.108	<b>0.569</b>	<b>0.640</b>	<b>0.671</b>
	Back	0.565	0.430	0.162	0.141	0.131	<b>1.157</b>	<b>1.136</b>	<b>1.126</b>
	Left side	0.286	0.253	0.042	0.233	0.128	<b>0.581</b>	<b>0.772</b>	<b>0.667</b>
	Right side	0.312	0.130	0.001	0.001	0.030	<b>0.443</b>	<b>0.443</b>	<b>0.472</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.908					<b>0.908</b>	<b>0.908</b>	<b>0.908</b>
LTE Band 26_Ant 0	Front	0.299	0.082	0.006	0.077	0.108	<b>0.387</b>	<b>0.458</b>	<b>0.489</b>
	Back	0.375	0.430	0.162	0.141	0.131	<b>0.967</b>	<b>0.946</b>	<b>0.936</b>
	Left side	0.290	0.253	0.042	0.233	0.128	<b>0.585</b>	<b>0.776</b>	<b>0.671</b>
	Right side	0.101	0.130	0.001	0.001	0.030	<b>0.232</b>	<b>0.232</b>	<b>0.261</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.159					<b>0.159</b>	<b>0.159</b>	<b>0.159</b>
LTE Band 30_Ant 2	Front	0.591	0.082	0.006	0.077	0.108	<b>0.679</b>	<b>0.750</b>	<b>0.781</b>
	Back	0.900	0.430	0.162	0.141	0.131	<b>1.492</b>	<b>1.471</b>	<b>1.461</b>
	Left side	0.028	0.253	0.042	0.233	0.128	<b>0.323</b>	<b>0.514</b>	<b>0.409</b>
	Right side	0.869	0.130	0.001	0.001	0.030	<b>1.000</b>	<b>1.000</b>	<b>1.029</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.854					<b>0.854</b>	<b>0.854</b>	<b>0.854</b>
LTE Band 41_Ant 2	Front	0.560	0.082	0.006	0.077	0.108	<b>0.648</b>	<b>0.719</b>	<b>0.750</b>
	Back	0.898	0.430	0.162	0.141	0.131	<b>1.490</b>	<b>1.469</b>	<b>1.459</b>
	Left side	0.062	0.253	0.042	0.233	0.128	<b>0.357</b>	<b>0.548</b>	<b>0.443</b>
	Right side	0.801	0.130	0.001	0.001	0.030	<b>0.932</b>	<b>0.932</b>	<b>0.961</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.879					<b>0.879</b>	<b>0.879</b>	<b>0.879</b>
LTE Band 48_Ant 6	Front	0.353	0.082	0.006	0.077	0.108	<b>0.441</b>	<b>0.512</b>	<b>0.543</b>
	Back	0.767	0.430	0.162	0.141	0.131	<b>1.359</b>	<b>1.338</b>	<b>1.328</b>
	Left side	0.893	0.253	0.042	0.233	0.128	<b>1.188</b>	<b>1.379</b>	<b>1.274</b>
	Right side	0.086	0.130	0.001	0.001	0.030	<b>0.217</b>	<b>0.217</b>	<b>0.246</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.072					<b>0.072</b>	<b>0.072</b>	<b>0.072</b>
LTE Band 66_Ant 2	Front	0.492	0.082	0.006	0.077	0.108	<b>0.580</b>	<b>0.651</b>	<b>0.682</b>
	Back	0.516	0.430	0.162	0.141	0.131	<b>1.108</b>	<b>1.087</b>	<b>1.077</b>
	Left side	0.246	0.253	0.042	0.233	0.128	<b>0.541</b>	<b>0.732</b>	<b>0.627</b>
	Right side	0.294	0.130	0.001	0.001	0.030	<b>0.425</b>	<b>0.425</b>	<b>0.454</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.892					<b>0.892</b>	<b>0.892</b>	<b>0.892</b>
LTE Band 71_Ant 0	Front	0.245	0.082	0.006	0.077	0.108	<b>0.333</b>	<b>0.404</b>	<b>0.435</b>
	Back	0.324	0.430	0.162	0.141	0.131	<b>0.916</b>	<b>0.895</b>	<b>0.885</b>
	Left side	0.273	0.253	0.042	0.233	0.128	<b>0.568</b>	<b>0.759</b>	<b>0.654</b>
	Right side	0.168	0.130	0.001	0.001	0.030	<b>0.299</b>	<b>0.299</b>	<b>0.328</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.049					<b>0.049</b>	<b>0.049</b>	<b>0.049</b>
FR1 n5_Ant 0	Front	0.229	0.082	0.006	0.077	0.108	<b>0.317</b>	<b>0.388</b>	<b>0.419</b>
	Back	0.404	0.430	0.162	0.141	0.131	<b>0.996</b>	<b>0.975</b>	<b>0.965</b>
	Left side	0.179	0.253	0.042	0.233	0.128	<b>0.474</b>	<b>0.665</b>	<b>0.560</b>
	Right side	0.077	0.130	0.001	0.001	0.030	<b>0.208</b>	<b>0.208</b>	<b>0.237</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.236					<b>0.236</b>	<b>0.236</b>	<b>0.236</b>
FR1 n7_Ant 2	Front	0.491	0.082	0.006	0.077	0.108	<b>0.579</b>	<b>0.650</b>	<b>0.681</b>
	Back	0.895	0.430	0.162	0.141	0.131	<b>1.487</b>	<b>1.466</b>	<b>1.456</b>
	Left side	0.097	0.253	0.042	0.233	0.128	<b>0.392</b>	<b>0.583</b>	<b>0.478</b>
	Right side	0.870	0.130	0.001	0.001	0.030	<b>1.001</b>	<b>1.001</b>	<b>1.030</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>



	Bottom side	0.752					<b>0.752</b>	<b>0.752</b>	<b>0.752</b>
FR1 n12_Ant 0	Front	0.230	0.082	0.006	0.077	0.108	<b>0.318</b>	<b>0.389</b>	<b>0.420</b>
	Back	0.249	0.430	0.162	0.141	0.131	<b>0.841</b>	<b>0.820</b>	<b>0.810</b>
	Left side	0.240	0.253	0.042	0.233	0.128	<b>0.535</b>	<b>0.726</b>	<b>0.621</b>
	Right side	0.177	0.130	0.001	0.001	0.030	<b>0.308</b>	<b>0.308</b>	<b>0.337</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.234					<b>0.234</b>	<b>0.234</b>	<b>0.234</b>
FR1 n25_Ant 2	Front	0.522	0.082	0.006	0.077	0.108	<b>0.610</b>	<b>0.681</b>	<b>0.712</b>
	Back	0.544	0.430	0.162	0.141	0.131	<b>1.136</b>	<b>1.115</b>	<b>1.105</b>
	Left side	0.287	0.253	0.042	0.233	0.128	<b>0.582</b>	<b>0.773</b>	<b>0.668</b>
	Right side	0.406	0.130	0.001	0.001	0.030	<b>0.537</b>	<b>0.537</b>	<b>0.566</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.843					<b>0.843</b>	<b>0.843</b>	<b>0.843</b>
FR1 n30_Ant 2	Front	0.579	0.082	0.006	0.077	0.108	<b>0.667</b>	<b>0.738</b>	<b>0.769</b>
	Back	0.898	0.430	0.162	0.141	0.131	<b>1.490</b>	<b>1.469</b>	<b>1.459</b>
	Left side	0.036	0.253	0.042	0.233	0.128	<b>0.331</b>	<b>0.522</b>	<b>0.417</b>
	Right side	0.746	0.130	0.001	0.001	0.030	<b>0.877</b>	<b>0.877</b>	<b>0.906</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.764					<b>0.764</b>	<b>0.764</b>	<b>0.764</b>
FR1 n41_Ant 1	Front	0.341	0.082	0.006	0.077	0.108	<b>0.429</b>	<b>0.500</b>	<b>0.531</b>
	Back	0.646	0.430	0.162	0.141	0.131	<b>1.238</b>	<b>1.217</b>	<b>1.207</b>
	Left side	0.146	0.253	0.042	0.233	0.128	<b>0.441</b>	<b>0.632</b>	<b>0.527</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side	0.885	0.221	0.111	0.001	0.088	<b>1.217</b>	<b>1.107</b>	<b>1.194</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 2	Front	0.443	0.082	0.006	0.077	0.108	<b>0.531</b>	<b>0.602</b>	<b>0.633</b>
	Back	0.652	0.430	0.162	0.141	0.131	<b>1.244</b>	<b>1.223</b>	<b>1.213</b>
	Left side	0.174	0.253	0.042	0.233	0.128	<b>0.469</b>	<b>0.660</b>	<b>0.555</b>
	Right side	0.390	0.130	0.001	0.001	0.030	<b>0.521</b>	<b>0.521</b>	<b>0.550</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.864					<b>0.864</b>	<b>0.864</b>	<b>0.864</b>
FR1 n71_Ant 0	Front	0.268	0.082	0.006	0.077	0.108	<b>0.356</b>	<b>0.427</b>	<b>0.458</b>
	Back	0.288	0.430	0.162	0.141	0.131	<b>0.880</b>	<b>0.859</b>	<b>0.849</b>
	Left side	0.271	0.253	0.042	0.233	0.128	<b>0.566</b>	<b>0.757</b>	<b>0.652</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.082					<b>0.082</b>	<b>0.082</b>	<b>0.082</b>
FR1 n77_Ant 6	Front	0.337	0.082	0.006	0.077	0.108	<b>0.425</b>	<b>0.496</b>	<b>0.527</b>
	Back	0.605	0.430	0.162	0.141	0.131	<b>1.197</b>	<b>1.176</b>	<b>1.166</b>
	Left side	0.894	0.253	0.042	0.233	0.128	<b>1.189</b>	<b>1.380</b>	<b>1.275</b>
	Right side	0.058	0.130	0.001	0.001	0.030	<b>0.189</b>	<b>0.189</b>	<b>0.218</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.168					<b>0.168</b>	<b>0.168</b>	<b>0.168</b>



<WWAN Index 4, WLAN Index 9, BT Index 4>

WWAN Band	Exposure Position	1	7	9	10	11	1+7+9 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)	1+7+11 Summed 1g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 7+3	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 1	Front	0.234	0.082	0.006	0.077	0.108	0.322	0.393	0.424
	Back	0.502	0.430	0.162	0.141	0.131	1.094	1.073	1.063
	Left side	0.190	0.253	0.042	0.233	0.128	0.485	0.676	0.571
	Right side	0.085	0.130	0.001	0.001	0.030	0.216	0.216	0.245
	Top side	0.306	0.221	0.111	0.001	0.088	0.638	0.528	0.615
	Bottom side						0.000	0.000	0.000
GSM1900_Ant 0	Front	0.390	0.082	0.006	0.077	0.108	0.478	0.549	0.580
	Back	0.688	0.430	0.162	0.141	0.131	1.280	1.259	1.249
	Left side	0.363	0.253	0.042	0.233	0.128	0.658	0.849	0.744
	Right side	0.036	0.130	0.001	0.001	0.030	0.167	0.167	0.196
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.253					0.253	0.253	0.253
WCDMA II_Ant 0	Front	0.397	0.082	0.006	0.077	0.108	0.485	0.556	0.587
	Back	0.903	0.430	0.162	0.141	0.131	1.495	1.474	1.464
	Left side	0.599	0.253	0.042	0.233	0.128	0.894	1.085	0.980
	Right side	0.005	0.130	0.001	0.001	0.030	0.136	0.136	0.165
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.372					0.372	0.372	0.372
WCDMA IV_Ant 0	Front	0.320	0.082	0.006	0.077	0.108	0.408	0.479	0.510
	Back	0.606	0.430	0.162	0.141	0.131	1.198	1.177	1.167
	Left side	0.387	0.253	0.042	0.233	0.128	0.682	0.873	0.768
	Right side	0.203	0.130	0.001	0.001	0.030	0.334	0.334	0.363
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.205					0.205	0.205	0.205
WCDMA V_Ant 1	Front	0.185	0.082	0.006	0.077	0.108	0.273	0.344	0.375
	Back	0.366	0.430	0.162	0.141	0.131	0.958	0.937	0.927
	Left side	0.150	0.253	0.042	0.233	0.128	0.445	0.636	0.531
	Right side	0.001	0.130	0.001	0.001	0.030	0.132	0.132	0.161
	Top side	0.228	0.221	0.111	0.001	0.088	0.560	0.450	0.537
	Bottom side						0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.365	0.082	0.006	0.077	0.108	0.453	0.524	0.555
	Back	0.386	0.430	0.162	0.141	0.131	0.978	0.957	0.947
	Left side	0.907	0.253	0.042	0.233	0.128	1.202	1.393	1.288
	Right side	0.085	0.130	0.001	0.001	0.030	0.216	0.216	0.245
	Top side		0.221	0.111	0.001	0.088	0.332	0.222	0.309
	Bottom side	0.507					0.507	0.507	0.507
LTE Band 12_Ant 1	Front	0.164	0.082	0.006	0.077	0.108	0.252	0.323	0.354
	Back	0.283	0.430	0.162	0.141	0.131	0.875	0.854	0.844
	Left side	0.162	0.253	0.042	0.233	0.128	0.457	0.648	0.543
	Right side	0.001	0.130	0.001	0.001	0.030	0.132	0.132	0.161
	Top side	0.166	0.221	0.111	0.001	0.088	0.498	0.388	0.475
	Bottom side						0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.164	0.082	0.006	0.077	0.108	0.252	0.323	0.354
	Back	0.305	0.430	0.162	0.141	0.131	0.897	0.876	0.866
	Left side	0.112	0.253	0.042	0.233	0.128	0.407	0.598	0.493
	Right side	0.001	0.130	0.001	0.001	0.030	0.132	0.132	0.161
	Top side	0.160	0.221	0.111	0.001	0.088	0.492	0.382	0.469
	Bottom side						0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.150	0.082	0.006	0.077	0.108	0.238	0.309	0.340
	Back	0.286	0.430	0.162	0.141	0.131	0.878	0.857	0.847
	Left side	0.126	0.253	0.042	0.233	0.128	0.421	0.612	0.507





	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side	0.172	0.221	0.111	0.001	0.088	<b>0.504</b>	<b>0.394</b>	<b>0.481</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 25_Ant 0	Front	0.340	0.082	0.006	0.077	0.108	<b>0.428</b>	<b>0.499</b>	<b>0.530</b>
	Back	0.903	0.430	0.162	0.141	0.131	<b>1.495</b>	<b>1.474</b>	<b>1.464</b>
	Left side	0.579	0.253	0.042	0.233	0.128	<b>0.874</b>	<b>1.065</b>	<b>0.960</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.518					<b>0.518</b>	<b>0.518</b>	<b>0.518</b>
LTE Band 26_Ant 1	Front	0.195	0.082	0.006	0.077	0.108	<b>0.283</b>	<b>0.354</b>	<b>0.385</b>
	Back	0.358	0.430	0.162	0.141	0.131	<b>0.950</b>	<b>0.929</b>	<b>0.919</b>
	Left side	0.121	0.253	0.042	0.233	0.128	<b>0.416</b>	<b>0.607</b>	<b>0.502</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.188					<b>0.188</b>	<b>0.188</b>	<b>0.188</b>
LTE Band 30_Ant 0	Front	0.340	0.082	0.006	0.077	0.108	<b>0.428</b>	<b>0.499</b>	<b>0.530</b>
	Back	0.529	0.430	0.162	0.141	0.131	<b>1.121</b>	<b>1.100</b>	<b>1.090</b>
	Left side	0.682	0.253	0.042	0.233	0.128	<b>0.977</b>	<b>1.168</b>	<b>1.063</b>
	Right side	0.002	0.130	0.001	0.001	0.030	<b>0.133</b>	<b>0.133</b>	<b>0.162</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.203					<b>0.203</b>	<b>0.203</b>	<b>0.203</b>
LTE Band 41_Ant 0	Front	0.248	0.082	0.006	0.077	0.108	<b>0.336</b>	<b>0.407</b>	<b>0.438</b>
	Back	0.334	0.430	0.162	0.141	0.131	<b>0.926</b>	<b>0.905</b>	<b>0.895</b>
	Left side	0.873	0.253	0.042	0.233	0.128	<b>1.168</b>	<b>1.359</b>	<b>1.254</b>
	Right side	0.062	0.130	0.001	0.001	0.030	<b>0.193</b>	<b>0.193</b>	<b>0.222</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.425					<b>0.425</b>	<b>0.425</b>	<b>0.425</b>
LTE Band 48_Ant 2	Front	0.137	0.082	0.006	0.077	0.108	<b>0.225</b>	<b>0.296</b>	<b>0.327</b>
	Back	0.132	0.430	0.162	0.141	0.131	<b>0.724</b>	<b>0.703</b>	<b>0.693</b>
	Left side	0.061	0.253	0.042	0.233	0.128	<b>0.356</b>	<b>0.547</b>	<b>0.442</b>
	Right side	0.306	0.130	0.001	0.001	0.030	<b>0.437</b>	<b>0.437</b>	<b>0.466</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.072					<b>0.072</b>	<b>0.072</b>	<b>0.072</b>
LTE Band 66_Ant 0	Front	0.315	0.082	0.006	0.077	0.108	<b>0.403</b>	<b>0.474</b>	<b>0.505</b>
	Back	0.532	0.430	0.162	0.141	0.131	<b>1.124</b>	<b>1.103</b>	<b>1.093</b>
	Left side	0.831	0.253	0.042	0.233	0.128	<b>1.126</b>	<b>1.317</b>	<b>1.212</b>
	Right side	0.051	0.130	0.001	0.001	0.030	<b>0.182</b>	<b>0.182</b>	<b>0.211</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.252					<b>0.252</b>	<b>0.252</b>	<b>0.252</b>
LTE Band 71_Ant 1	Front	0.129	0.082	0.006	0.077	0.108	<b>0.217</b>	<b>0.288</b>	<b>0.319</b>
	Back	0.238	0.430	0.162	0.141	0.131	<b>0.830</b>	<b>0.809</b>	<b>0.799</b>
	Left side	0.218	0.253	0.042	0.233	0.128	<b>0.513</b>	<b>0.704</b>	<b>0.599</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side	0.159	0.221	0.111	0.001	0.088	<b>0.491</b>	<b>0.381</b>	<b>0.468</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n5_Ant 1	Front	0.196	0.082	0.006	0.077	0.108	<b>0.284</b>	<b>0.355</b>	<b>0.386</b>
	Back	0.382	0.430	0.162	0.141	0.131	<b>0.974</b>	<b>0.953</b>	<b>0.943</b>
	Left side	0.121	0.253	0.042	0.233	0.128	<b>0.416</b>	<b>0.607</b>	<b>0.502</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side	0.220	0.221	0.111	0.001	0.088	<b>0.552</b>	<b>0.442</b>	<b>0.529</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n7_Ant 0	Front	0.189	0.082	0.006	0.077	0.108	<b>0.277</b>	<b>0.348</b>	<b>0.379</b>
	Back	0.400	0.430	0.162	0.141	0.131	<b>0.992</b>	<b>0.971</b>	<b>0.961</b>
	Left side	0.888	0.253	0.042	0.233	0.128	<b>1.183</b>	<b>1.374</b>	<b>1.269</b>
	Right side	0.109	0.130	0.001	0.001	0.030	<b>0.240</b>	<b>0.240</b>	<b>0.269</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>



	Bottom side	0.594					<b>0.594</b>	<b>0.594</b>	<b>0.594</b>
FR1 n12_Ant 1	Front	0.146	0.082	0.006	0.077	0.108	<b>0.234</b>	<b>0.305</b>	<b>0.336</b>
	Back	0.290	0.430	0.162	0.141	0.131	<b>0.882</b>	<b>0.861</b>	<b>0.851</b>
	Left side	0.134	0.253	0.042	0.233	0.128	<b>0.429</b>	<b>0.620</b>	<b>0.515</b>
	Right side	0.001	0.130	0.001	0.001	0.030	<b>0.132</b>	<b>0.132</b>	<b>0.161</b>
	Top side	0.188	0.221	0.111	0.001	0.088	<b>0.520</b>	<b>0.410</b>	<b>0.497</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n25_Ant 0	Front	0.567	0.082	0.006	0.077	0.108	<b>0.655</b>	<b>0.726</b>	<b>0.757</b>
	Back	0.903	0.430	0.162	0.141	0.131	<b>1.495</b>	<b>1.474</b>	<b>1.464</b>
	Left side	0.505	0.253	0.042	0.233	0.128	<b>0.800</b>	<b>0.991</b>	<b>0.886</b>
	Right side	0.039	0.130	0.001	0.001	0.030	<b>0.170</b>	<b>0.170</b>	<b>0.199</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.425					<b>0.425</b>	<b>0.425</b>	<b>0.425</b>
FR1 n30_Ant 0	Front	0.457	0.082	0.006	0.077	0.108	<b>0.545</b>	<b>0.616</b>	<b>0.647</b>
	Back	0.489	0.430	0.162	0.141	0.131	<b>1.081</b>	<b>1.060</b>	<b>1.050</b>
	Left side	0.778	0.253	0.042	0.233	0.128	<b>1.073</b>	<b>1.264</b>	<b>1.159</b>
	Right side	0.106	0.130	0.001	0.001	0.030	<b>0.237</b>	<b>0.237</b>	<b>0.266</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.326					<b>0.326</b>	<b>0.326</b>	<b>0.326</b>
FR1 n41_Ant 5	Front	0.256	0.082	0.006	0.077	0.108	<b>0.344</b>	<b>0.415</b>	<b>0.446</b>
	Back	0.408	0.430	0.162	0.141	0.131	<b>1.000</b>	<b>0.979</b>	<b>0.969</b>
	Left side	0.050	0.253	0.042	0.233	0.128	<b>0.345</b>	<b>0.536</b>	<b>0.431</b>
	Right side	0.883	0.130	0.001	0.001	0.030	<b>1.014</b>	<b>1.014</b>	<b>1.043</b>
	Top side	0.102	0.221	0.111	0.001	0.088	<b>0.434</b>	<b>0.324</b>	<b>0.411</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 0	Front	0.611	0.082	0.006	0.077	0.108	<b>0.699</b>	<b>0.770</b>	<b>0.801</b>
	Back	0.846	0.430	0.162	0.141	0.131	<b>1.438</b>	<b>1.417</b>	<b>1.407</b>
	Left side	0.754	0.253	0.042	0.233	0.128	<b>1.049</b>	<b>1.240</b>	<b>1.135</b>
	Right side	0.065	0.130	0.001	0.001	0.030	<b>0.196</b>	<b>0.196</b>	<b>0.225</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.611					<b>0.611</b>	<b>0.611</b>	<b>0.611</b>
FR1 n71_Ant 1	Front	0.130	0.082	0.006	0.077	0.108	<b>0.218</b>	<b>0.289</b>	<b>0.320</b>
	Back	0.243	0.430	0.162	0.141	0.131	<b>0.835</b>	<b>0.814</b>	<b>0.804</b>
	Left side	0.152	0.253	0.042	0.233	0.128	<b>0.447</b>	<b>0.638</b>	<b>0.533</b>
	Right side	0.077	0.130	0.001	0.001	0.030	<b>0.208</b>	<b>0.208</b>	<b>0.237</b>
	Top side	0.158	0.221	0.111	0.001	0.088	<b>0.490</b>	<b>0.380</b>	<b>0.467</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n77_Ant 2	Front	0.166	0.082	0.006	0.077	0.108	<b>0.254</b>	<b>0.325</b>	<b>0.356</b>
	Back	0.230	0.430	0.162	0.141	0.131	<b>0.822</b>	<b>0.801</b>	<b>0.791</b>
	Left side	0.040	0.253	0.042	0.233	0.128	<b>0.335</b>	<b>0.526</b>	<b>0.421</b>
	Right side	0.426	0.130	0.001	0.001	0.030	<b>0.557</b>	<b>0.557</b>	<b>0.586</b>
	Top side		0.221	0.111	0.001	0.088	<b>0.332</b>	<b>0.222</b>	<b>0.309</b>
	Bottom side	0.116					<b>0.116</b>	<b>0.116</b>	<b>0.116</b>



**<WWAN Index 4, WLAN Index 8>**

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)	
GSM850_Ant 0	Front	0.151	0.133	0.082	<b>0.366</b>
	Back	0.494	0.196	0.430	<b>1.120</b>
	Left side	0.129	0.262	0.253	<b>0.644</b>
	Right side	0.048	0.048	0.130	<b>0.226</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.098			<b>0.098</b>
GSM1900_Ant 2	Front	0.310	0.133	0.082	<b>0.525</b>
	Back	0.460	0.196	0.430	<b>1.086</b>
	Left side	0.156	0.262	0.253	<b>0.671</b>
	Right side	0.193	0.048	0.130	<b>0.371</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.907			<b>0.907</b>
WCDMA II_Ant 2	Front	0.446	0.133	0.082	<b>0.661</b>
	Back	0.681	0.196	0.430	<b>1.307</b>
	Left side	0.005	0.262	0.253	<b>0.520</b>
	Right side	0.240	0.048	0.130	<b>0.418</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.878			<b>0.878</b>
WCDMA IV_Ant 2	Front	0.477	0.133	0.082	<b>0.692</b>
	Back	0.737	0.196	0.430	<b>1.363</b>
	Left side	0.234	0.262	0.253	<b>0.749</b>
	Right side	0.377	0.048	0.130	<b>0.555</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.892			<b>0.892</b>
WCDMA V_Ant 0	Front	0.261	0.133	0.082	<b>0.476</b>
	Back	0.363	0.196	0.430	<b>0.989</b>
	Left side	0.264	0.262	0.253	<b>0.779</b>
	Right side	0.105	0.048	0.130	<b>0.283</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.317			<b>0.317</b>
LTE Band 7_Ant 2	Front	0.619	0.133	0.082	<b>0.834</b>
	Back	0.903	0.196	0.430	<b>1.529</b>
	Left side	0.040	0.262	0.253	<b>0.555</b>
	Right side	0.899	0.048	0.130	<b>1.077</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.895			<b>0.895</b>
LTE Band 12_Ant 0	Front	0.199	0.133	0.082	<b>0.414</b>
	Back	0.313	0.196	0.430	<b>0.939</b>
	Left side	0.243	0.262	0.253	<b>0.758</b>
	Right side	0.159	0.048	0.130	<b>0.337</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.251			<b>0.251</b>
LTE Band 13_Ant 0	Front	0.318	0.133	0.082	<b>0.533</b>
	Back	0.341	0.196	0.430	<b>0.967</b>
	Left side	0.288	0.262	0.253	<b>0.803</b>
	Right side	0.213	0.048	0.130	<b>0.391</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.288			<b>0.288</b>
LTE Band 14_Ant 0	Front	0.256	0.133	0.082	<b>0.471</b>
	Back	0.328	0.196	0.430	<b>0.954</b>
	Left side	0.303	0.262	0.253	<b>0.818</b>



	Right side	0.224	0.048	0.130	<b>0.402</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.211			<b>0.211</b>
LTE Band 25_Ant 2	Front	0.481	0.133	0.082	<b>0.696</b>
	Back	0.565	0.196	0.430	<b>1.191</b>
	Left side	0.286	0.262	0.253	<b>0.801</b>
	Right side	0.312	0.048	0.130	<b>0.490</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.908			<b>0.908</b>
LTE Band 26_Ant 0	Front	0.299	0.133	0.082	<b>0.514</b>
	Back	0.375	0.196	0.430	<b>1.001</b>
	Left side	0.290	0.262	0.253	<b>0.805</b>
	Right side	0.101	0.048	0.130	<b>0.279</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.159			<b>0.159</b>
LTE Band 30_Ant 2	Front	0.591	0.133	0.082	<b>0.806</b>
	Back	0.900	0.196	0.430	<b>1.526</b>
	Left side	0.028	0.262	0.253	<b>0.543</b>
	Right side	0.869	0.048	0.130	<b>1.047</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.854			<b>0.854</b>
LTE Band 41_Ant 2	Front	0.560	0.133	0.082	<b>0.775</b>
	Back	0.898	0.196	0.430	<b>1.524</b>
	Left side	0.062	0.262	0.253	<b>0.577</b>
	Right side	0.801	0.048	0.130	<b>0.979</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.879			<b>0.879</b>
LTE Band 48_Ant 6	Front	0.353	0.133	0.082	<b>0.568</b>
	Back	0.767	0.196	0.430	<b>1.393</b>
	Left side	0.893	0.262	0.253	<b>1.408</b>
	Right side	0.086	0.048	0.130	<b>0.264</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.072			<b>0.072</b>
LTE Band 66_Ant 2	Front	0.492	0.133	0.082	<b>0.707</b>
	Back	0.516	0.196	0.430	<b>1.142</b>
	Left side	0.246	0.262	0.253	<b>0.761</b>
	Right side	0.294	0.048	0.130	<b>0.472</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.892			<b>0.892</b>
LTE Band 71_Ant 0	Front	0.245	0.133	0.082	<b>0.460</b>
	Back	0.324	0.196	0.430	<b>0.950</b>
	Left side	0.273	0.262	0.253	<b>0.788</b>
	Right side	0.168	0.048	0.130	<b>0.346</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.049			<b>0.049</b>
FR1 n5_Ant 0	Front	0.229	0.133	0.082	<b>0.444</b>
	Back	0.404	0.196	0.430	<b>1.030</b>
	Left side	0.179	0.262	0.253	<b>0.694</b>
	Right side	0.077	0.048	0.130	<b>0.255</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.236			<b>0.236</b>
FR1 n7_Ant 2	Front	0.491	0.133	0.082	<b>0.706</b>
	Back	0.895	0.196	0.430	<b>1.521</b>
	Left side	0.097	0.262	0.253	<b>0.612</b>
	Right side	0.870	0.048	0.130	<b>1.048</b>
	Top side		0.122	0.221	<b>0.343</b>



	Bottom side	0.752			<b>0.752</b>
FR1 n12_Ant 0	Front	0.230	0.133	0.082	<b>0.445</b>
	Back	0.249	0.196	0.430	<b>0.875</b>
	Left side	0.240	0.262	0.253	<b>0.755</b>
	Right side	0.177	0.048	0.130	<b>0.355</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.234			<b>0.234</b>
FR1 n25_Ant 2	Front	0.522	0.133	0.082	<b>0.737</b>
	Back	0.544	0.196	0.430	<b>1.170</b>
	Left side	0.287	0.262	0.253	<b>0.802</b>
	Right side	0.406	0.048	0.130	<b>0.584</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.843			<b>0.843</b>
FR1 n30_Ant 2	Front	0.579	0.133	0.082	<b>0.794</b>
	Back	0.898	0.196	0.430	<b>1.524</b>
	Left side	0.036	0.262	0.253	<b>0.551</b>
	Right side	0.746	0.048	0.130	<b>0.924</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.764			<b>0.764</b>
FR1 n41_Ant 1	Front	0.341	0.133	0.082	<b>0.556</b>
	Back	0.646	0.196	0.430	<b>1.272</b>
	Left side	0.146	0.262	0.253	<b>0.661</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.885	0.122	0.221	<b>1.228</b>
	Bottom side				<b>0.000</b>
FR1 n66_Ant 2	Front	0.443	0.133	0.082	<b>0.658</b>
	Back	0.652	0.196	0.430	<b>1.278</b>
	Left side	0.174	0.262	0.253	<b>0.689</b>
	Right side	0.390	0.048	0.130	<b>0.568</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.864			<b>0.864</b>
FR1 n71_Ant 0	Front	0.268	0.133	0.082	<b>0.483</b>
	Back	0.288	0.196	0.430	<b>0.914</b>
	Left side	0.271	0.262	0.253	<b>0.786</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.082			<b>0.082</b>
FR1 n77_Ant 6	Front	0.337	0.133	0.082	<b>0.552</b>
	Back	0.605	0.196	0.430	<b>1.231</b>
	Left side	0.894	0.262	0.253	<b>1.409</b>
	Right side	0.058	0.048	0.130	<b>0.236</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.168			<b>0.168</b>



**<WWAN Index 4, WLAN Index 8>**

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Front	0.234	0.133	0.082	<b>0.449</b>
	Back	0.502	0.196	0.430	<b>1.128</b>
	Left side	0.190	0.262	0.253	<b>0.705</b>
	Right side	0.085	0.048	0.130	<b>0.263</b>
	Top side	0.306	0.122	0.221	<b>0.649</b>
	Bottom side				<b>0.000</b>
GSM1900_Ant 0	Front	0.390	0.133	0.082	<b>0.605</b>
	Back	0.688	0.196	0.430	<b>1.314</b>
	Left side	0.363	0.262	0.253	<b>0.878</b>
	Right side	0.036	0.048	0.130	<b>0.214</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.253			<b>0.253</b>
WCDMA II_Ant 0	Front	0.397	0.133	0.082	<b>0.612</b>
	Back	0.903	0.196	0.430	<b>1.529</b>
	Left side	0.599	0.262	0.253	<b>1.114</b>
	Right side	0.005	0.048	0.130	<b>0.183</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.372			<b>0.372</b>
WCDMA IV_Ant 0	Front	0.320	0.133	0.082	<b>0.535</b>
	Back	0.606	0.196	0.430	<b>1.232</b>
	Left side	0.387	0.262	0.253	<b>0.902</b>
	Right side	0.203	0.048	0.130	<b>0.381</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.205			<b>0.205</b>
WCDMA V_Ant 1	Front	0.185	0.133	0.082	<b>0.400</b>
	Back	0.366	0.196	0.430	<b>0.992</b>
	Left side	0.150	0.262	0.253	<b>0.665</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.228	0.122	0.221	<b>0.571</b>
	Bottom side				<b>0.000</b>
LTE Band 7_Ant 0	Front	0.365	0.133	0.082	<b>0.580</b>
	Back	0.386	0.196	0.430	<b>1.012</b>
	Left side	0.907	0.262	0.253	<b>1.422</b>
	Right side	0.085	0.048	0.130	<b>0.263</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.507			<b>0.507</b>
LTE Band 12_Ant 1	Front	0.164	0.133	0.082	<b>0.379</b>
	Back	0.283	0.196	0.430	<b>0.909</b>
	Left side	0.162	0.262	0.253	<b>0.677</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.166	0.122	0.221	<b>0.509</b>
	Bottom side				<b>0.000</b>
LTE Band 13_Ant 1	Front	0.164	0.133	0.082	<b>0.379</b>
	Back	0.305	0.196	0.430	<b>0.931</b>
	Left side	0.112	0.262	0.253	<b>0.627</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.160	0.122	0.221	<b>0.503</b>
	Bottom side				<b>0.000</b>
LTE Band 14_Ant 1	Front	0.150	0.133	0.082	<b>0.365</b>
	Back	0.286	0.196	0.430	<b>0.912</b>
	Left side	0.126	0.262	0.253	<b>0.641</b>



	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.172	0.122	0.221	<b>0.515</b>
	Bottom side				<b>0.000</b>
LTE Band 25_Ant 0	Front	0.340	0.133	0.082	<b>0.555</b>
	Back	0.903	0.196	0.430	<b>1.529</b>
	Left side	0.579	0.262	0.253	<b>1.094</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.518			<b>0.518</b>
LTE Band 26_Ant 1	Front	0.195	0.133	0.082	<b>0.410</b>
	Back	0.358	0.196	0.430	<b>0.984</b>
	Left side	0.121	0.262	0.253	<b>0.636</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.188			<b>0.188</b>
LTE Band 30_Ant 0	Front	0.340	0.133	0.082	<b>0.555</b>
	Back	0.529	0.196	0.430	<b>1.155</b>
	Left side	0.682	0.262	0.253	<b>1.197</b>
	Right side	0.002	0.048	0.130	<b>0.180</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.203			<b>0.203</b>
LTE Band 41_Ant 0	Front	0.248	0.133	0.082	<b>0.463</b>
	Back	0.334	0.196	0.430	<b>0.960</b>
	Left side	0.873	0.262	0.253	<b>1.388</b>
	Right side	0.062	0.048	0.130	<b>0.240</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.425			<b>0.425</b>
LTE Band 48_Ant 2	Front	0.137	0.133	0.082	<b>0.352</b>
	Back	0.132	0.196	0.430	<b>0.758</b>
	Left side	0.061	0.262	0.253	<b>0.576</b>
	Right side	0.306	0.048	0.130	<b>0.484</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.072			<b>0.072</b>
LTE Band 66_Ant 0	Front	0.315	0.133	0.082	<b>0.530</b>
	Back	0.532	0.196	0.430	<b>1.158</b>
	Left side	0.831	0.262	0.253	<b>1.346</b>
	Right side	0.051	0.048	0.130	<b>0.229</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.252			<b>0.252</b>
LTE Band 71_Ant 1	Front	0.129	0.133	0.082	<b>0.344</b>
	Back	0.238	0.196	0.430	<b>0.864</b>
	Left side	0.218	0.262	0.253	<b>0.733</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.159	0.122	0.221	<b>0.502</b>
	Bottom side				<b>0.000</b>
FR1 n5_Ant 1	Front	0.196	0.133	0.082	<b>0.411</b>
	Back	0.382	0.196	0.430	<b>1.008</b>
	Left side	0.121	0.262	0.253	<b>0.636</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.220	0.122	0.221	<b>0.563</b>
	Bottom side				<b>0.000</b>
FR1 n7_Ant 0	Front	0.189	0.133	0.082	<b>0.404</b>
	Back	0.400	0.196	0.430	<b>1.026</b>
	Left side	0.888	0.262	0.253	<b>1.403</b>
	Right side	0.109	0.048	0.130	<b>0.287</b>
	Top side		0.122	0.221	<b>0.343</b>



	Bottom side	0.594			<b>0.594</b>
FR1 n12_Ant 1	Front	0.146	0.133	0.082	<b>0.361</b>
	Back	0.290	0.196	0.430	<b>0.916</b>
	Left side	0.134	0.262	0.253	<b>0.649</b>
	Right side	0.001	0.048	0.130	<b>0.179</b>
	Top side	0.188	0.122	0.221	<b>0.531</b>
	Bottom side				<b>0.000</b>
FR1 n25_Ant 0	Front	0.567	0.133	0.082	<b>0.782</b>
	Back	0.903	0.196	0.430	<b>1.529</b>
	Left side	0.505	0.262	0.253	<b>1.020</b>
	Right side	0.039	0.048	0.130	<b>0.217</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.425			<b>0.425</b>
FR1 n30_Ant 0	Front	0.457	0.133	0.082	<b>0.672</b>
	Back	0.489	0.196	0.430	<b>1.115</b>
	Left side	0.778	0.262	0.253	<b>1.293</b>
	Right side	0.106	0.048	0.130	<b>0.284</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.326			<b>0.326</b>
FR1 n41_Ant 5	Front	0.256	0.133	0.082	<b>0.471</b>
	Back	0.408	0.196	0.430	<b>1.034</b>
	Left side	0.050	0.262	0.253	<b>0.565</b>
	Right side	0.883	0.048	0.130	<b>1.061</b>
	Top side	0.102	0.122	0.221	<b>0.445</b>
	Bottom side				<b>0.000</b>
FR1 n66_Ant 0	Front	0.611	0.133	0.082	<b>0.826</b>
	Back	0.846	0.196	0.430	<b>1.472</b>
	Left side	0.754	0.262	0.253	<b>1.269</b>
	Right side	0.065	0.048	0.130	<b>0.243</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.611			<b>0.611</b>
FR1 n71_Ant 1	Front	0.130	0.133	0.082	<b>0.345</b>
	Back	0.243	0.196	0.430	<b>0.869</b>
	Left side	0.152	0.262	0.253	<b>0.667</b>
	Right side	0.077	0.048	0.130	<b>0.255</b>
	Top side	0.158	0.122	0.221	<b>0.501</b>
	Bottom side				<b>0.000</b>
FR1 n77_Ant 2	Front	0.166	0.133	0.082	<b>0.381</b>
	Back	0.230	0.196	0.430	<b>0.856</b>
	Left side	0.040	0.262	0.253	<b>0.555</b>
	Right side	0.426	0.048	0.130	<b>0.604</b>
	Top side		0.122	0.221	<b>0.343</b>
	Bottom side	0.116			<b>0.116</b>





**<WWAN Index 4, BT Index 3>**

WWAN Band	Exposure Position	1	9	10	11	1+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+11 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 0	Front	0.151	0.008	0.109	0.108	<b>0.159</b>	<b>0.260</b>	<b>0.259</b>
	Back	0.494	0.229	0.200	0.131	<b>0.723</b>	<b>0.694</b>	<b>0.625</b>
	Left side	0.129	0.060	0.329	0.128	<b>0.189</b>	<b>0.458</b>	<b>0.257</b>
	Right side	0.048	0.002	0.002	0.030	<b>0.050</b>	<b>0.050</b>	<b>0.078</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.098				<b>0.098</b>	<b>0.098</b>	<b>0.098</b>
GSM1900_Ant 2	Front	0.310	0.008	0.109	0.108	<b>0.318</b>	<b>0.419</b>	<b>0.418</b>
	Back	0.460	0.229	0.200	0.131	<b>0.689</b>	<b>0.660</b>	<b>0.591</b>
	Left side	0.156	0.060	0.329	0.128	<b>0.216</b>	<b>0.485</b>	<b>0.284</b>
	Right side	0.193	0.002	0.002	0.030	<b>0.195</b>	<b>0.195</b>	<b>0.223</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.907				<b>0.907</b>	<b>0.907</b>	<b>0.907</b>
WCDMA II_Ant 2	Front	0.446	0.008	0.109	0.108	<b>0.454</b>	<b>0.555</b>	<b>0.554</b>
	Back	0.681	0.229	0.200	0.131	<b>0.910</b>	<b>0.881</b>	<b>0.812</b>
	Left side	0.005	0.060	0.329	0.128	<b>0.065</b>	<b>0.334</b>	<b>0.133</b>
	Right side	0.240	0.002	0.002	0.030	<b>0.242</b>	<b>0.242</b>	<b>0.270</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.878				<b>0.878</b>	<b>0.878</b>	<b>0.878</b>
WCDMA IV_Ant 2	Front	0.477	0.008	0.109	0.108	<b>0.485</b>	<b>0.586</b>	<b>0.585</b>
	Back	0.737	0.229	0.200	0.131	<b>0.966</b>	<b>0.937</b>	<b>0.868</b>
	Left side	0.234	0.060	0.329	0.128	<b>0.294</b>	<b>0.563</b>	<b>0.362</b>
	Right side	0.377	0.002	0.002	0.030	<b>0.379</b>	<b>0.379</b>	<b>0.407</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.892				<b>0.892</b>	<b>0.892</b>	<b>0.892</b>
WCDMA V_Ant 0	Front	0.261	0.008	0.109	0.108	<b>0.269</b>	<b>0.370</b>	<b>0.369</b>
	Back	0.363	0.229	0.200	0.131	<b>0.592</b>	<b>0.563</b>	<b>0.494</b>
	Left side	0.264	0.060	0.329	0.128	<b>0.324</b>	<b>0.593</b>	<b>0.392</b>
	Right side	0.105	0.002	0.002	0.030	<b>0.107</b>	<b>0.107</b>	<b>0.135</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.317				<b>0.317</b>	<b>0.317</b>	<b>0.317</b>
LTE Band 7_Ant 2	Front	0.619	0.008	0.109	0.108	<b>0.627</b>	<b>0.728</b>	<b>0.727</b>
	Back	0.903	0.229	0.200	0.131	<b>1.132</b>	<b>1.103</b>	<b>1.034</b>
	Left side	0.040	0.060	0.329	0.128	<b>0.100</b>	<b>0.369</b>	<b>0.168</b>
	Right side	0.899	0.002	0.002	0.030	<b>0.901</b>	<b>0.901</b>	<b>0.929</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.895				<b>0.895</b>	<b>0.895</b>	<b>0.895</b>
LTE Band 12_Ant 0	Front	0.199	0.008	0.109	0.108	<b>0.207</b>	<b>0.308</b>	<b>0.307</b>
	Back	0.313	0.229	0.200	0.131	<b>0.542</b>	<b>0.513</b>	<b>0.444</b>
	Left side	0.243	0.060	0.329	0.128	<b>0.303</b>	<b>0.572</b>	<b>0.371</b>
	Right side	0.159	0.002	0.002	0.030	<b>0.161</b>	<b>0.161</b>	<b>0.189</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.251				<b>0.251</b>	<b>0.251</b>	<b>0.251</b>
LTE Band 13_Ant 0	Front	0.318	0.008	0.109	0.108	<b>0.326</b>	<b>0.427</b>	<b>0.426</b>
	Back	0.341	0.229	0.200	0.131	<b>0.570</b>	<b>0.541</b>	<b>0.472</b>
	Left side	0.288	0.060	0.329	0.128	<b>0.348</b>	<b>0.617</b>	<b>0.416</b>
	Right side	0.213	0.002	0.002	0.030	<b>0.215</b>	<b>0.215</b>	<b>0.243</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.288				<b>0.288</b>	<b>0.288</b>	<b>0.288</b>
LTE Band 14_Ant 0	Front	0.256	0.008	0.109	0.108	<b>0.264</b>	<b>0.365</b>	<b>0.364</b>
	Back	0.328	0.229	0.200	0.131	<b>0.557</b>	<b>0.528</b>	<b>0.459</b>
	Left side	0.303	0.060	0.329	0.128	<b>0.363</b>	<b>0.632</b>	<b>0.431</b>



	Right side	0.224	0.002	0.002	0.030	<b>0.226</b>	<b>0.226</b>	<b>0.254</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.211				<b>0.211</b>	<b>0.211</b>	<b>0.211</b>
LTE Band 25_Ant 2	Front	0.481	0.008	0.109	0.108	<b>0.489</b>	<b>0.590</b>	<b>0.589</b>
	Back	0.565	0.229	0.200	0.131	<b>0.794</b>	<b>0.765</b>	<b>0.696</b>
	Left side	0.286	0.060	0.329	0.128	<b>0.346</b>	<b>0.615</b>	<b>0.414</b>
	Right side	0.312	0.002	0.002	0.030	<b>0.314</b>	<b>0.314</b>	<b>0.342</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.908				<b>0.908</b>	<b>0.908</b>	<b>0.908</b>
LTE Band 26_Ant 0	Front	0.299	0.008	0.109	0.108	<b>0.307</b>	<b>0.408</b>	<b>0.407</b>
	Back	0.375	0.229	0.200	0.131	<b>0.604</b>	<b>0.575</b>	<b>0.506</b>
	Left side	0.290	0.060	0.329	0.128	<b>0.350</b>	<b>0.619</b>	<b>0.418</b>
	Right side	0.101	0.002	0.002	0.030	<b>0.103</b>	<b>0.103</b>	<b>0.131</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.159				<b>0.159</b>	<b>0.159</b>	<b>0.159</b>
LTE Band 30_Ant 2	Front	0.591	0.008	0.109	0.108	<b>0.599</b>	<b>0.700</b>	<b>0.699</b>
	Back	0.900	0.229	0.200	0.131	<b>1.129</b>	<b>1.100</b>	<b>1.031</b>
	Left side	0.028	0.060	0.329	0.128	<b>0.088</b>	<b>0.357</b>	<b>0.156</b>
	Right side	0.869	0.002	0.002	0.030	<b>0.871</b>	<b>0.871</b>	<b>0.899</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.854				<b>0.854</b>	<b>0.854</b>	<b>0.854</b>
LTE Band 41_Ant 2	Front	0.560	0.008	0.109	0.108	<b>0.568</b>	<b>0.669</b>	<b>0.668</b>
	Back	0.898	0.229	0.200	0.131	<b>1.127</b>	<b>1.098</b>	<b>1.029</b>
	Left side	0.062	0.060	0.329	0.128	<b>0.122</b>	<b>0.391</b>	<b>0.190</b>
	Right side	0.801	0.002	0.002	0.030	<b>0.803</b>	<b>0.803</b>	<b>0.831</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.879				<b>0.879</b>	<b>0.879</b>	<b>0.879</b>
LTE Band 48_Ant 6	Front	0.353	0.008	0.109	0.108	<b>0.361</b>	<b>0.462</b>	<b>0.461</b>
	Back	0.767	0.229	0.200	0.131	<b>0.996</b>	<b>0.967</b>	<b>0.898</b>
	Left side	0.893	0.060	0.329	0.128	<b>0.953</b>	<b>1.222</b>	<b>1.021</b>
	Right side	0.086	0.002	0.002	0.030	<b>0.088</b>	<b>0.088</b>	<b>0.116</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.072				<b>0.072</b>	<b>0.072</b>	<b>0.072</b>
LTE Band 66_Ant 2	Front	0.492	0.008	0.109	0.108	<b>0.500</b>	<b>0.601</b>	<b>0.600</b>
	Back	0.516	0.229	0.200	0.131	<b>0.745</b>	<b>0.716</b>	<b>0.647</b>
	Left side	0.246	0.060	0.329	0.128	<b>0.306</b>	<b>0.575</b>	<b>0.374</b>
	Right side	0.294	0.002	0.002	0.030	<b>0.296</b>	<b>0.296</b>	<b>0.324</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.892				<b>0.892</b>	<b>0.892</b>	<b>0.892</b>
LTE Band 71_Ant 0	Front	0.245	0.008	0.109	0.108	<b>0.253</b>	<b>0.354</b>	<b>0.353</b>
	Back	0.324	0.229	0.200	0.131	<b>0.553</b>	<b>0.524</b>	<b>0.455</b>
	Left side	0.273	0.060	0.329	0.128	<b>0.333</b>	<b>0.602</b>	<b>0.401</b>
	Right side	0.168	0.002	0.002	0.030	<b>0.170</b>	<b>0.170</b>	<b>0.198</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.049				<b>0.049</b>	<b>0.049</b>	<b>0.049</b>
FR1 n5_Ant 0	Front	0.229	0.008	0.109	0.108	<b>0.237</b>	<b>0.338</b>	<b>0.337</b>
	Back	0.404	0.229	0.200	0.131	<b>0.633</b>	<b>0.604</b>	<b>0.535</b>
	Left side	0.179	0.060	0.329	0.128	<b>0.239</b>	<b>0.508</b>	<b>0.307</b>
	Right side	0.077	0.002	0.002	0.030	<b>0.079</b>	<b>0.079</b>	<b>0.107</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.236				<b>0.236</b>	<b>0.236</b>	<b>0.236</b>
FR1 n7_Ant 2	Front	0.491	0.008	0.109	0.108	<b>0.499</b>	<b>0.600</b>	<b>0.599</b>
	Back	0.895	0.229	0.200	0.131	<b>1.124</b>	<b>1.095</b>	<b>1.026</b>
	Left side	0.097	0.060	0.329	0.128	<b>0.157</b>	<b>0.426</b>	<b>0.225</b>
	Right side	0.870	0.002	0.002	0.030	<b>0.872</b>	<b>0.872</b>	<b>0.900</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>



	Bottom side	0.752				<b>0.752</b>	<b>0.752</b>	<b>0.752</b>
FR1 n12_Ant 0	Front	0.230	0.008	0.109	0.108	<b>0.238</b>	<b>0.339</b>	<b>0.338</b>
	Back	0.249	0.229	0.200	0.131	<b>0.478</b>	<b>0.449</b>	<b>0.380</b>
	Left side	0.240	0.060	0.329	0.128	<b>0.300</b>	<b>0.569</b>	<b>0.368</b>
	Right side	0.177	0.002	0.002	0.030	<b>0.179</b>	<b>0.179</b>	<b>0.207</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.234				<b>0.234</b>	<b>0.234</b>	<b>0.234</b>
FR1 n25_Ant 2	Front	0.522	0.008	0.109	0.108	<b>0.530</b>	<b>0.631</b>	<b>0.630</b>
	Back	0.544	0.229	0.200	0.131	<b>0.773</b>	<b>0.744</b>	<b>0.675</b>
	Left side	0.287	0.060	0.329	0.128	<b>0.347</b>	<b>0.616</b>	<b>0.415</b>
	Right side	0.406	0.002	0.002	0.030	<b>0.408</b>	<b>0.408</b>	<b>0.436</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.843				<b>0.843</b>	<b>0.843</b>	<b>0.843</b>
FR1 n30_Ant 2	Front	0.579	0.008	0.109	0.108	<b>0.587</b>	<b>0.688</b>	<b>0.687</b>
	Back	0.898	0.229	0.200	0.131	<b>1.127</b>	<b>1.098</b>	<b>1.029</b>
	Left side	0.036	0.060	0.329	0.128	<b>0.096</b>	<b>0.365</b>	<b>0.164</b>
	Right side	0.746	0.002	0.002	0.030	<b>0.748</b>	<b>0.748</b>	<b>0.776</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.764				<b>0.764</b>	<b>0.764</b>	<b>0.764</b>
FR1 n41_Ant 1	Front	0.341	0.008	0.109	0.108	<b>0.349</b>	<b>0.450</b>	<b>0.449</b>
	Back	0.646	0.229	0.200	0.131	<b>0.875</b>	<b>0.846</b>	<b>0.777</b>
	Left side	0.146	0.060	0.329	0.128	<b>0.206</b>	<b>0.475</b>	<b>0.274</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side	0.885	0.157	0.002	0.088	<b>1.042</b>	<b>0.887</b>	<b>0.973</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 2	Front	0.443	0.008	0.109	0.108	<b>0.451</b>	<b>0.552</b>	<b>0.551</b>
	Back	0.652	0.229	0.200	0.131	<b>0.881</b>	<b>0.852</b>	<b>0.783</b>
	Left side	0.174	0.060	0.329	0.128	<b>0.234</b>	<b>0.503</b>	<b>0.302</b>
	Right side	0.390	0.002	0.002	0.030	<b>0.392</b>	<b>0.392</b>	<b>0.420</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.864				<b>0.864</b>	<b>0.864</b>	<b>0.864</b>
FR1 n71_Ant 0	Front	0.268	0.008	0.109	0.108	<b>0.276</b>	<b>0.377</b>	<b>0.376</b>
	Back	0.288	0.229	0.200	0.131	<b>0.517</b>	<b>0.488</b>	<b>0.419</b>
	Left side	0.271	0.060	0.329	0.128	<b>0.331</b>	<b>0.600</b>	<b>0.399</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.082				<b>0.082</b>	<b>0.082</b>	<b>0.082</b>
FR1 n77_Ant 6	Front	0.337	0.008	0.109	0.108	<b>0.345</b>	<b>0.446</b>	<b>0.445</b>
	Back	0.605	0.229	0.200	0.131	<b>0.834</b>	<b>0.805</b>	<b>0.736</b>
	Left side	0.894	0.060	0.329	0.128	<b>0.954</b>	<b>1.223</b>	<b>1.022</b>
	Right side	0.058	0.002	0.002	0.030	<b>0.060</b>	<b>0.060</b>	<b>0.088</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.168				<b>0.168</b>	<b>0.168</b>	<b>0.168</b>



<WWAN Index 4, BT Index 3>

WWAN Band	Exposure Position	1	9	10	11	1+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+11 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 1	Front	0.234	0.008	0.109	0.108	0.242	0.343	0.342
	Back	0.502	0.229	0.200	0.131	0.731	0.702	0.633
	Left side	0.190	0.060	0.329	0.128	0.250	0.519	0.318
	Right side	0.085	0.002	0.002	0.030	0.087	0.087	0.115
	Top side	0.306	0.157	0.002	0.088	0.463	0.308	0.394
	Bottom side					0.000	0.000	0.000
GSM1900_Ant 0	Front	0.390	0.008	0.109	0.108	0.398	0.499	0.498
	Back	0.688	0.229	0.200	0.131	0.917	0.888	0.819
	Left side	0.363	0.060	0.329	0.128	0.423	0.692	0.491
	Right side	0.036	0.002	0.002	0.030	0.038	0.038	0.066
	Top side		0.157	0.002	0.088	0.157	0.002	0.088
	Bottom side	0.253				0.253	0.253	0.253
WCDMA II_Ant 0	Front	0.397	0.008	0.109	0.108	0.405	0.506	0.505
	Back	0.903	0.229	0.200	0.131	1.132	1.103	1.034
	Left side	0.599	0.060	0.329	0.128	0.659	0.928	0.727
	Right side	0.005	0.002	0.002	0.030	0.007	0.007	0.035
	Top side		0.157	0.002	0.088	0.157	0.002	0.088
	Bottom side	0.372				0.372	0.372	0.372
WCDMA IV_Ant 0	Front	0.320	0.008	0.109	0.108	0.328	0.429	0.428
	Back	0.606	0.229	0.200	0.131	0.835	0.806	0.737
	Left side	0.387	0.060	0.329	0.128	0.447	0.716	0.515
	Right side	0.203	0.002	0.002	0.030	0.205	0.205	0.233
	Top side		0.157	0.002	0.088	0.157	0.002	0.088
	Bottom side	0.205				0.205	0.205	0.205
WCDMA V_Ant 1	Front	0.185	0.008	0.109	0.108	0.193	0.294	0.293
	Back	0.366	0.229	0.200	0.131	0.595	0.566	0.497
	Left side	0.150	0.060	0.329	0.128	0.210	0.479	0.278
	Right side	0.001	0.002	0.002	0.030	0.003	0.003	0.031
	Top side	0.228	0.157	0.002	0.088	0.385	0.230	0.316
	Bottom side					0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.365	0.008	0.109	0.108	0.373	0.474	0.473
	Back	0.386	0.229	0.200	0.131	0.615	0.586	0.517
	Left side	0.907	0.060	0.329	0.128	0.967	1.236	1.035
	Right side	0.085	0.002	0.002	0.030	0.087	0.087	0.115
	Top side		0.157	0.002	0.088	0.157	0.002	0.088
	Bottom side	0.507				0.507	0.507	0.507
LTE Band 12_Ant 1	Front	0.164	0.008	0.109	0.108	0.172	0.273	0.272
	Back	0.283	0.229	0.200	0.131	0.512	0.483	0.414
	Left side	0.162	0.060	0.329	0.128	0.222	0.491	0.290
	Right side	0.001	0.002	0.002	0.030	0.003	0.003	0.031
	Top side	0.166	0.157	0.002	0.088	0.323	0.168	0.254
	Bottom side					0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.164	0.008	0.109	0.108	0.172	0.273	0.272
	Back	0.305	0.229	0.200	0.131	0.534	0.505	0.436
	Left side	0.112	0.060	0.329	0.128	0.172	0.441	0.240
	Right side	0.001	0.002	0.002	0.030	0.003	0.003	0.031
	Top side	0.160	0.157	0.002	0.088	0.317	0.162	0.248
	Bottom side					0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.150	0.008	0.109	0.108	0.158	0.259	0.258
	Back	0.286	0.229	0.200	0.131	0.515	0.486	0.417
	Left side	0.126	0.060	0.329	0.128	0.186	0.455	0.254



	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side	0.172	0.157	0.002	0.088	<b>0.329</b>	<b>0.174</b>	<b>0.260</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 25_Ant 0	Front	0.340	0.008	0.109	0.108	<b>0.348</b>	<b>0.449</b>	<b>0.448</b>
	Back	0.903	0.229	0.200	0.131	<b>1.132</b>	<b>1.103</b>	<b>1.034</b>
	Left side	0.579	0.060	0.329	0.128	<b>0.639</b>	<b>0.908</b>	<b>0.707</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.518				<b>0.518</b>	<b>0.518</b>	<b>0.518</b>
LTE Band 26_Ant 1	Front	0.195	0.008	0.109	0.108	<b>0.203</b>	<b>0.304</b>	<b>0.303</b>
	Back	0.358	0.229	0.200	0.131	<b>0.587</b>	<b>0.558</b>	<b>0.489</b>
	Left side	0.121	0.060	0.329	0.128	<b>0.181</b>	<b>0.450</b>	<b>0.249</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.188				<b>0.188</b>	<b>0.188</b>	<b>0.188</b>
LTE Band 30_Ant 0	Front	0.340	0.008	0.109	0.108	<b>0.348</b>	<b>0.449</b>	<b>0.448</b>
	Back	0.529	0.229	0.200	0.131	<b>0.758</b>	<b>0.729</b>	<b>0.660</b>
	Left side	0.682	0.060	0.329	0.128	<b>0.742</b>	<b>1.011</b>	<b>0.810</b>
	Right side	0.002	0.002	0.002	0.030	<b>0.004</b>	<b>0.004</b>	<b>0.032</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.203				<b>0.203</b>	<b>0.203</b>	<b>0.203</b>
LTE Band 41_Ant 0	Front	0.248	0.008	0.109	0.108	<b>0.256</b>	<b>0.357</b>	<b>0.356</b>
	Back	0.334	0.229	0.200	0.131	<b>0.563</b>	<b>0.534</b>	<b>0.465</b>
	Left side	0.873	0.060	0.329	0.128	<b>0.933</b>	<b>1.202</b>	<b>1.001</b>
	Right side	0.062	0.002	0.002	0.030	<b>0.064</b>	<b>0.064</b>	<b>0.092</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.425				<b>0.425</b>	<b>0.425</b>	<b>0.425</b>
LTE Band 48_Ant 2	Front	0.137	0.008	0.109	0.108	<b>0.145</b>	<b>0.246</b>	<b>0.245</b>
	Back	0.132	0.229	0.200	0.131	<b>0.361</b>	<b>0.332</b>	<b>0.263</b>
	Left side	0.061	0.060	0.329	0.128	<b>0.121</b>	<b>0.390</b>	<b>0.189</b>
	Right side	0.306	0.002	0.002	0.030	<b>0.308</b>	<b>0.308</b>	<b>0.336</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.072				<b>0.072</b>	<b>0.072</b>	<b>0.072</b>
LTE Band 66_Ant 0	Front	0.315	0.008	0.109	0.108	<b>0.323</b>	<b>0.424</b>	<b>0.423</b>
	Back	0.532	0.229	0.200	0.131	<b>0.761</b>	<b>0.732</b>	<b>0.663</b>
	Left side	0.831	0.060	0.329	0.128	<b>0.891</b>	<b>1.160</b>	<b>0.959</b>
	Right side	0.051	0.002	0.002	0.030	<b>0.053</b>	<b>0.053</b>	<b>0.081</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.252				<b>0.252</b>	<b>0.252</b>	<b>0.252</b>
LTE Band 71_Ant 1	Front	0.129	0.008	0.109	0.108	<b>0.137</b>	<b>0.238</b>	<b>0.237</b>
	Back	0.238	0.229	0.200	0.131	<b>0.467</b>	<b>0.438</b>	<b>0.369</b>
	Left side	0.218	0.060	0.329	0.128	<b>0.278</b>	<b>0.547</b>	<b>0.346</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side	0.159	0.157	0.002	0.088	<b>0.316</b>	<b>0.161</b>	<b>0.247</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n5_Ant 1	Front	0.196	0.008	0.109	0.108	<b>0.204</b>	<b>0.305</b>	<b>0.304</b>
	Back	0.382	0.229	0.200	0.131	<b>0.611</b>	<b>0.582</b>	<b>0.513</b>
	Left side	0.121	0.060	0.329	0.128	<b>0.181</b>	<b>0.450</b>	<b>0.249</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side	0.220	0.157	0.002	0.088	<b>0.377</b>	<b>0.222</b>	<b>0.308</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n7_Ant 0	Front	0.189	0.008	0.109	0.108	<b>0.197</b>	<b>0.298</b>	<b>0.297</b>
	Back	0.400	0.229	0.200	0.131	<b>0.629</b>	<b>0.600</b>	<b>0.531</b>
	Left side	0.888	0.060	0.329	0.128	<b>0.948</b>	<b>1.217</b>	<b>1.016</b>
	Right side	0.109	0.002	0.002	0.030	<b>0.111</b>	<b>0.111</b>	<b>0.139</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>



	Bottom side	0.594				<b>0.594</b>	<b>0.594</b>	<b>0.594</b>
FR1 n12_Ant 1	Front	0.146	0.008	0.109	0.108	<b>0.154</b>	<b>0.255</b>	<b>0.254</b>
	Back	0.290	0.229	0.200	0.131	<b>0.519</b>	<b>0.490</b>	<b>0.421</b>
	Left side	0.134	0.060	0.329	0.128	<b>0.194</b>	<b>0.463</b>	<b>0.262</b>
	Right side	0.001	0.002	0.002	0.030	<b>0.003</b>	<b>0.003</b>	<b>0.031</b>
	Top side	0.188	0.157	0.002	0.088	<b>0.345</b>	<b>0.190</b>	<b>0.276</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n25_Ant 0	Front	0.567	0.008	0.109	0.108	<b>0.575</b>	<b>0.676</b>	<b>0.675</b>
	Back	0.903	0.229	0.200	0.131	<b>1.132</b>	<b>1.103</b>	<b>1.034</b>
	Left side	0.505	0.060	0.329	0.128	<b>0.565</b>	<b>0.834</b>	<b>0.633</b>
	Right side	0.039	0.002	0.002	0.030	<b>0.041</b>	<b>0.041</b>	<b>0.069</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.425				<b>0.425</b>	<b>0.425</b>	<b>0.425</b>
FR1 n30_Ant 0	Front	0.457	0.008	0.109	0.108	<b>0.465</b>	<b>0.566</b>	<b>0.565</b>
	Back	0.489	0.229	0.200	0.131	<b>0.718</b>	<b>0.689</b>	<b>0.620</b>
	Left side	0.778	0.060	0.329	0.128	<b>0.838</b>	<b>1.107</b>	<b>0.906</b>
	Right side	0.106	0.002	0.002	0.030	<b>0.108</b>	<b>0.108</b>	<b>0.136</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.326				<b>0.326</b>	<b>0.326</b>	<b>0.326</b>
FR1 n41_Ant 5	Front	0.256	0.008	0.109	0.108	<b>0.264</b>	<b>0.365</b>	<b>0.364</b>
	Back	0.408	0.229	0.200	0.131	<b>0.637</b>	<b>0.608</b>	<b>0.539</b>
	Left side	0.050	0.060	0.329	0.128	<b>0.110</b>	<b>0.379</b>	<b>0.178</b>
	Right side	0.883	0.002	0.002	0.030	<b>0.885</b>	<b>0.885</b>	<b>0.913</b>
	Top side	0.102	0.157	0.002	0.088	<b>0.259</b>	<b>0.104</b>	<b>0.190</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 0	Front	0.611	0.008	0.109	0.108	<b>0.619</b>	<b>0.720</b>	<b>0.719</b>
	Back	0.846	0.229	0.200	0.131	<b>1.075</b>	<b>1.046</b>	<b>0.977</b>
	Left side	0.754	0.060	0.329	0.128	<b>0.814</b>	<b>1.083</b>	<b>0.882</b>
	Right side	0.065	0.002	0.002	0.030	<b>0.067</b>	<b>0.067</b>	<b>0.095</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.611				<b>0.611</b>	<b>0.611</b>	<b>0.611</b>
FR1 n71_Ant 1	Front	0.130	0.008	0.109	0.108	<b>0.138</b>	<b>0.239</b>	<b>0.238</b>
	Back	0.243	0.229	0.200	0.131	<b>0.472</b>	<b>0.443</b>	<b>0.374</b>
	Left side	0.152	0.060	0.329	0.128	<b>0.212</b>	<b>0.481</b>	<b>0.280</b>
	Right side	0.077	0.002	0.002	0.030	<b>0.079</b>	<b>0.079</b>	<b>0.107</b>
	Top side	0.158	0.157	0.002	0.088	<b>0.315</b>	<b>0.160</b>	<b>0.246</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n77_Ant 2	Front	0.166	0.008	0.109	0.108	<b>0.174</b>	<b>0.275</b>	<b>0.274</b>
	Back	0.230	0.229	0.200	0.131	<b>0.459</b>	<b>0.430</b>	<b>0.361</b>
	Left side	0.040	0.060	0.329	0.128	<b>0.100</b>	<b>0.369</b>	<b>0.168</b>
	Right side	0.426	0.002	0.002	0.030	<b>0.428</b>	<b>0.428</b>	<b>0.456</b>
	Top side		0.157	0.002	0.088	<b>0.157</b>	<b>0.002</b>	<b>0.088</b>
	Bottom side	0.116				<b>0.116</b>	<b>0.116</b>	<b>0.116</b>



**16.4 Body-Worn Accessory Exposure Conditions**

**<WLAN Index 5, BT Index 3>**

Exposure Position	1	2	3	4	5	2+3 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)	2+5 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 3+4 1g SAR (W/kg)			
Front at 10mm	0.532	0.202	0.008	0.109	0.108	<b>0.211</b>	<b>0.333</b>	<b>0.332</b>
Back at 10mm	0.823	1.127	0.241	0.200	0.131	<b>1.433</b>	<b>1.367</b>	<b>1.284</b>

**<WLAN Index 6>**

Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)	
	Front at 10mm -	0.374	
Back at 10mm -	0.546	0.999	<b>1.545</b>



**<WWAN Index 6, WLAN Index 7>**

WWAN Band	Exposure Position	1	5	7	1+5 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850_Ant 0	Front	0.151	0.269	0.109	0.420	0.260
	Back	0.494	0.369	0.492	0.863	0.986
GSM1900_Ant 2	Front	0.409	0.269	0.109	0.678	0.518
	Back	0.607	0.369	0.492	0.976	1.099
WCDMA II_Ant 2	Front	0.588	0.269	0.109	0.857	0.697
	Back	0.898	0.369	0.492	1.267	1.390
WCDMA IV_Ant 2	Front	0.573	0.269	0.109	0.842	0.682
	Back	0.887	0.369	0.492	1.256	1.379
WCDMA V_Ant 0	Front	0.261	0.269	0.109	0.530	0.370
	Back	0.363	0.369	0.492	0.732	0.855
LTE Band 7_Ant 2	Front	0.619	0.269	0.109	0.888	0.728
	Back	0.903	0.369	0.492	1.272	1.395
LTE Band 12_Ant 0	Front	0.199	0.269	0.109	0.468	0.308
	Back	0.313	0.369	0.492	0.682	0.805
LTE Band 13_Ant 0	Front	0.318	0.269	0.109	0.587	0.427
	Back	0.341	0.369	0.492	0.710	0.833
LTE Band 14_Ant 0	Front	0.256	0.269	0.109	0.525	0.365
	Back	0.328	0.369	0.492	0.697	0.820
LTE Band 25_Ant 2	Front	0.641	0.269	0.109	0.910	0.750
	Back	0.746	0.369	0.492	1.115	1.238
LTE Band 26_Ant 0	Front	0.299	0.269	0.109	0.568	0.408
	Back	0.375	0.369	0.492	0.744	0.867
LTE Band 30_Ant 2	Front	0.591	0.269	0.109	0.860	0.700
	Back	0.900	0.369	0.492	1.269	1.392
LTE Band 41_Ant 2	Front	0.560	0.269	0.109	0.829	0.669
	Back	0.898	0.369	0.492	1.267	1.390
LTE Band 48_Ant 6	Front	0.434	0.269	0.109	0.703	0.543
	Back	0.891	0.369	0.492	1.260	1.383
LTE Band 66_Ant 2	Front	0.646	0.269	0.109	0.915	0.755
	Back	0.821	0.369	0.492	1.190	1.313
LTE Band 71_Ant 0	Front	0.245	0.269	0.109	0.514	0.354
	Back	0.324	0.369	0.492	0.693	0.816
FR1 n5_Ant 0	Front	0.229	0.269	0.109	0.498	0.338
	Back	0.404	0.369	0.492	0.773	0.896
FR1 n7_Ant 2	Front	0.491	0.269	0.109	0.760	0.600
	Back	0.895	0.369	0.492	1.264	1.387
FR1 n12_Ant 0	Front	0.230	0.269	0.109	0.499	0.339
	Back	0.249	0.369	0.492	0.618	0.741
FR1 n25_Ant 2	Front	0.689	0.269	0.109	0.958	0.798
	Back	0.717	0.369	0.492	1.086	1.209
FR1 n30_Ant 2	Front	0.579	0.269	0.109	0.848	0.688
	Back	0.898	0.369	0.492	1.267	1.390
FR1 n41_Ant 1	Front	0.471	0.269	0.109	0.740	0.580
	Back	0.891	0.369	0.492	1.260	1.383
FR1 n66_Ant 2	Front	0.584	0.269	0.109	0.853	0.693
	Back	0.860	0.369	0.492	1.229	1.352
FR1 n71_Ant 0	Front	0.268	0.269	0.109	0.537	0.377
	Back	0.288	0.369	0.492	0.657	0.780
FR1 n77_Ant 6	Front	0.445	0.269	0.109	0.714	0.554
	Back	0.797	0.369	0.492	1.166	1.289





**<WWAN Index 6, WLAN Index 7>**

WWAN Band	Exposure Position	1	5	7	1+5 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850_Ant 1	Front	0.234	0.269	0.109	<b>0.503</b>	<b>0.343</b>
	Back	0.502	0.369	0.492	<b>0.871</b>	<b>0.994</b>
GSM1900_Ant 0	Front	0.390	0.269	0.109	<b>0.659</b>	<b>0.499</b>
	Back	0.688	0.369	0.492	<b>1.057</b>	<b>1.180</b>
WCDMA II_Ant 0	Front	0.397	0.269	0.109	<b>0.666</b>	<b>0.506</b>
	Back	0.903	0.369	0.492	<b>1.272</b>	<b>1.395</b>
WCDMA IV_Ant 0	Front	0.320	0.269	0.109	<b>0.589</b>	<b>0.429</b>
	Back	0.606	0.369	0.492	<b>0.975</b>	<b>1.098</b>
WCDMA V_Ant 1	Front	0.185	0.269	0.109	<b>0.454</b>	<b>0.294</b>
	Back	0.366	0.369	0.492	<b>0.735</b>	<b>0.858</b>
LTE Band 7_Ant 0	Front	0.470	0.269	0.109	<b>0.739</b>	<b>0.579</b>
	Back	0.680	0.369	0.492	<b>1.049</b>	<b>1.172</b>
LTE Band 12_Ant 1	Front	0.164	0.269	0.109	<b>0.433</b>	<b>0.273</b>
	Back	0.283	0.369	0.492	<b>0.652</b>	<b>0.775</b>
LTE Band 13_Ant 1	Front	0.164	0.269	0.109	<b>0.433</b>	<b>0.273</b>
	Back	0.305	0.369	0.492	<b>0.674</b>	<b>0.797</b>
LTE Band 14_Ant 1	Front	0.150	0.269	0.109	<b>0.419</b>	<b>0.259</b>
	Back	0.286	0.369	0.492	<b>0.655</b>	<b>0.778</b>
LTE Band 25_Ant 0	Front	0.340	0.269	0.109	<b>0.609</b>	<b>0.449</b>
	Back	0.903	0.369	0.492	<b>1.272</b>	<b>1.395</b>
LTE Band 26_Ant 1	Front	0.195	0.269	0.109	<b>0.464</b>	<b>0.304</b>
	Back	0.358	0.369	0.492	<b>0.727</b>	<b>0.850</b>
LTE Band 30_Ant 0	Front	0.340	0.269	0.109	<b>0.609</b>	<b>0.449</b>
	Back	0.529	0.369	0.492	<b>0.898</b>	<b>1.021</b>
LTE Band 41_Ant 0	Front	0.319	0.269	0.109	<b>0.588</b>	<b>0.428</b>
	Back	0.429	0.369	0.492	<b>0.798</b>	<b>0.921</b>
LTE Band 48_Ant 2	Front	0.159	0.269	0.109	<b>0.428</b>	<b>0.268</b>
	Back	0.132	0.369	0.492	<b>0.501</b>	<b>0.624</b>
LTE Band 66_Ant 0	Front	0.315	0.269	0.109	<b>0.584</b>	<b>0.424</b>
	Back	0.891	0.369	0.492	<b>1.260</b>	<b>1.383</b>
LTE Band 71_Ant 1	Front	0.129	0.269	0.109	<b>0.398</b>	<b>0.238</b>
	Back	0.238	0.369	0.492	<b>0.607</b>	<b>0.730</b>
FR1 n5_Ant 1	Front	0.196	0.269	0.109	<b>0.465</b>	<b>0.305</b>
	Back	0.382	0.369	0.492	<b>0.751</b>	<b>0.874</b>
FR1 n7_Ant 0	Front	0.249	0.269	0.109	<b>0.518</b>	<b>0.358</b>
	Back	0.528	0.369	0.492	<b>0.897</b>	<b>1.020</b>
FR1 n12_Ant 1	Front	0.146	0.269	0.109	<b>0.415</b>	<b>0.255</b>
	Back	0.290	0.369	0.492	<b>0.659</b>	<b>0.782</b>
FR1 n25_Ant 0	Front	0.567	0.269	0.109	<b>0.836</b>	<b>0.676</b>
	Back	0.903	0.369	0.492	<b>1.272</b>	<b>1.395</b>
FR1 n30_Ant 0	Front	0.457	0.269	0.109	<b>0.726</b>	<b>0.566</b>
	Back	0.489	0.369	0.492	<b>0.858</b>	<b>0.981</b>
FR1 n41_Ant 5	Front	0.338	0.269	0.109	<b>0.607</b>	<b>0.447</b>
	Back	0.637	0.369	0.492	<b>1.006</b>	<b>1.129</b>
FR1 n66_Ant 0	Front	0.611	0.269	0.109	<b>0.880</b>	<b>0.720</b>
	Back	0.846	0.369	0.492	<b>1.215</b>	<b>1.338</b>
FR1 n71_Ant 1	Front	0.130	0.269	0.109	<b>0.399</b>	<b>0.239</b>
	Back	0.243	0.369	0.492	<b>0.612</b>	<b>0.735</b>
FR1 n77_Ant 2	Front	0.166	0.269	0.109	<b>0.435</b>	<b>0.275</b>
	Back	0.230	0.369	0.492	<b>0.599</b>	<b>0.722</b>



**<WWAN Index 6, WLAN Index 9, BT Index 4>**

WWAN Band	Exposure Position	1	7	9	10	11	1+7+9 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)	1+7+11 Summed 1g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 7+3	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 0	Front	0.151	0.097	0.006	0.077	0.108	<b>0.254</b>	<b>0.325</b>	<b>0.356</b>
	Back	0.494	0.439	0.162	0.141	0.131	<b>1.095</b>	<b>1.074</b>	<b>1.064</b>
GSM1900_Ant 2	Front	0.409	0.097	0.006	0.077	0.108	<b>0.512</b>	<b>0.583</b>	<b>0.614</b>
	Back	0.607	0.439	0.162	0.141	0.131	<b>1.208</b>	<b>1.187</b>	<b>1.177</b>
WCDMA II_Ant 2	Front	0.588	0.097	0.006	0.077	0.108	<b>0.691</b>	<b>0.762</b>	<b>0.793</b>
	Back	0.898	0.439	0.162	0.141	0.131	<b>1.499</b>	<b>1.478</b>	<b>1.468</b>
WCDMA IV_Ant 2	Front	0.573	0.097	0.006	0.077	0.108	<b>0.676</b>	<b>0.747</b>	<b>0.778</b>
	Back	0.887	0.439	0.162	0.141	0.131	<b>1.488</b>	<b>1.467</b>	<b>1.457</b>
WCDMA V_Ant 0	Front	0.261	0.097	0.006	0.077	0.108	<b>0.364</b>	<b>0.435</b>	<b>0.466</b>
	Back	0.363	0.439	0.162	0.141	0.131	<b>0.964</b>	<b>0.943</b>	<b>0.933</b>
LTE Band 7_Ant 2	Front	0.619	0.097	0.006	0.077	0.108	<b>0.722</b>	<b>0.793</b>	<b>0.824</b>
	Back	0.903	0.439	0.162	0.141	0.131	<b>1.504</b>	<b>1.483</b>	<b>1.473</b>
LTE Band 12_Ant 0	Front	0.199	0.097	0.006	0.077	0.108	<b>0.302</b>	<b>0.373</b>	<b>0.404</b>
	Back	0.313	0.439	0.162	0.141	0.131	<b>0.914</b>	<b>0.893</b>	<b>0.883</b>
LTE Band 13_Ant 0	Front	0.318	0.097	0.006	0.077	0.108	<b>0.421</b>	<b>0.492</b>	<b>0.523</b>
	Back	0.341	0.439	0.162	0.141	0.131	<b>0.942</b>	<b>0.921</b>	<b>0.911</b>
LTE Band 14_Ant 0	Front	0.256	0.097	0.006	0.077	0.108	<b>0.359</b>	<b>0.430</b>	<b>0.461</b>
	Back	0.328	0.439	0.162	0.141	0.131	<b>0.929</b>	<b>0.908</b>	<b>0.898</b>
LTE Band 25_Ant 2	Front	0.641	0.097	0.006	0.077	0.108	<b>0.744</b>	<b>0.815</b>	<b>0.846</b>
	Back	0.746	0.439	0.162	0.141	0.131	<b>1.347</b>	<b>1.326</b>	<b>1.316</b>
LTE Band 26_Ant 0	Front	0.299	0.097	0.006	0.077	0.108	<b>0.402</b>	<b>0.473</b>	<b>0.504</b>
	Back	0.375	0.439	0.162	0.141	0.131	<b>0.976</b>	<b>0.955</b>	<b>0.945</b>
LTE Band 30_Ant 2	Front	0.591	0.097	0.006	0.077	0.108	<b>0.694</b>	<b>0.765</b>	<b>0.796</b>
	Back	0.900	0.439	0.162	0.141	0.131	<b>1.501</b>	<b>1.480</b>	<b>1.470</b>
LTE Band 41_Ant 2	Front	0.560	0.097	0.006	0.077	0.108	<b>0.663</b>	<b>0.734</b>	<b>0.765</b>
	Back	0.898	0.439	0.162	0.141	0.131	<b>1.499</b>	<b>1.478</b>	<b>1.468</b>
LTE Band 48_Ant 6	Front	0.434	0.097	0.006	0.077	0.108	<b>0.537</b>	<b>0.608</b>	<b>0.639</b>
	Back	0.891	0.439	0.162	0.141	0.131	<b>1.492</b>	<b>1.471</b>	<b>1.461</b>
LTE Band 66_Ant 2	Front	0.646	0.097	0.006	0.077	0.108	<b>0.749</b>	<b>0.820</b>	<b>0.851</b>
	Back	0.821	0.439	0.162	0.141	0.131	<b>1.422</b>	<b>1.401</b>	<b>1.391</b>
LTE Band 71_Ant 0	Front	0.245	0.097	0.006	0.077	0.108	<b>0.348</b>	<b>0.419</b>	<b>0.450</b>
	Back	0.324	0.439	0.162	0.141	0.131	<b>0.925</b>	<b>0.904</b>	<b>0.894</b>
FR1 n5_Ant 0	Front	0.229	0.097	0.006	0.077	0.108	<b>0.332</b>	<b>0.403</b>	<b>0.434</b>
	Back	0.404	0.439	0.162	0.141	0.131	<b>1.005</b>	<b>0.984</b>	<b>0.974</b>
FR1 n7_Ant 2	Front	0.491	0.097	0.006	0.077	0.108	<b>0.594</b>	<b>0.665</b>	<b>0.696</b>
	Back	0.895	0.439	0.162	0.141	0.131	<b>1.496</b>	<b>1.475</b>	<b>1.465</b>
FR1 n12_Ant 0	Front	0.230	0.097	0.006	0.077	0.108	<b>0.333</b>	<b>0.404</b>	<b>0.435</b>
	Back	0.249	0.439	0.162	0.141	0.131	<b>0.850</b>	<b>0.829</b>	<b>0.819</b>
FR1 n25_Ant 2	Front	0.689	0.097	0.006	0.077	0.108	<b>0.792</b>	<b>0.863</b>	<b>0.894</b>
	Back	0.717	0.439	0.162	0.141	0.131	<b>1.318</b>	<b>1.297</b>	<b>1.287</b>
FR1 n30_Ant 2	Front	0.579	0.097	0.006	0.077	0.108	<b>0.682</b>	<b>0.753</b>	<b>0.784</b>
	Back	0.898	0.439	0.162	0.141	0.131	<b>1.499</b>	<b>1.478</b>	<b>1.468</b>
FR1 n41_Ant 1	Front	0.471	0.097	0.006	0.077	0.108	<b>0.574</b>	<b>0.645</b>	<b>0.676</b>
	Back	0.891	0.439	0.162	0.141	0.131	<b>1.492</b>	<b>1.471</b>	<b>1.461</b>
FR1 n66_Ant 2	Front	0.584	0.097	0.006	0.077	0.108	<b>0.687</b>	<b>0.758</b>	<b>0.789</b>
	Back	0.860	0.439	0.162	0.141	0.131	<b>1.461</b>	<b>1.440</b>	<b>1.430</b>
FR1 n71_Ant 0	Front	0.268	0.097	0.006	0.077	0.108	<b>0.371</b>	<b>0.442</b>	<b>0.473</b>
	Back	0.288	0.439	0.162	0.141	0.131	<b>0.889</b>	<b>0.868</b>	<b>0.858</b>
FR1 n77_Ant 6	Front	0.445	0.097	0.006	0.077	0.108	<b>0.548</b>	<b>0.619</b>	<b>0.650</b>
	Back	0.797	0.439	0.162	0.141	0.131	<b>1.398</b>	<b>1.377</b>	<b>1.367</b>



**<WWAN Index 6, WLAN Index 9, BT Index 4>**

WWAN Band	Exposure Position	1	7	9	10	11	1+7+9 Summed 1g SAR (W/kg)	1+7+10 Summed 1g SAR (W/kg)	1+7+11 Summed 1g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 7+3	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 1	Front	0.234	0.109	0.006	0.077	0.108	0.349	0.420	0.451
	Back	0.502	0.492	0.162	0.141	0.131	1.156	1.135	1.125
GSM1900_Ant 0	Front	0.390	0.109	0.006	0.077	0.108	0.505	0.576	0.607
	Back	0.688	0.492	0.162	0.141	0.131	1.342	1.321	1.311
WCDMA II_Ant 0	Front	0.397	0.109	0.006	0.077	0.108	0.512	0.583	0.614
	Back	0.903	0.492	0.162	0.141	0.131	1.557	1.536	1.526
WCDMA IV_Ant 0	Front	0.320	0.109	0.006	0.077	0.108	0.435	0.506	0.537
	Back	0.606	0.492	0.162	0.141	0.131	1.260	1.239	1.229
WCDMA V_Ant 1	Front	0.185	0.109	0.006	0.077	0.108	0.300	0.371	0.402
	Back	0.366	0.492	0.162	0.141	0.131	1.020	0.999	0.989
LTE Band 7_Ant 0	Front	0.470	0.109	0.006	0.077	0.108	0.585	0.656	0.687
	Back	0.680	0.492	0.162	0.141	0.131	1.334	1.313	1.303
LTE Band 12_Ant 1	Front	0.164	0.109	0.006	0.077	0.108	0.279	0.350	0.381
	Back	0.283	0.492	0.162	0.141	0.131	0.937	0.916	0.906
LTE Band 13_Ant 1	Front	0.164	0.109	0.006	0.077	0.108	0.279	0.350	0.381
	Back	0.305	0.492	0.162	0.141	0.131	0.959	0.938	0.928
LTE Band 14_Ant 1	Front	0.150	0.109	0.006	0.077	0.108	0.265	0.336	0.367
	Back	0.286	0.492	0.162	0.141	0.131	0.940	0.919	0.909
LTE Band 25_Ant 0	Front	0.340	0.109	0.006	0.077	0.108	0.455	0.526	0.557
	Back	0.903	0.492	0.162	0.141	0.131	1.557	1.536	1.526
LTE Band 26_Ant 1	Front	0.195	0.109	0.006	0.077	0.108	0.310	0.381	0.412
	Back	0.358	0.492	0.162	0.141	0.131	1.012	0.991	0.981
LTE Band 30_Ant 0	Front	0.340	0.109	0.006	0.077	0.108	0.455	0.526	0.557
	Back	0.529	0.492	0.162	0.141	0.131	1.183	1.162	1.152
LTE Band 41_Ant 0	Front	0.319	0.109	0.006	0.077	0.108	0.434	0.505	0.536
	Back	0.429	0.492	0.162	0.141	0.131	1.083	1.062	1.052
LTE Band 48_Ant 2	Front	0.159	0.109	0.006	0.077	0.108	0.274	0.345	0.376
	Back	0.132	0.492	0.162	0.141	0.131	0.786	0.765	0.755
LTE Band 66_Ant 0	Front	0.315	0.109	0.006	0.077	0.108	0.430	0.501	0.532
	Back	0.891	0.492	0.162	0.141	0.131	1.545	1.524	1.514
LTE Band 71_Ant 1	Front	0.129	0.109	0.006	0.077	0.108	0.244	0.315	0.346
	Back	0.238	0.492	0.162	0.141	0.131	0.892	0.871	0.861
FR1 n5_Ant 1	Front	0.196	0.109	0.006	0.077	0.108	0.311	0.382	0.413
	Back	0.382	0.492	0.162	0.141	0.131	1.036	1.015	1.005
FR1 n7_Ant 0	Front	0.249	0.109	0.006	0.077	0.108	0.364	0.435	0.466
	Back	0.528	0.492	0.162	0.141	0.131	1.182	1.161	1.151
FR1 n12_Ant 1	Front	0.146	0.109	0.006	0.077	0.108	0.261	0.332	0.363
	Back	0.290	0.492	0.162	0.141	0.131	0.944	0.923	0.913
FR1 n25_Ant 0	Front	0.567	0.109	0.006	0.077	0.108	0.682	0.753	0.784
	Back	0.903	0.492	0.162	0.141	0.131	1.557	1.536	1.526
FR1 n30_Ant 0	Front	0.457	0.109	0.006	0.077	0.108	0.572	0.643	0.674
	Back	0.489	0.492	0.162	0.141	0.131	1.143	1.122	1.112
FR1 n41_Ant 5	Front	0.338	0.109	0.006	0.077	0.108	0.453	0.524	0.555
	Back	0.637	0.492	0.162	0.141	0.131	1.291	1.270	1.260
FR1 n66_Ant 0	Front	0.611	0.109	0.006	0.077	0.108	0.726	0.797	0.828
	Back	0.846	0.492	0.162	0.141	0.131	1.500	1.479	1.469
FR1 n71_Ant 1	Front	0.130	0.109	0.006	0.077	0.108	0.245	0.316	0.347
	Back	0.243	0.492	0.162	0.141	0.131	0.897	0.876	0.866
FR1 n77_Ant 2	Front	0.166	0.109	0.006	0.077	0.108	0.281	0.352	0.353
	Back	0.241	0.492	0.162	0.141	0.131	0.884	0.863	0.853



**<WWAN Index 6, WLAN Index 8>**

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 0	Front	0.151	0.133	0.097	0.381
	Back	0.494	0.196	0.439	1.129
GSM1900_Ant 2	Front	0.409	0.133	0.097	0.639
	Back	0.607	0.196	0.439	1.242
WCDMA II_Ant 2	Front	0.588	0.133	0.097	0.818
	Back	0.898	0.196	0.439	1.533
WCDMA IV_Ant 2	Front	0.573	0.133	0.097	0.803
	Back	0.887	0.196	0.439	1.522
WCDMA V_Ant 0	Front	0.261	0.133	0.097	0.491
	Back	0.363	0.196	0.439	0.998
LTE Band 7_Ant 2	Front	0.619	0.133	0.097	0.849
	Back	0.903	0.196	0.439	1.538
LTE Band 12_Ant 0	Front	0.199	0.133	0.097	0.429
	Back	0.313	0.196	0.439	0.948
LTE Band 13_Ant 0	Front	0.318	0.133	0.097	0.548
	Back	0.341	0.196	0.439	0.976
LTE Band 14_Ant 0	Front	0.256	0.133	0.097	0.486
	Back	0.328	0.196	0.439	0.963
LTE Band 25_Ant 2	Front	0.641	0.133	0.097	0.871
	Back	0.746	0.196	0.439	1.381
LTE Band 26_Ant 0	Front	0.299	0.133	0.097	0.529
	Back	0.375	0.196	0.439	1.010
LTE Band 30_Ant 2	Front	0.591	0.133	0.097	0.821
	Back	0.900	0.196	0.439	1.535
LTE Band 41_Ant 2	Front	0.560	0.133	0.097	0.790
	Back	0.898	0.196	0.439	1.533
LTE Band 48_Ant 6	Front	0.434	0.133	0.097	0.664
	Back	0.891	0.196	0.439	1.526
LTE Band 66_Ant 2	Front	0.646	0.133	0.097	0.876
	Back	0.821	0.196	0.439	1.456
LTE Band 71_Ant 0	Front	0.245	0.133	0.097	0.475
	Back	0.324	0.196	0.439	0.959
FR1 n5_Ant 0	Front	0.229	0.133	0.097	0.459
	Back	0.404	0.196	0.439	1.039
FR1 n7_Ant 2	Front	0.491	0.133	0.097	0.721
	Back	0.895	0.196	0.439	1.530
FR1 n12_Ant 0	Front	0.230	0.133	0.097	0.460
	Back	0.249	0.196	0.439	0.884
FR1 n25_Ant 2	Front	0.689	0.133	0.097	0.919
	Back	0.717	0.196	0.439	1.352
FR1 n30_Ant 2	Front	0.579	0.133	0.097	0.809
	Back	0.898	0.196	0.439	1.533
FR1 n41_Ant 1	Front	0.471	0.133	0.097	0.701
	Back	0.891	0.196	0.439	1.526
FR1 n66_Ant 2	Front	0.584	0.133	0.097	0.814
	Back	0.860	0.196	0.439	1.495
FR1 n71_Ant 0	Front	0.268	0.133	0.097	0.498
	Back	0.288	0.196	0.439	0.923
FR1 n77_Ant 6	Front	0.445	0.133	0.097	0.675
	Back	0.797	0.196	0.439	1.432



**<WWAN Index 6, WLAN Index 8>**

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 7+3 1g SAR (W/kg)	
GSM850_Ant 1	Front	0.234	0.133	0.097	<b>0.464</b>
	Back	0.502	0.196	0.439	<b>1.137</b>
GSM1900_Ant 0	Front	0.390	0.133	0.097	<b>0.620</b>
	Back	0.688	0.196	0.439	<b>1.323</b>
WCDMA II_Ant 0	Front	0.397	0.133	0.097	<b>0.627</b>
	Back	0.903	0.196	0.439	<b>1.538</b>
WCDMA IV_Ant 0	Front	0.320	0.133	0.097	<b>0.550</b>
	Back	0.606	0.196	0.439	<b>1.241</b>
WCDMA V_Ant 1	Front	0.185	0.133	0.097	<b>0.415</b>
	Back	0.366	0.196	0.439	<b>1.001</b>
LTE Band 7_Ant 0	Front	0.470	0.133	0.097	<b>0.700</b>
	Back	0.680	0.196	0.439	<b>1.315</b>
LTE Band 12_Ant 1	Front	0.164	0.133	0.097	<b>0.394</b>
	Back	0.283	0.196	0.439	<b>0.918</b>
LTE Band 13_Ant 1	Front	0.164	0.133	0.097	<b>0.394</b>
	Back	0.305	0.196	0.439	<b>0.940</b>
LTE Band 14_Ant 1	Front	0.150	0.133	0.097	<b>0.380</b>
	Back	0.286	0.196	0.439	<b>0.921</b>
LTE Band 25_Ant 0	Front	0.340	0.133	0.097	<b>0.570</b>
	Back	0.903	0.196	0.439	<b>1.538</b>
LTE Band 26_Ant 1	Front	0.195	0.133	0.097	<b>0.425</b>
	Back	0.358	0.196	0.439	<b>0.993</b>
LTE Band 30_Ant 0	Front	0.340	0.133	0.097	<b>0.570</b>
	Back	0.529	0.196	0.439	<b>1.164</b>
LTE Band 41_Ant 0	Front	0.319	0.133	0.097	<b>0.549</b>
	Back	0.429	0.196	0.439	<b>1.064</b>
LTE Band 48_Ant 2	Front	0.159	0.133	0.097	<b>0.389</b>
	Back	0.132	0.196	0.439	<b>0.767</b>
LTE Band 66_Ant 0	Front	0.315	0.133	0.097	<b>0.545</b>
	Back	0.891	0.196	0.439	<b>1.526</b>
LTE Band 71_Ant 1	Front	0.129	0.133	0.097	<b>0.359</b>
	Back	0.238	0.196	0.439	<b>0.873</b>
FR1 n5_Ant 1	Front	0.196	0.133	0.097	<b>0.426</b>
	Back	0.382	0.196	0.439	<b>1.017</b>
FR1 n7_Ant 0	Front	0.249	0.133	0.097	<b>0.479</b>
	Back	0.528	0.196	0.439	<b>1.163</b>
FR1 n12_Ant 1	Front	0.146	0.133	0.097	<b>0.376</b>
	Back	0.290	0.196	0.439	<b>0.925</b>
FR1 n25_Ant 0	Front	0.567	0.133	0.097	<b>0.797</b>
	Back	0.903	0.196	0.439	<b>1.538</b>
FR1 n30_Ant 0	Front	0.457	0.133	0.097	<b>0.687</b>
	Back	0.489	0.196	0.439	<b>1.124</b>
FR1 n41_Ant 5	Front	0.338	0.133	0.097	<b>0.568</b>
	Back	0.637	0.196	0.439	<b>1.272</b>
FR1 n66_Ant 0	Front	0.611	0.133	0.097	<b>0.841</b>
	Back	0.846	0.196	0.439	<b>1.481</b>
FR1 n71_Ant 1	Front	0.130	0.133	0.097	<b>0.360</b>
	Back	0.243	0.196	0.439	<b>0.878</b>
FR1 n77_Ant 2	Front	0.166	0.133	0.097	<b>0.386</b>
	Back	0.230	0.196	0.439	<b>0.865</b>



**<WWAN Index 6, BT Index 3>**

WWAN Band	Exposure Position	1	9	10	11	1+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+11 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)			
GSM850_Ant 0	Front	0.151	0.008	0.109	0.108	0.159	0.260	0.259
	Back	0.494	0.255	0.200	0.131	0.749	0.694	0.625
GSM1900_Ant 2	Front	0.409	0.008	0.109	0.108	0.417	0.518	0.517
	Back	0.607	0.255	0.200	0.131	0.862	0.807	0.738
WCDMA II_Ant 2	Front	0.588	0.008	0.109	0.108	0.596	0.697	0.696
	Back	0.898	0.255	0.200	0.131	1.153	1.098	1.029
WCDMA IV_Ant 2	Front	0.573	0.008	0.109	0.108	0.581	0.682	0.681
	Back	0.887	0.255	0.200	0.131	1.142	1.087	1.018
WCDMA V_Ant 0	Front	0.261	0.008	0.109	0.108	0.269	0.370	0.369
	Back	0.363	0.255	0.200	0.131	0.618	0.563	0.494
LTE Band 7_Ant 2	Front	0.619	0.008	0.109	0.108	0.627	0.728	0.727
	Back	0.903	0.255	0.200	0.131	1.158	1.103	1.034
LTE Band 12_Ant 0	Front	0.199	0.008	0.109	0.108	0.207	0.308	0.307
	Back	0.313	0.255	0.200	0.131	0.568	0.513	0.444
LTE Band 13_Ant 0	Front	0.318	0.008	0.109	0.108	0.326	0.427	0.426
	Back	0.341	0.255	0.200	0.131	0.596	0.541	0.472
LTE Band 14_Ant 0	Front	0.256	0.008	0.109	0.108	0.264	0.365	0.364
	Back	0.328	0.255	0.200	0.131	0.583	0.528	0.459
LTE Band 25_Ant 2	Front	0.641	0.008	0.109	0.108	0.649	0.750	0.749
	Back	0.746	0.255	0.200	0.131	1.001	0.946	0.877
LTE Band 26_Ant 0	Front	0.299	0.008	0.109	0.108	0.307	0.408	0.407
	Back	0.375	0.255	0.200	0.131	0.630	0.575	0.506
LTE Band 30_Ant 2	Front	0.591	0.008	0.109	0.108	0.599	0.700	0.699
	Back	0.900	0.255	0.200	0.131	1.155	1.100	1.031
LTE Band 41_Ant 2	Front	0.560	0.008	0.109	0.108	0.568	0.669	0.668
	Back	0.898	0.255	0.200	0.131	1.153	1.098	1.029
LTE Band 48_Ant 6	Front	0.434	0.008	0.109	0.108	0.442	0.543	0.542
	Back	0.891	0.255	0.200	0.131	1.146	1.091	1.022
LTE Band 66_Ant 2	Front	0.646	0.008	0.109	0.108	0.654	0.755	0.754
	Back	0.821	0.255	0.200	0.131	1.076	1.021	0.952
LTE Band 71_Ant 0	Front	0.245	0.008	0.109	0.108	0.253	0.354	0.353
	Back	0.324	0.255	0.200	0.131	0.579	0.524	0.455
FR1 n5_Ant 0	Front	0.229	0.008	0.109	0.108	0.237	0.338	0.337
	Back	0.404	0.255	0.200	0.131	0.659	0.604	0.535
FR1 n7_Ant 2	Front	0.491	0.008	0.109	0.108	0.499	0.600	0.599
	Back	0.895	0.255	0.200	0.131	1.150	1.095	1.026
FR1 n12_Ant 0	Front	0.230	0.008	0.109	0.108	0.238	0.339	0.338
	Back	0.249	0.255	0.200	0.131	0.504	0.449	0.380
FR1 n25_Ant 2	Front	0.689	0.008	0.109	0.108	0.697	0.798	0.797
	Back	0.717	0.255	0.200	0.131	0.972	0.917	0.848
FR1 n30_Ant 2	Front	0.579	0.008	0.109	0.108	0.587	0.688	0.687
	Back	0.898	0.255	0.200	0.131	1.153	1.098	1.029
FR1 n41_Ant 1	Front	0.471	0.008	0.109	0.108	0.479	0.580	0.579
	Back	0.891	0.255	0.200	0.131	1.146	1.091	1.022
FR1 n66_Ant 2	Front	0.584	0.008	0.109	0.108	0.592	0.693	0.692
	Back	0.860	0.255	0.200	0.131	1.115	1.060	0.991
FR1 n71_Ant 0	Front	0.268	0.008	0.109	0.108	0.276	0.377	0.376
	Back	0.288	0.255	0.200	0.131	0.543	0.488	0.419
FR1 n77_Ant 6	Front	0.445	0.008	0.109	0.108	0.453	0.554	0.553
	Back	0.797	0.255	0.200	0.131	1.052	0.997	0.928



WWAN Band	Exposure Position	1	9	10	11	1+9 Summed 1g SAR (W/kg)	1+10 Summed 1g SAR (W/kg)	1+11 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM850_Ant 1	Front	0.234	0.008	0.109	0.108	0.242	0.343	0.342
	Back	0.502	0.255	0.200	0.131	0.757	0.702	0.633
GSM1900_Ant 0	Front	0.390	0.008	0.109	0.108	0.398	0.499	0.498
	Back	0.688	0.255	0.200	0.131	0.943	0.888	0.819
WCDMA II_Ant 0	Front	0.397	0.008	0.109	0.108	0.405	0.506	0.505
	Back	0.903	0.255	0.200	0.131	1.158	1.103	1.034
WCDMA IV_Ant 0	Front	0.320	0.008	0.109	0.108	0.328	0.429	0.428
	Back	0.606	0.255	0.200	0.131	0.861	0.806	0.737
WCDMA V_Ant 1	Front	0.185	0.008	0.109	0.108	0.193	0.294	0.293
	Back	0.366	0.255	0.200	0.131	0.621	0.566	0.497
LTE Band 7_Ant 0	Front	0.470	0.008	0.109	0.108	0.478	0.579	0.578
	Back	0.680	0.255	0.200	0.131	0.935	0.880	0.811
LTE Band 12_Ant 1	Front	0.164	0.008	0.109	0.108	0.172	0.273	0.272
	Back	0.283	0.255	0.200	0.131	0.538	0.483	0.414
LTE Band 13_Ant 1	Front	0.164	0.008	0.109	0.108	0.172	0.273	0.272
	Back	0.305	0.255	0.200	0.131	0.560	0.505	0.436
LTE Band 14_Ant 1	Front	0.150	0.008	0.109	0.108	0.158	0.259	0.258
	Back	0.286	0.255	0.200	0.131	0.541	0.486	0.417
LTE Band 25_Ant 0	Front	0.340	0.008	0.109	0.108	0.348	0.449	0.448
	Back	0.903	0.255	0.200	0.131	1.158	1.103	1.034
LTE Band 26_Ant 1	Front	0.195	0.008	0.109	0.108	0.203	0.304	0.303
	Back	0.358	0.255	0.200	0.131	0.613	0.558	0.489
LTE Band 30_Ant 0	Front	0.340	0.008	0.109	0.108	0.348	0.449	0.448
	Back	0.529	0.255	0.200	0.131	0.784	0.729	0.660
LTE Band 41_Ant 0	Front	0.319	0.008	0.109	0.108	0.327	0.428	0.427
	Back	0.429	0.255	0.200	0.131	0.684	0.629	0.560
LTE Band 48_Ant 2	Front	0.159	0.008	0.109	0.108	0.167	0.268	0.267
	Back	0.132	0.255	0.200	0.131	0.387	0.332	0.263
LTE Band 66_Ant 0	Front	0.315	0.008	0.109	0.108	0.323	0.424	0.423
	Back	0.891	0.255	0.200	0.131	1.146	1.091	1.022
LTE Band 71_Ant 1	Front	0.129	0.008	0.109	0.108	0.137	0.238	0.237
	Back	0.238	0.255	0.200	0.131	0.493	0.438	0.369
FR1 n5_Ant 1	Front	0.196	0.008	0.109	0.108	0.204	0.305	0.304
	Back	0.382	0.255	0.200	0.131	0.637	0.582	0.513
FR1 n7_Ant 0	Front	0.249	0.008	0.109	0.108	0.257	0.358	0.357
	Back	0.528	0.255	0.200	0.131	0.783	0.728	0.659
FR1 n12_Ant 1	Front	0.146	0.008	0.109	0.108	0.154	0.255	0.254
	Back	0.290	0.255	0.200	0.131	0.545	0.490	0.421
FR1 n25_Ant 0	Front	0.567	0.008	0.109	0.108	0.575	0.676	0.675
	Back	0.903	0.255	0.200	0.131	1.158	1.103	1.034
FR1 n30_Ant 0	Front	0.457	0.008	0.109	0.108	0.465	0.566	0.565
	Back	0.489	0.255	0.200	0.131	0.744	0.689	0.620
FR1 n41_Ant 5	Front	0.338	0.008	0.109	0.108	0.346	0.447	0.446
	Back	0.637	0.255	0.200	0.131	0.892	0.837	0.768
FR1 n66_Ant 0	Front	0.611	0.008	0.109	0.108	0.619	0.720	0.719
	Back	0.846	0.255	0.200	0.131	1.101	1.046	0.977
FR1 n71_Ant 1	Front	0.130	0.008	0.109	0.108	0.138	0.239	0.238
	Back	0.243	0.255	0.200	0.131	0.498	0.443	0.374
FR1 n77_Ant 2	Front	0.166	0.008	0.109	0.108	0.174	0.275	0.274
	Back	0.230	0.255	0.200	0.131	0.507	0.452	0.383





**16.5 Product Specific Exposure Conditions**

WWAN Band	Exposure Position	1	7	1+7 Summed 10g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 7+3	
		10g SAR (W/kg)	10g SAR (W/kg)	
LTE Band 66_Ant 2	Front		0.216	0.216
	Back		0.858	0.858
	Left side		0.399	0.399
	Right side		0.166	0.166
	Top side		0.146	0.146
	Bottom side	2.965		2.965
FR1 n41_Ant 1	Front		0.216	0.216
	Back		0.858	0.858
	Left side		0.399	0.399
	Right side		0.166	0.166
	Top side	2.721	0.146	2.867
	Bottom side			0.000

WWAN Band	Exposure Position	1	7	9	10	11	1+7+9 Summed 10g SAR (W/kg)	1+7+10 Summed 10g SAR (W/kg)	1+7+11 Summed 10g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 7+3	Bluetooth Ant 4	Bluetooth Ant 3	Bluetooth Ant 4+3			
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)			
LTE Band 66_Ant 2	Front		0.193				0.193	0.193	0.193
	Back		0.765				0.765	0.765	0.765
	Left side		0.356				0.356	0.356	0.356
	Right side		0.148				0.148	0.148	0.148
	Top side		0.130				0.130	0.130	0.130
	Bottom side	2.965					2.965	2.965	2.965
FR1 n41_Ant 1	Front		0.193				0.193	0.193	0.193
	Back		0.765				0.765	0.765	0.765
	Left side		0.356				0.356	0.356	0.356
	Right side		0.148				0.148	0.148	0.148
	Top side	2.721	0.130				2.851	2.851	2.851
	Bottom side						0.000	0.000	0.000

WWAN Band	Exposure Position	1	5	7	1+5+7 Summed 10g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 7+3	
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
LTE Band 66_Ant 2	Front			0.193	0.193
	Back			0.765	0.765
	Left side			0.356	0.356
	Right side			0.148	0.148
	Top side			0.130	0.130
	Bottom side	2.965			2.965
FR1 n41_Ant 1	Front			0.193	0.193
	Back			0.765	0.765
	Left side			0.356	0.356
	Right side			0.148	0.148
	Top side	2.721		0.130	2.851
	Bottom side				0.000





17. Supplemental Antenna tuner tests results

General Note:

- 1. This device implements antenna tuning techniques in the several frequency band and list as below. 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. Dynamic antenna tuning mechanism is available at Ant. 0 and for its <1GHz band, details are illustrated in the operational description. In this section, all supported tuning states for each band are tested and it's verified that auto-tune state results in the highest SAR
4. 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).

Table with 2 columns: Transmit switching diversity configuration, Support transmit antenna and band. Row 1: TX0, ANT 0: LTE B5/B12/B13/B14/B17/B26/B71



**17.1 Supplemental Head SAR results**

RF exposure position						Average Value of Time Sweep (W/kg)																
Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
LTE Band 5	10M_QPSK_1_0	20525	Left Cheek	0.246	0.259	0.231	0.158	0.139	0.231	0.252	0.283	0.257	0.154	0.231	0.24	0.165	0.139	0.23	0.231	0.208		
LTE Band 12	10M_QPSK_25_0	23095	Left Cheek	0.181	0.219	0.216	0.149	0.152	0.163	0.192	0.229	0.187	0.123	0.148	0.201	0.194	0.138	0.141	0.155	0.208		
LTE Band 13	10M_QPSK_1_0	23230	Left Cheek	0.254	0.29	0.245	0.281	0.246	0.222	0.282	0.184	0.267	0.284	0.232	0.213	0.275	0.26	0.281	0.246			
LTE Band 14	10M_QPSK_1_0	23330	Left Cheek	0.275	0.277	0.249	0.269	0.259	0.202	0.203	0.271	0.207	0.248	0.271	0.249	0.192	0.171	0.265	0.27	0.227		
LTE Band 17	10M_QPSK_25_0	23790	Left Cheek	0.181	0.216	0.146	0.161	0.182	0.138	0.129	0.175	0.195	0.19	0.187	0.155	0.215	0.182	0.138	0.149	0.165	0.182	0.194
LTE Band 26	15M_QPSK_1_0	26865	Left Cheek	0.246	0.26	0.211	0.165	0.178	0.142	0.231	0.233	0.143	0.183	0.197	0.245	0.212	0.166	0.15	0.224	0.231		
LTE Band 71	20M_QPSK_1_0	133322	Left Cheek	0.17	0.206	0.136	0.182	0.041	0.155	0.041	0.141	0.041	0.041	0.041	0.156	0.041	0.041	0.16				



**17.2 Supplemental Body SAR results**

RF exposure position					Average Value of Time Sweep (W/kg)																		
Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Body (Ant0) Power Index 4/5/6	LTE Band 5	10M_QPSK_1_0	20525	Back	0.278	0.286	0.21	0.144	0.127	0.21	0.229	0.257	0.282	0.165	0.241	0.259	0.146	0.124	0.203	0.204	0.184		
	LTE Band 12	10M_QPSK_1_0	23095	Back	0.238	0.287	0.249	0.169	0.172	0.186	0.22	0.286	0.248	0.182	0.189	0.28	0.23	0.16	0.164	0.181	0.248		
	LTE Band 13	10M_QPSK_1_0	23230	Back	0.269	0.332	0.27	0.311	0.271	0.243	0.322	0.206	0.305	0.32	0.268	0.242	0.318	0.3	0.321	0.283			
	LTE Band 14	10M_QPSK_1_0	23330	Back	0.249	0.291	0.264	0.261	0.258	0.213	0.214	0.285	0.219	0.271	0.289	0.249	0.204	0.183	0.27	0.268	0.225		
	LTE Band 17	10M_QPSK_1_0	23790	Back	0.238	0.277	0.125	0.144	0.172	0.114	0.103	0.163	0.244	0.232	0.221	0.175	0.268	0.158	0.106	0.119	0.138	0.158	0.173
	LTE Band 26	15M_QPSK_1_0	26865	Back	0.278	0.324	0.278	0.228	0.242	0.203	0.299	0.284	0.199	0.239	0.253	0.308	0.268	0.221	0.205	0.281	0.288		
	LTE Band 71	20M_QPSK_1_0	133322	Back	0.24	0.254	0.138	0.152	0.041	0.15	0.041	0.183	0.041	0.041	0.041	0.159	0.041	0.041	0.164				

**Test Engineer :** Mood Huang, Carter Jhuang, Ken Lin, Willie Huang, Lemon Su, Bob Cheng, Sing Lim, Randy Lin, Bevis Chang



## **18. 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.

### Declaration of Conformity:

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

### Comments and Explanations:

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

## **19. 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.