



# FCC SAR TEST REPORT

FCC ID : A4RGB7N6  
Equipment : Phone  
Model Name : GB7N6, GR1YH  
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 02, 2021 and testing was started from Jun 29, 2021 and completed on Jul 29, 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



**Sporton International Inc. EMC & Wireless Communications Laboratory**

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan



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... 74
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... 83
10.3 PD System Performance Check Results... 85
11. RF Exposure Positions... 86
11.1 Ear and handset reference point... 86
11.2 Definition of the cheek position... 87
11.3 Definition of the tilt position... 88
11.4 Body Worn Accessory... 88
11.5 Product Specific Exposure... 89
11.6 Wireless Router... 89
12. Measurement procedure for output power and SAR... 90
13. DL/UL carrier aggregation... 98
14. RF Exposure position consideration... 104
15. RF Exposure Test Result... 105
15.1 Head SAR... 108
15.2 Hotspot SAR... 120
15.3 Body Worn Accessory SAR... 128
15.4 Product Specific SAR... 135
15.5 6GHz PD Test Result... 137
15.6 Repeated SAR Measurement... 137
15.7 FR1 n41/n77 Power Class 2 and Power Class 3 Linearity... 139
16. Simultaneous Transmission Analysis... 141
16.1 5G NR + LTE + WLAN + BT Sim-Tx analysis... 143
16.2 Head Exposure Conditions... 143
16.3 Hotspot Exposure Conditions... 152
16.4 Body-Worn Accessory Exposure Conditions... 176
16.5 Product Specific Exposure Conditions... 185
17. Supplemental Antenna tuner tests results... 187
17.1 Supplemental Head SAR results... 188
17.2 Supplemental Body SAR results... 189
18. Uncertainty Assessment... 190
19. References... 190
Appendix A. Plots of System Performance Check
Appendix B. Plots of High SAR Measurement
Appendix C. DASY Calibration Certificate
Appendix D. Test Setup Photos and Antenna Location



### History of this test report

Report No.	Version	Description	Issued Date
FA0D2942-05C	01	Initial issue of report	Aug. 30, 2021
FA0D2942-05C	02	Updated description in section 16	Sep. 17, 2021
FA0D2942-05C	03	revised description of WLAN mode	Sep. 18, 2021



**1. Statement of Compliance**

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, GB7N6, GR1YH, 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	1.04	0.82	0.82		1.59		
	GSM1900	0.46	1.20	0.90	0.95			
	WCDMA II	0.47	1.20	0.91	1.97			
	WCDMA IV	0.36	1.16	0.89	2.54			
	WCDMA V	1.08	0.49	0.49				
	LTE Band 7	0.45	1.20	0.87	2.82			
	LTE Band 12/17	0.79	0.28	0.28				
	LTE Band 13	1.20	0.44	0.44				
	LTE Band 14	1.17	0.50	0.50				
	LTE Band 25/2	0.47	1.20	0.90	2.05			
	LTE Band 26/5	1.08	0.50	0.50				
	LTE Band 30	0.38	1.11	0.90	2.50			
	LTE Band 41/38	0.36	0.93	0.90				
	LTE Band 48	0.45	0.52	0.91				
	LTE Band 66/4	0.47	1.07	0.91	2.48			
	LTE Band 71	1.01	0.22	0.22				
	FR1 n5	1.06	0.40	0.40				
	FR1 n7	0.36	1.20	0.91	2.49			
	FR1 n12	0.80	0.25	0.25				
	FR1 n25/2	0.49	1.17	0.90	1.83			
FR1 n30	0.31	1.12	0.90	2.42				
FR1 n41/38	1.19	0.69	0.91					
FR1 n66	0.39	1.07	0.82	2.81				
FR1 n71	0.95	0.19	0.19					
FR1 n77	1.06	0.73	0.84					
DTS	2.4GHz WLAN	1.10	0.46	0.88		1.50		
NIJ	5GHz WLAN	1.11	1.03	0.67	2.83	1.59		
DSS	Bluetooth	0.45	0.21	0.36		1.59		
Equipment Class	Frequency Band	Head		Body		Product Specific		Highest Reported PD (W/m^2)
6XD	6GHz WLAN	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)	
		0.70	3.94	0.15	1.00	0.42	8.18	7.47
Date of Testing:		2021/06/29 ~ 2021/07/29						

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	GB7N6, GR1YH
FCC ID	A4RGB7N6
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: 3700 MHz ~ 3980 MHz, 3450 MHz ~ 3550 MHz 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
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
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>For antenna 0/2/6, SAR data is reused from FCC ID A4RGS9SB, and spot check verification is provided in the spot check report FA0D2942-05F. Spot check procedures and data follow the FCC guidance in the lab KDB inquiry.</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 FA0D2942-05A.
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 and Support transmit antenna and band. Rows include TX 0 and TX 1 configurations with associated antenna and band details.



Maximum Transmit Burst Average Power (dBm)									
Band	Config	Antenna	Duty	Mobile Condition	Head	Head	Hotspot	Body-worn Extremity	Body-worn Extremity
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GPRS 1TX	TX0	0	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
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	28	28	28	28	28
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	31	31	30.3	31	30.3
GSM1900 GPRS 2TX	TX0	2	25.00%	29.5	29.5	29.5	27.3	28.5	27.3
GSM1900 GPRS 3TX	TX0	2	37.50%	29	29	29	25.5	26.7	25.5
GSM1900 GPRS 4TX	TX0	2	50.00%	28	28	28	24.3	25.5	24.3
GSM1900 EDGE 1TX	TX0	2	12.50%	26	26	26	26	26	26
GSM1900 EDGE 2TX	TX0	2	25.00%	25	25	25	25	25	25
GSM1900 EDGE 3TX	TX0	2	37.50%	25	25	25	25	25	25
GSM1900 EDGE 4TX	TX0	2	50.00%	24	24	24	24	24	24
WCDMA B2	TX0	2	100.00%	25	25	25	21.2	22.6	21.4
WCDMA B4	TX0	2	100.00%	25	25	25	22.4	24	22.8
WCDMA B5	TX0	0	100.00%	25	25	25	25	25	25
LTE B7	TX0	2	100.00%	24.6	24.6	24.6	19.8	21.5	20.3
LTE B12/17	TX0	0	100.00%	25	25	25	25	25	25
LTE B13	TX0	0	100.00%	25	25	25	25	25	25
LTE B14	TX0	0	100.00%	25	25	25	25	25	25
LTE B25/2	TX0	2	100.00%	25	25	25	20.7	22.9	21.7
LTE B26/5	TX0	0	100.00%	25	25	25	25	25	25
LTE B30	TX0	2	100.00%	25	25	25	20.4	22.6	21.5
LTE B41/B38 PC3	TX0	2	63.30%	23.8	23.8	23.8	22.1	23.4	23.2
LTE B41/B38 PC2	TX0	2	43.30%	26.8	26.8	26.8	23.8	25	24.8
LTE B48	TX0	6	63.30%	24	24	24	24	24	24
LTE B66/4	TX0	2	100.00%	25	25	25	22	23.6	22.4
LTE B71	TX0	0	100.00%	25	25	25	25	25	25
FR1 n25/2	TX0	2	100.00%	25	25	25	20.2	22.3	21.1
FR1 n5	TX0	0	100.00%	25	25	25	25	25	25
FR1 n7	TX0	2	100.00%	24.6	24.6	24.6	19.5	22	20.8
FR1 n12	TX0	0	100.00%	25	25	25	25	25	25
FR1 n30	TX0	2	100.00%	25	25	25	21	22.8	21.6
FR1 n41/38 PC3	TX0	5	100.00%	24.8	18.2	17	21.1	22.3	21.1
FR1 n41 PC2	TX0	5	50.00%	26.8	21.2	20	24.1	25.3	24.1
FR1 n66	TX0	2	100.00%	25	25	25	22.7	24.7	23.5
FR1 n71	TX0	0	100.00%	25	25	25	25	25	25
FR1 n77 PC3	TX0	6	100.00%	25	25	24.6	21.6	22.8	21.6
FR1 n77 PC2	TX0	6	50.00%	27	27	27	24.6	25.8	24.6



Maximum Transmit Burst Average Power (dBm)									
Band	Config	Antenna	Duty	Mobile Condition	Head	Head	Hotspot	Body-worn Extremity	Body-worn Extremity
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
					Index 1	Index 2	Index 3	Index 4	Index 5
GSM850 GPRS 1TX	TX1	1	12.50%	33.9	33.7	32.5	33.9	33.9	33.9
GSM850 GPRS 2TX	TX1	1	25.00%	32.4	30.7	29.5	32.4	32.4	32.4
GSM850 GPRS 3TX	TX1	1	37.50%	31.4	28.9	27.7	31.4	31.4	31.4
GSM850 GPRS 4TX	TX1	1	50.00%	30.4	27.7	26.5	30.4	30.4	30.4
GSM850 EDGE 1TX	TX1	1	12.50%	27.9	27.9	27.9	27.9	27.9	27.9
GSM850 EDGE 2TX	TX1	1	25.00%	27.4	27.4	27.4	27.4	27.4	27.4
GSM850 EDGE 3TX	TX1	1	37.50%	27.4	27.4	27.4	27.4	27.4	27.4
GSM850 EDGE 4TX	TX1	1	50.00%	25.4	25.4	25.4	25.4	25.4	25.4
GSM1900 GPRS 1TX	TX1	0	12.50%	30.7	30.7	30.7	30.7	30.7	30.7
GSM1900 GPRS 2TX	TX1	0	25.00%	29.2	29.2	29.2	29.2	29.2	29.2
GSM1900 GPRS 3TX	TX1	0	37.50%	28.7	28.7	28.7	27.5	28.7	27.7
GSM1900 GPRS 4TX	TX1	0	50.00%	27.7	27.7	27.7	26.3	27.7	26.5
GSM1900 EDGE 1TX	TX1	0	12.50%	25.7	25.7	25.7	25.7	25.7	25.7
GSM1900 EDGE 2TX	TX1	0	25.00%	24.7	24.7	24.7	24.7	24.7	24.7
GSM1900 EDGE 3TX	TX1	0	37.50%	24.7	24.7	24.7	24.7	24.7	24.7
GSM1900 EDGE 4TX	TX1	0	50.00%	23.7	23.7	23.7	23.7	23.7	23.7
WCDMA B2	TX1	0	100.00%	24.7	24.7	24.7	22.6	23.9	22.7
WCDMA B4	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
WCDMA B5	TX1	1	100.00%	24.9	24.8	23.6	24.9	24.9	24.9
LTE B4	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
LTE B7	TX1	0	100.00%	24	24	24	24	24	24
LTE B12/17	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
LTE B13	TX1	1	100.00%	24.9	23.6	22.4	24.9	24.9	24.9
LTE B14	TX1	1	100.00%	24.9	24	22.8	24.9	24.9	24.9
LTE B25/2	TX1	0	100.00%	24.7	24.7	24.7	22.5	23.8	22.5
LTE B26/5	TX1	1	100.00%	24.9	24.8	23.6	24.9	24.9	24.9
LTE B30	TX1	0	100.00%	24.4	24.4	24.4	23.9	24.4	24.4
LTE B38/41 PC3	TX1	0	63.30%	23.2	23.2	23.2	23.2	23.2	23.2
LTE B38 PC2	TX1	0	43.30%	26.2	26.2	26.2	26.2	26.2	26.2
LTE B41 PC2	TX1	0	43.30%	26.5	26.5	26.5	26.5	26.5	26.5
LTE B48	TX1	2	63.30%	24.5	24.5	24.5	24.2	24.5	24.5
LTE B66	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
LTE B71	TX1	1	100.00%	24.9	24.9	23.9	24.9	24.9	24.9
FR1 n25/2	TX1	0	100.00%	24.7	24.7	24.7	22.6	23.9	22.7
FR1 n5	TX1	1	100.00%	24.9	24.9	24.1	24.9	24.9	24.9
FR1 n7	TX1	0	100.00%	24	24	24	24	24	24
FR1 n12	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
FR1 n30	TX1	0	100.00%	24.4	24.4	24.4	24.4	24.4	24.4
FR1 n38	TX1	1	100.00%	25.2	19.2	18	25.2	25.2	25.2
FR1 n41 PC3	TX1	1	100.00%	25.4	19.4	18.2	25.4	25.4	25.4
FR1 n41 PC2	TX1	1	50.00%	27.4	22.4	21.2	27.4	27.4	27.4
FR1 n66	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
FR1 n71	TX1	1	100.00%	24.9	24.9	24.6	24.9	24.9	24.9
FR1 n77 PC3	TX1	2	100.00%	25	25	24.2	21.9	23.1	22
FR1 n77 PC2	TX1	2	50.00%	27	27	27	24.9	26.1	25





**<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
2.4GHz WLAN	802.11b 1Mbps	1	2412	23.00	23.00	26.0
		6	2437	23.00	23.00	26.0
		11	2462	23.00	23.00	26.0
		12	2467	23.00	23.00	26.0
		13	2472	20.50	20.50	23.5
	802.11g 6Mbps	1	2412	21.50	21.50	24.5
		6	2437	21.50	21.50	24.5
		11	2462	21.00	21.00	24.0
		12	2467	19.50	19.50	22.5
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	21.00	21.00	24.0
		6	2437	21.50	21.50	24.5
		11	2462	20.00	20.00	23.0
		12	2467	19.00	19.00	22.0
		13	2472	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	21.00	21.00	24.0
		6	2437	21.50	21.50	24.5
		11	2462	20.00	20.00	23.0
		12	2467	19.00	19.00	22.0
		13	2472	16.50	16.50	19.5
802.11ax-HE20 MCS0	1	2412	21.00	21.00	24.0	
	6	2437	21.50	21.50	24.5	
	11	2462	20.00	20.00	23.0	
	12	2467	19.00	19.00	22.0	
	13	2472	16.50	16.50	19.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	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	18.50	18.50	21.5
	802.11n-HT20 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
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	20.00	20.00	23.0
	802.11ac-VHT20 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
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	20.0
	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	17.50	17.50	20.5	
	46	5230	20.00	20.00	23.0	
802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.0	



Burst Average Power (dBm)						
5.3GHz 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
802.11a 6Mbps		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	19.00	19.00	22.0
802.11n-HT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11n-HT40 MCS0		54	5270	20.00	20.00	23.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ac-VHT40 MCS0		54	5270	20.00	20.00	23.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ax-HE40 MCS0		54	5270	20.00	20.00	23.0
		62	5310	17.00	17.00	20.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.00	17.00	20.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		140	5700	17.00	17.00	20.0
		144	5720	19.00	19.00	22.0
	802.11n-HT20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	19.50	19.50	22.5
		124	5620	19.50	19.50	22.5
		132	5660	19.50	19.50	22.5
		140	5700	17.50	17.50	20.5
		144	5720	19.50	19.50	22.5
	802.11n-HT40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
		142	5710	20.00	20.00	23.0
	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	19.50	19.50	22.5
		124	5620	19.50	19.50	22.5
		132	5660	19.50	19.50	22.5
		140	5700	17.50	17.50	20.5
		144	5720	19.50	19.50	22.5
	802.11ac-VHT40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
		142	5710	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	106	5530	18.00	18.00	21.0
		122	5610	20.00	20.00	23.0
		138	5690	20.00	20.00	23.0
	802.11ac-VHT160 MCS0	114	5570	17.00	17.00	20.0
	802.11ax-HE20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	19.50	19.50	22.5
		124	5620	19.50	19.50	22.5
		132	5660	19.50	19.50	22.5
140		5700	17.50	17.50	20.5	
144		5720	19.50	19.50	22.5	
802.11ax-HE40 MCS0	102	5510	17.50	17.50	20.5	
	110	5550	20.00	20.00	23.0	
	126	5630	20.00	20.00	23.0	
	134	5670	20.00	20.00	23.0	
	142	5710	20.00	20.00	23.0	
802.11ax-HE80 MCS0	106	5530	18.00	18.00	21.0	
	122	5610	20.00	20.00	23.0	
	138	5690	20.00	20.00	23.0	
802.11ax-HE160 MCS0	114	5570	17.00	17.00	20.0	



Burst Average Power (dBm)						
5.8GHz 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
802.11a 6Mbps		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11n-HT20 MCS0		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11n-HT40 MCS0		151	5755	20.50	20.50	23.5
		159	5795	20.50	20.50	23.5
802.11ac-VHT20 MCS0		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11ac-VHT40 MCS0		151	5755	20.50	20.50	23.5
		159	5795	20.50	20.50	23.5
802.11ac-VHT80 MCS0		155	5775	20.50	20.50	23.5
802.11ax-HE20 MCS0		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11ax-HE40 MCS0		151	5755	20.50	20.50	23.5
		159	5795	20.50	20.50	23.5
802.11ax-HE80 MCS0		155	5775	20.50	20.50	23.5



<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	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
		13	2472	16.50	16.50	19.5
	802.11g 6Mbps	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
	802.11n-HT20 MCS0	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
	802.11ax-HE20 MCS0	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
12		2467	16.50	16.50	19.5	
		13	2472	16.50	16.50	19.5



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11n-HT20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11n-HT40 MCS0	38	5190	15.50	15.50	18.5
		46	5230	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	38	5190	15.50	15.50	18.5
		46	5230	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	42	5210	15.50	15.50	18.5
	802.11ax-HE20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
48		5240	15.50	15.50	18.5	
802.11ax-HE40 MCS0	38	5190	15.50	15.50	18.5	
	46	5230	15.50	15.50	18.5	
802.11ax-HE80 MCS0	42	5210	15.50	15.50	18.5	



Burst Average Power (dBm)						
5.3GHz 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
5.3GHz WLAN	802.11a 6Mbps	52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
		60	5300	15.50	15.50	18.5
		64	5320	15.50	15.50	18.5
	802.11n-HT20 MCS0	52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
		60	5300	15.50	15.50	18.5
		64	5320	15.50	15.50	18.5
	802.11n-HT40 MCS0	54	5270	15.50	15.50	18.5
		62	5310	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
		60	5300	15.50	15.50	18.5
		64	5320	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	54	5270	15.50	15.50	18.5
		62	5310	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	58	5290	15.50	15.50	18.5
	802.11ac-VHT160 MCS0	50	5250	15.00	15.00	18.0
	802.11ax-HE20 MCS0	52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
60		5300	15.50	15.50	18.5	
64		5320	15.50	15.50	18.5	
802.11ax-HE40 MCS0	54	5270	15.50	15.50	18.5	
	62	5310	15.50	15.50	18.5	
802.11ax-HE80 MCS0	58	5290	15.50	15.50	18.5	
802.11ax-HE160 MCS0	50	5250	15.00	15.00	18.0	





Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		140	5700	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11n-HT20 MCS0	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		140	5700	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11n-HT40 MCS0	102	5510	15.50	15.50	18.5
		110	5550	15.50	15.50	18.5
		126	5630	15.50	15.50	18.5
		134	5670	15.50	15.50	18.5
		142	5710	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		140	5700	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	102	5510	15.50	15.50	18.5
		110	5550	15.50	15.50	18.5
		126	5630	15.50	15.50	18.5
		134	5670	15.50	15.50	18.5
		142	5710	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	106	5530	15.50	15.50	18.5
		122	5610	15.50	15.50	18.5
		138	5690	15.50	15.50	18.5
	802.11ac-VHT160 MCS0	114	5570	16.00	16.00	19.0
	802.11ax-HE20 MCS0	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		140	5700	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11ax-HE40 MCS0	102	5510	15.50	15.50	18.5
		110	5550	15.50	15.50	18.5
126		5630	15.50	15.50	18.5	
134		5670	15.50	15.50	18.5	
142		5710	15.50	15.50	18.5	
802.11ax-HE80 MCS0	106	5530	15.50	15.50	18.5	
	122	5610	15.50	15.50	18.5	
	138	5690	15.50	15.50	18.5	
802.11ax-HE160 MCS0	114	5570	16.00	16.00	19.0	



Burst Average Power (dBm)						
5.8GHz 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
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11n-HT20 MCS0	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11n-HT40 MCS0	151	5755	15.00	15.00	18.0
		159	5795	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	151	5755	15.00	15.00	18.0
		159	5795	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	155	5775	15.50	15.50	18.5
	802.11ax-HE20 MCS0	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11ax-HE40 MCS0	151	5755	15.00	15.00	18.0
159		5795	15.00	15.00	18.0	
802.11ax-HE80 MCS0	155	5775	15.50	15.50	18.5	



<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	14.00	14.00	17.0
		6	2437	14.00	14.00	17.0
		11	2462	14.00	14.00	17.0
		12	2467	14.00	14.00	17.0
		13	2472	14.00	14.00	17.0
	802.11g 6Mbps	1	2412	14.00	14.00	17.0
		6	2437	14.00	14.00	17.0
		11	2462	14.00	14.00	17.0
		12	2467	14.00	14.00	17.0
		13	2472	14.00	14.00	17.0
	802.11n-HT20 MCS0	1	2412	14.00	14.00	17.0
		6	2437	14.00	14.00	17.0
		11	2462	14.00	14.00	17.0
		12	2467	14.00	14.00	17.0
		13	2472	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	1	2412	14.00	14.00	17.0
		6	2437	14.00	14.00	17.0
		11	2462	14.00	14.00	17.0
		12	2467	14.00	14.00	17.0
		13	2472	14.00	14.00	17.0
802.11ax-HE20 MCS0	1	2412	14.00	14.00	17.0	
	6	2437	14.00	14.00	17.0	
	11	2462	14.00	14.00	17.0	
	12	2467	14.00	14.00	17.0	
	13	2472	14.00	14.00	17.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11n-HT20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11n-HT40 MCS0	38	5190	15.00	15.00	18.0
		46	5230	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	38	5190	15.00	15.00	18.0
		46	5230	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	42	5210	15.00	15.00	18.0
	802.11ax-HE20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
48		5240	15.00	15.00	18.0	
802.11ax-HE40 MCS0	38	5190	15.00	15.00	18.0	
	46	5230	15.00	15.00	18.0	
802.11ax-HE80 MCS0	42	5210	15.00	15.00	18.0	



Burst Average Power (dBm)						
5.3GHz 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
802.11a 6Mbps		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11n-HT20 MCS0		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11n-HT40 MCS0		54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
802.11ac-VHT20 MCS0		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11ac-VHT40 MCS0		54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
802.11ac-VHT80 MCS0		58	5290	15.00	15.00	18.0
802.11ac-VHT160 MCS0		50	5250	14.50	14.50	17.5
802.11ax-HE20 MCS0		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11ax-HE40 MCS0		54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
802.11ax-HE80 MCS0		58	5290	15.00	15.00	18.0
802.11ax-HE160 MCS0		50	5250	14.50	14.50	17.5



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
	802.11n-HT20 MCS0	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
		142	5710	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
		142	5710	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	106	5530	15.00	15.00	18.0
		122	5610	15.00	15.00	18.0
		138	5690	15.00	15.00	18.0
	802.11ac-VHT160 MCS0	114	5570	15.50	15.50	18.5
	802.11ax-HE20 MCS0	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
	802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
134		5670	15.00	15.00	18.0	
142		5710	15.00	15.00	18.0	
802.11ax-HE80 MCS0	106	5530	15.00	15.00	18.0	
	122	5610	15.00	15.00	18.0	
	138	5690	15.00	15.00	18.0	
802.11ax-HE160 MCS0	114	5570	15.50	15.50	18.5	



Burst Average Power (dBm)						
5.8GHz 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
802.11a 6Mbps		149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
802.11n-HT20 MCS0		149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
802.11n-HT40 MCS0		151	5755	14.50	14.50	17.5
		159	5795	14.50	14.50	17.5
802.11ac-VHT20 MCS0		149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
802.11ac-VHT40 MCS0		151	5755	14.50	14.50	17.5
		159	5795	14.50	14.50	17.5
802.11ac-VHT80 MCS0		155	5775	14.50	14.50	17.5
802.11ax-HE20 MCS0		149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
802.11ax-HE40 MCS0		151	5755	14.50	14.50	17.5
		159	5795	14.50	14.50	17.5
802.11ax-HE80 MCS0		155	5775	14.50	14.50	17.5



<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	14.50	14.50
6			2437	14.50	14.50	17.5
11			2462	14.50	14.50	17.5
12			2467	14.50	14.50	17.5
13			2472	14.50	14.50	17.5
802.11g 6Mbps		1	2412	14.50	14.50	17.5
		6	2437	14.50	14.50	17.5
		11	2462	14.50	14.50	17.5
		12	2467	14.50	14.50	17.5
		13	2472	14.50	14.50	17.5
802.11n-HT20 MCS0		1	2412	14.50	14.50	17.5
		6	2437	14.50	14.50	17.5
		11	2462	14.50	14.50	17.5
		12	2467	14.50	14.50	17.5
		13	2472	14.50	14.50	17.5
802.11ac-VHT20 MCS0		1	2412	14.50	14.50	17.5
		6	2437	14.50	14.50	17.5
		11	2462	14.50	14.50	17.5
		12	2467	14.50	14.50	17.5
		13	2472	14.50	14.50	17.5
802.11ax-HE20 MCS0	1	2412	14.50	14.50	17.5	
	6	2437	14.50	14.50	17.5	
	11	2462	14.50	14.50	17.5	
	12	2467	14.50	14.50	17.5	
	13	2472	14.50	14.50	17.5	





<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
		48	5240	11.50	11.50	14.5
	802.11n-HT20 MCS0	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
		48	5240	11.50	11.50	14.5
	802.11n-HT40 MCS0	38	5190	11.50	11.50	14.5
		46	5230	11.50	11.50	14.5
	802.11ac-VHT20 MCS0	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
		48	5240	11.50	11.50	14.5
	802.11ac-VHT40 MCS0	38	5190	11.50	11.50	14.5
		46	5230	11.50	11.50	14.5
	802.11ac-VHT80 MCS0	42	5210	11.50	11.50	14.5
	802.11ax-HE20 MCS0	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
48		5240	11.50	11.50	14.5	
802.11ax-HE40 MCS0	38	5190	11.50	11.50	14.5	
	46	5230	11.50	11.50	14.5	
802.11ax-HE80 MCS0	42	5210	11.50	11.50	14.5	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz 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
	802.11a 6Mbps		52	5260	11.50	11.50
56			5280	11.50	11.50	14.5
60			5300	11.50	11.50	14.5
64			5320	11.50	11.50	14.5
802.11n-HT20 MCS0		52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
		60	5300	11.50	11.50	14.5
		64	5320	11.50	11.50	14.5
802.11n-HT40 MCS0		54	5270	11.50	11.50	14.5
		62	5310	11.50	11.50	14.5
802.11ac-VHT20 MCS0		52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
		60	5300	11.50	11.50	14.5
		64	5320	11.50	11.50	14.5
802.11ac-VHT40 MCS0		54	5270	11.50	11.50	14.5
		62	5310	11.50	11.50	14.5
802.11ac-VHT80 MCS0		58	5290	11.50	11.50	14.5
802.11ac-VHT160 MCS0		50	5250	11.50	11.50	14.5
802.11ax-HE20 MCS0		52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
		60	5300	11.50	11.50	14.5
		64	5320	11.50	11.50	14.5
802.11ax-HE40 MCS0		54	5270	11.50	11.50	14.5
		62	5310	11.50	11.50	14.5
802.11ax-HE80 MCS0		58	5290	11.50	11.50	14.5
802.11ax-HE160 MCS0		50	5250	11.50	11.50	14.5



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	11.00	11.00	14.0
		116	5580	11.00	11.00	14.0
		124	5620	11.00	11.00	14.0
		132	5660	11.00	11.00	14.0
		140	5700	11.00	11.00	14.0
		144	5720	11.00	11.00	14.0
	802.11n-HT20 MCS0	100	5500	11.00	11.00	14.0
		116	5580	11.00	11.00	14.0
		124	5620	11.00	11.00	14.0
		132	5660	11.00	11.00	14.0
		140	5700	11.00	11.00	14.0
		144	5720	11.00	11.00	14.0
	802.11n-HT40 MCS0	102	5510	11.00	11.00	14.0
		110	5550	11.00	11.00	14.0
		126	5630	11.00	11.00	14.0
		134	5670	11.00	11.00	14.0
		142	5710	11.00	11.00	14.0
	802.11ac-VHT20 MCS0	100	5500	11.00	11.00	14.0
		116	5580	11.00	11.00	14.0
		124	5620	11.00	11.00	14.0
		132	5660	11.00	11.00	14.0
		140	5700	11.00	11.00	14.0
		144	5720	11.00	11.00	14.0
	802.11ac-VHT40 MCS0	102	5510	11.00	11.00	14.0
		110	5550	11.00	11.00	14.0
		126	5630	11.00	11.00	14.0
		134	5670	11.00	11.00	14.0
		142	5710	11.00	11.00	14.0
	802.11ac-VHT80 MCS0	106	5530	11.00	11.00	14.0
		122	5610	11.00	11.00	14.0
		138	5690	11.00	11.00	14.0
	802.11ac-VHT160 MCS0	114	5570	11.00	11.00	14.0
	802.11ax-HE20 MCS0	100	5500	11.00	11.00	14.0
		116	5580	11.00	11.00	14.0
		124	5620	11.00	11.00	14.0
		132	5660	11.00	11.00	14.0
		140	5700	11.00	11.00	14.0
		144	5720	11.00	11.00	14.0
	802.11ax-HE40 MCS0	102	5510	11.00	11.00	14.0
		110	5550	11.00	11.00	14.0
126		5630	11.00	11.00	14.0	
134		5670	11.00	11.00	14.0	
142		5710	11.00	11.00	14.0	
802.11ax-HE80 MCS0	106	5530	11.00	11.00	14.0	
	122	5610	11.00	11.00	14.0	
	138	5690	11.00	11.00	14.0	
802.11ax-HE160 MCS0	114	5570	11.00	11.00	14.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz 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
	802.11a 6Mbps	149	5745	11.00	11.00	14.0
		157	5785	11.00	11.00	14.0
		165	5825	11.00	11.00	14.0
	802.11n-HT20 MCS0	149	5745	11.00	11.00	14.0
		157	5785	11.00	11.00	14.0
		165	5825	11.00	11.00	14.0
	802.11n-HT40 MCS0	151	5755	11.00	11.00	14.0
		159	5795	11.00	11.00	14.0
	802.11ac-VHT20 MCS0	149	5745	11.00	11.00	14.0
		157	5785	11.00	11.00	14.0
		165	5825	11.00	11.00	14.0
	802.11ac-VHT40 MCS0	151	5755	11.00	11.00	14.0
		159	5795	11.00	11.00	14.0
802.11ac-VHT80 MCS0	155	5775	11.00	11.00	14.0	
802.11ax-HE20 MCS0	149	5745	11.00	11.00	14.0	
	157	5785	11.00	11.00	14.0	
	165	5825	11.00	11.00	14.0	
802.11ax-HE40 MCS0	151	5755	11.00	11.00	14.0	
	159	5795	11.00	11.00	14.0	
802.11ax-HE80 MCS0	155	5775	11.00	11.00	14.0	



<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	9.00	9.00	12.0
		6	2437	9.00	9.00	12.0
		11	2462	9.00	9.00	12.0
		12	2467	9.00	9.00	12.0
		13	2472	9.00	9.00	12.0
	802.11g 6Mbps	1	2412	9.00	9.00	12.0
		6	2437	9.00	9.00	12.0
		11	2462	9.00	9.00	12.0
		12	2467	9.00	9.00	12.0
		13	2472	9.00	9.00	12.0
	802.11n-HT20 MCS0	1	2412	9.00	9.00	12.0
		6	2437	9.00	9.00	12.0
		11	2462	9.00	9.00	12.0
		12	2467	9.00	9.00	12.0
		13	2472	9.00	9.00	12.0
	802.11ac-VHT20 MCS0	1	2412	9.00	9.00	12.0
		6	2437	9.00	9.00	12.0
		11	2462	9.00	9.00	12.0
		12	2467	9.00	9.00	12.0
		13	2472	9.00	9.00	12.0
802.11ax-HE20 MCS0	1	2412	9.00	9.00	12.0	
	6	2437	9.00	9.00	12.0	
	11	2462	9.00	9.00	12.0	
	12	2467	9.00	9.00	12.0	
	13	2472	9.00	9.00	12.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	36	5180	12.00	12.00	15.0
		40	5200	12.00	12.00	15.0
		44	5220	12.00	12.00	15.0
		48	5240	12.00	12.00	15.0
	802.11n-HT20 MCS0	36	5180	12.00	12.00	15.0
		40	5200	12.00	12.00	15.0
		44	5220	12.00	12.00	15.0
	802.11n-HT40 MCS0	38	5190	12.00	12.00	15.0
		46	5230	12.00	12.00	15.0
	802.11ac-VHT20 MCS0	36	5180	12.00	12.00	15.0
		40	5200	12.00	12.00	15.0
		44	5220	12.00	12.00	15.0
		48	5240	12.00	12.00	15.0
	802.11ac-VHT40 MCS0	38	5190	12.00	12.00	15.0
	802.11ac-VHT80 MCS0	42	5210	12.00	12.00	15.0
		46	5230	12.00	12.00	15.0
	802.11ax-HE20 MCS0	36	5180	12.00	12.00	15.0
		40	5200	12.00	12.00	15.0
		44	5220	12.00	12.00	15.0
		48	5240	12.00	12.00	15.0
802.11ax-HE40 MCS0	38	5190	12.00	12.00	15.0	
	46	5230	12.00	12.00	15.0	
802.11ax-HE80 MCS0	42	5210	12.00	12.00	15.0	



Burst Average Power (dBm)						
5.3GHz 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
802.11a 6Mbps		52	5260	12.00	12.00	15.0
		56	5280	12.00	12.00	15.0
		60	5300	12.00	12.00	15.0
		64	5320	12.00	12.00	15.0
802.11n-HT20 MCS0		52	5260	12.00	12.00	15.0
		56	5280	12.00	12.00	15.0
		60	5300	12.00	12.00	15.0
		64	5320	12.00	12.00	15.0
802.11n-HT40 MCS0		54	5270	12.00	12.00	15.0
		62	5310	12.00	12.00	15.0
802.11ac-VHT20 MCS0		52	5260	12.00	12.00	15.0
		56	5280	12.00	12.00	15.0
		60	5300	12.00	12.00	15.0
		64	5320	12.00	12.00	15.0
802.11ac-VHT40 MCS0		54	5270	12.00	12.00	15.0
		62	5310	12.00	12.00	15.0
802.11ac-VHT80 MCS0		58	5290	12.00	12.00	15.0
802.11ac-VHT160 MCS0		50	5250	12.00	12.00	15.0
802.11ax-HE20 MCS0		52	5260	12.00	12.00	15.0
		56	5280	12.00	12.00	15.0
		60	5300	12.00	12.00	15.0
		64	5320	12.00	12.00	15.0
802.11ax-HE40 MCS0		54	5270	12.00	12.00	15.0
		62	5310	12.00	12.00	15.0
802.11ax-HE80 MCS0		58	5290	12.00	12.00	15.0
802.11ax-HE160 MCS0		50	5250	12.00	12.00	15.0



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	12.00	12.00	15.0
		116	5580	12.00	12.00	15.0
		124	5620	12.00	12.00	15.0
		132	5660	12.00	12.00	15.0
		140	5700	12.00	12.00	15.0
		144	5720	12.00	12.00	15.0
	802.11n-HT20 MCS0	100	5500	12.00	12.00	15.0
		116	5580	12.00	12.00	15.0
		124	5620	12.00	12.00	15.0
		132	5660	12.00	12.00	15.0
		140	5700	12.00	12.00	15.0
		144	5720	12.00	12.00	15.0
	802.11n-HT40 MCS0	102	5510	12.00	12.00	15.0
		110	5550	12.00	12.00	15.0
		126	5630	12.00	12.00	15.0
		134	5670	12.00	12.00	15.0
		142	5710	12.00	12.00	15.0
	802.11ac-VHT20 MCS0	100	5500	12.00	12.00	15.0
		116	5580	12.00	12.00	15.0
		124	5620	12.00	12.00	15.0
		132	5660	12.00	12.00	15.0
		140	5700	12.00	12.00	15.0
	802.11ac-VHT40 MCS0	102	5510	12.00	12.00	15.0
		110	5550	12.00	12.00	15.0
		126	5630	12.00	12.00	15.0
		134	5670	12.00	12.00	15.0
		142	5710	12.00	12.00	15.0
	802.11ac-VHT80 MCS0	106	5530	12.00	12.00	15.0
		122	5610	12.00	12.00	15.0
		138	5690	12.00	12.00	15.0
	802.11ac-VHT160 MCS0	114	5570	12.00	12.00	15.0
	802.11ax-HE20 MCS0	100	5500	12.00	12.00	15.0
		116	5580	12.00	12.00	15.0
		124	5620	12.00	12.00	15.0
		132	5660	12.00	12.00	15.0
		140	5700	12.00	12.00	15.0
144		5720	12.00	12.00	15.0	
802.11ax-HE40 MCS0	102	5510	12.00	12.00	15.0	
	110	5550	12.00	12.00	15.0	
	126	5630	12.00	12.00	15.0	
	134	5670	12.00	12.00	15.0	
	142	5710	12.00	12.00	15.0	
802.11ax-HE80 MCS0	106	5530	12.00	12.00	15.0	
	122	5610	12.00	12.00	15.0	
	138	5690	12.00	12.00	15.0	
802.11ax-HE160 MCS0	114	5570	12.00	12.00	15.0	





Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz 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
	802.11a 6Mbps	149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
	802.11n-HT20 MCS0	149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
	802.11n-HT40 MCS0	151	5755	11.50	11.50	14.5
		159	5795	11.50	11.50	14.5
	802.11ac-VHT20 MCS0	149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
	802.11ac-VHT40 MCS0	151	5755	11.50	11.50	14.5
		159	5795	11.50	11.50	14.5
802.11ac-VHT80 MCS0	155	5775	11.50	11.50	14.5	
802.11ax-HE20 MCS0	149	5745	11.50	11.50	14.5	
	157	5785	11.50	11.50	14.5	
	165	5825	11.50	11.50	14.5	
802.11ax-HE40 MCS0	151	5755	11.50	11.50	14.5	
	159	5795	11.50	11.50	14.5	
802.11ax-HE80 MCS0	155	5775	11.50	11.50	14.5	



<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	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.50	19.50	22.5
		13	2472	19.50	19.50	22.5
	802.11g 6Mbps	1	2412	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.50	19.50	22.5
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	16.50	16.50	19.5
802.11ax-HE20 MCS0	1	2412	19.50	19.50	22.5	
	6	2437	19.50	19.50	22.5	
	11	2462	19.50	19.50	22.5	
	12	2467	19.00	19.00	22.0	
	13	2472	16.50	16.50	19.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	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	18.50	18.50	21.5
	802.11n-HT20 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
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	20.00	20.00	23.0
	802.11ac-VHT20 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
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	20.0
	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	17.50	17.50	20.5	
	46	5230	20.00	20.00	23.0	
802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.0	



Burst Average Power (dBm)						
5.3GHz 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
802.11a 6Mbps		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	19.00	19.00	22.0
802.11n-HT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11n-HT40 MCS0		54	5270	19.50	19.50	22.5
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ac-VHT40 MCS0		54	5270	19.50	19.50	22.5
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ax-HE40 MCS0		54	5270	19.50	19.50	22.5
		62	5310	17.00	17.00	20.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.00	17.00	20.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		140	5700	17.00	17.00	20.0
		144	5720	19.00	19.00	22.0
	802.11n-HT20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		140	5700	17.50	17.50	20.5
		144	5720	19.00	19.00	22.0
	802.11n-HT40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
		142	5710	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		140	5700	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
		142	5710	19.00	19.00	22.0
	802.11ac-VHT80 MCS0	106	5530	18.00	18.00	21.0
		122	5610	19.00	19.00	22.0
		138	5690	19.00	19.00	22.0
	802.11ac-VHT160 MCS0	114	5570	17.00	17.00	20.0
	802.11ax-HE20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		140	5700	17.50	17.50	20.5
		144	5720	19.00	19.00	22.0
	802.11ax-HE40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
134		5670	19.00	19.00	22.0	
142		5710	19.00	19.00	22.0	
802.11ax-HE80 MCS0	106	5530	18.00	18.00	21.0	
	122	5610	19.00	19.00	22.0	
	138	5690	19.00	19.00	22.0	
802.11ax-HE160 MCS0	114	5570	17.00	17.00	20.0	



Burst Average Power (dBm)						
5.8GHz 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
5.8GHz WLAN	802.11a 6Mbps	149	5745	19.50	19.50	22.5
		157	5785	19.50	19.50	22.5
		165	5825	19.50	19.50	22.5
	802.11n-HT20 MCS0	149	5745	19.50	19.50	22.5
		157	5785	19.50	19.50	22.5
		165	5825	19.50	19.50	22.5
	802.11n-HT40 MCS0	151	5755	19.50	19.50	22.5
		159	5795	19.50	19.50	22.5
	802.11ac-VHT20 MCS0	149	5745	19.50	19.50	22.5
		157	5785	19.50	19.50	22.5
		165	5825	19.50	19.50	22.5
	802.11ac-VHT40 MCS0	151	5755	19.50	19.50	22.5
		159	5795	19.50	19.50	22.5
	802.11ac-VHT80 MCS0	155	5775	20.00	20.00	23.0
	802.11ax-HE20 MCS0	149	5745	19.50	19.50	22.5
		157	5785	19.50	19.50	22.5
		165	5825	19.50	19.50	22.5
	802.11ax-HE40 MCS0	151	5755	19.50	19.50	22.5
159		5795	19.50	19.50	22.5	
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.0	



<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	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.50	19.50	22.5
		13	2472	19.50	19.50	22.5
	802.11g 6Mbps	1	2412	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.50	19.50	22.5
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	19.50	19.50	22.5
		6	2437	19.50	19.50	22.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	16.50	16.50	19.5
802.11ax-HE20 MCS0	1	2412	19.50	19.50	22.5	
	6	2437	19.50	19.50	22.5	
	11	2462	19.50	19.50	22.5	
	12	2467	19.00	19.00	22.0	
	13	2472	16.50	16.50	19.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	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	18.50	18.50	21.5
	802.11n-HT20 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
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	20.00	20.00	23.0
	802.11ac-VHT20 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
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	20.0
	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	17.50	17.50	20.5
46		5230	20.00	20.00	23.0	
802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.0	





Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz 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
	802.11a 6Mbps		52	5260	19.00	19.00
56			5280	19.00	19.00	22.0
60			5300	19.00	19.00	22.0
64			5320	19.00	19.00	22.0
802.11n-HT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11n-HT40 MCS0		54	5270	19.50	19.50	22.5
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ac-VHT40 MCS0		54	5270	19.50	19.50	22.5
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ax-HE40 MCS0		54	5270	19.50	19.50	22.5
		62	5310	17.00	17.00	20.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.00	17.00	20.0
		116	5580	18.50	18.50	21.5
		124	5620	18.50	18.50	21.5
		132	5660	18.50	18.50	21.5
		140	5700	17.00	17.00	20.0
		144	5720	18.50	18.50	21.5
	802.11n-HT20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	18.50	18.50	21.5
		124	5620	18.50	18.50	21.5
		132	5660	18.50	18.50	21.5
		140	5700	17.50	17.50	20.5
		144	5720	18.50	18.50	21.5
	802.11n-HT40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	18.50	18.50	21.5
		126	5630	18.50	18.50	21.5
		134	5670	18.50	18.50	21.5
		142	5710	18.50	18.50	21.5
	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	18.50	18.50	21.5
		124	5620	18.50	18.50	21.5
		132	5660	18.50	18.50	21.5
		140	5700	17.50	17.50	20.5
		144	5720	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	18.50	18.50	21.5
		126	5630	18.50	18.50	21.5
		134	5670	18.50	18.50	21.5
		142	5710	18.50	18.50	21.5
	802.11ac-VHT80 MCS0	106	5530	18.00	18.00	21.0
		122	5610	18.50	18.50	21.5
		138	5690	18.50	18.50	21.5
	802.11ac-VHT160 MCS0	114	5570	17.00	17.00	20.0
	802.11ax-HE20 MCS0	100	5500	17.00	17.00	20.0
		116	5580	18.50	18.50	21.5
		124	5620	18.50	18.50	21.5
		132	5660	18.50	18.50	21.5
		140	5700	17.50	17.50	20.5
		144	5720	18.50	18.50	21.5
	802.11ax-HE40 MCS0	102	5510	17.50	17.50	20.5
		110	5550	18.50	18.50	21.5
126		5630	18.50	18.50	21.5	
134		5670	18.50	18.50	21.5	
142		5710	18.50	18.50	21.5	
802.11ax-HE80 MCS0	106	5530	18.00	18.00	21.0	
	122	5610	18.50	18.50	21.5	
	138	5690	18.50	18.50	21.5	
802.11ax-HE160 MCS0	114	5570	17.00	17.00	20.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz 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
	802.11a 6Mbps	149	5745	19.00	19.00	22.0
		157	5785	19.00	19.00	22.0
		165	5825	19.00	19.00	22.0
	802.11n-HT20 MCS0	149	5745	19.00	19.00	22.0
		157	5785	19.00	19.00	22.0
		165	5825	19.00	19.00	22.0
	802.11n-HT40 MCS0	151	5755	19.00	19.00	22.0
		159	5795	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	149	5745	19.00	19.00	22.0
		157	5785	19.00	19.00	22.0
		165	5825	19.00	19.00	22.0
	802.11ac-VHT40 MCS0	151	5755	19.00	19.00	22.0
		159	5795	19.00	19.00	22.0
802.11ac-VHT80 MCS0	155	5775	19.50	19.50	22.5	
802.11ax-HE20 MCS0	149	5745	19.00	19.00	22.0	
	157	5785	19.00	19.00	22.0	
	165	5825	19.00	19.00	22.0	
802.11ax-HE40 MCS0	151	5755	19.00	19.00	22.0	
	159	5795	19.00	19.00	22.0	
802.11ax-HE80 MCS0	155	5775	19.50	19.50	22.5	



<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	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	18.50	18.50	21.5
		13	2472	18.50	18.50	21.5
	802.11g 6Mbps	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	18.50	18.50	21.5
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	18.50	18.50	21.5
		13	2472	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	18.50	18.50	21.5
		13	2472	16.50	16.50	19.5
802.11ax-HE20 MCS0	1	2412	18.50	18.50	21.5	
	6	2437	18.50	18.50	21.5	
	11	2462	18.50	18.50	21.5	
	12	2467	18.50	18.50	21.5	
	13	2472	16.50	16.50	19.5	



<5 GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	36	5180	17.50	17.50	20.5
		40	5200	17.50	17.50	20.5
		44	5220	17.50	17.50	20.5
		48	5240	17.50	17.50	20.5
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	17.50	17.50	20.5
		44	5220	17.50	17.50	20.5
	802.11n-HT40 MCS0	38	5190	17.50	17.50	20.5
		46	5230	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	17.50	17.50	20.5
		44	5220	17.50	17.50	20.5
		48	5240	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	38	5190	17.50	17.50	20.5
	802.11ac-VHT80 MCS0	46	5230	17.50	17.50	20.5
		42	5210	17.00	17.00	20.0
	802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	17.50	17.50	20.5
		44	5220	17.50	17.50	20.5
		48	5240	17.50	17.50	20.5
802.11ax-HE40 MCS0	38	5190	17.50	17.50	20.5	
	46	5230	17.50	17.50	20.5	
802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.0	



Burst Average Power (dBm)						
5.3GHz 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
802.11a 6Mbps		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	19.00	19.00	22.0
802.11n-HT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11n-HT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ac-VHT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	19.00	19.00	22.0
		56	5280	19.00	19.00	22.0
		60	5300	19.00	19.00	22.0
		64	5320	17.50	17.50	20.5
802.11ax-HE40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)							
5.5GHz 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	
802.11a 6Mbps	802.11a 6Mbps	100	5500	17.00	17.00	20.0	
		116	5580	17.00	17.00	20.0	
		124	5620	17.00	17.00	20.0	
		132	5660	17.00	17.00	20.0	
		140	5700	17.00	17.00	20.0	
		144	5720	17.00	17.00	20.0	
	802.11n-HT20 MCS0	802.11n-HT20 MCS0	100	5500	17.00	17.00	20.0
			116	5580	17.00	17.00	20.0
			124	5620	17.00	17.00	20.0
			132	5660	17.00	17.00	20.0
			140	5700	17.00	17.00	20.0
			144	5720	17.00	17.00	20.0
802.11n-HT40 MCS0	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.0	
		110	5550	17.00	17.00	20.0	
		126	5630	17.00	17.00	20.0	
		134	5670	17.00	17.00	20.0	
		142	5710	17.00	17.00	20.0	
802.11ac-VHT20 MCS0	802.11ac-VHT20 MCS0	100	5500	17.00	17.00	20.0	
		116	5580	17.00	17.00	20.0	
		124	5620	17.00	17.00	20.0	
		132	5660	17.00	17.00	20.0	
		140	5700	17.00	17.00	20.0	
802.11ac-VHT40 MCS0	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.0	
		110	5550	17.00	17.00	20.0	
		126	5630	17.00	17.00	20.0	
		134	5670	17.00	17.00	20.0	
		142	5710	17.00	17.00	20.0	
802.11ac-VHT80 MCS0	802.11ac-VHT80 MCS0	106	5530	17.00	17.00	20.0	
		122	5610	17.00	17.00	20.0	
		138	5690	17.00	17.00	20.0	
802.11ac-VHT160 MCS0	802.11ac-VHT160 MCS0	114	5570	17.00	17.00	20.0	
802.11ax-HE20 MCS0	802.11ax-HE20 MCS0	100	5500	17.00	17.00	20.0	
		116	5580	17.00	17.00	20.0	
		124	5620	17.00	17.00	20.0	
		132	5660	17.00	17.00	20.0	
		140	5700	17.00	17.00	20.0	
802.11ax-HE40 MCS0	802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.0	
		110	5550	17.00	17.00	20.0	
		126	5630	17.00	17.00	20.0	
		134	5670	17.00	17.00	20.0	
		142	5710	17.00	17.00	20.0	
802.11ax-HE80 MCS0	802.11ax-HE80 MCS0	106	5530	17.00	17.00	20.0	
		122	5610	17.00	17.00	20.0	
		138	5690	17.00	17.00	20.0	
802.11ax-HE160 MCS0	802.11ax-HE160 MCS0	114	5570	17.00	17.00	20.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz 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
	802.11a 6Mbps	149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
	802.11n-HT20 MCS0	149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
	802.11n-HT40 MCS0	151	5755	18.00	18.00	21.0
		159	5795	18.00	18.00	21.0
	802.11ac-VHT20 MCS0	149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
	802.11ac-VHT40 MCS0	151	5755	18.00	18.00	21.0
		159	5795	18.00	18.00	21.0
802.11ac-VHT80 MCS0	155	5775	18.00	18.00	21.0	
802.11ax-HE20 MCS0	149	5745	18.00	18.00	21.0	
	157	5785	18.00	18.00	21.0	
	165	5825	18.00	18.00	21.0	
802.11ax-HE40 MCS0	151	5755	18.00	18.00	21.0	
	159	5795	18.00	18.00	21.0	
802.11ax-HE80 MCS0	155	5775	18.00	18.00	21.0	





<Power Index 8>

<2.4 GHz WLAN>

Burst Average Power (dBm)						
	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
2.4GHz WLAN	802.11b 1Mbps	1	2412	15.50	15.50	18.5
		6	2437	15.50	15.50	18.5
		11	2462	15.50	15.50	18.5
		12	2467	15.50	15.50	18.5
		13	2472	15.50	15.50	18.5
	802.11g 6Mbps	1	2412	15.50	15.50	18.5
		6	2437	15.50	15.50	18.5
		11	2462	15.50	15.50	18.5
		12	2467	15.50	15.50	18.5
		13	2472	15.50	15.50	18.5
	802.11n-HT20 MCS0	1	2412	15.50	15.50	18.5
		6	2437	15.50	15.50	18.5
		11	2462	15.50	15.50	18.5
		12	2467	15.50	15.50	18.5
		13	2472	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	1	2412	15.50	15.50	18.5
		6	2437	15.50	15.50	18.5
		11	2462	15.50	15.50	18.5
		12	2467	15.50	15.50	18.5
		13	2472	15.50	15.50	18.5
802.11ax-HE20 MCS0	1	2412	15.50	15.50	18.5	
	6	2437	15.50	15.50	18.5	
	11	2462	15.50	15.50	18.5	
	12	2467	15.50	15.50	18.5	
	13	2472	15.50	15.50	18.5	



<5GHz WLAN>

Burst Average Power (dBm)						
	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
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11n-HT20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11n-HT40 MCS0	38	5190	15.00	15.00	18.0
		46	5230	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	38	5190	15.00	15.00	18.0
		46	5230	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	42	5210	15.00	15.00	18.0
	802.11ax-HE20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
48		5240	15.00	15.00	18.0	
802.11ax-HE40 MCS0	38	5190	15.00	15.00	18.0	
	46	5230	15.00	15.00	18.0	
802.11ax-HE80 MCS0	42	5210	15.00	15.00	18.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz 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
	802.11a 6Mbps		52	5260	16.50	16.50
56			5280	16.50	16.50	19.5
60			5300	16.50	16.50	19.5
64			5320	16.50	16.50	19.5
802.11n-HT20 MCS0		52	5260	16.50	16.50	19.5
		56	5280	16.50	16.50	19.5
		60	5300	16.50	16.50	19.5
		64	5320	16.50	16.50	19.5
802.11n-HT40 MCS0		54	5270	16.50	16.50	19.5
		62	5310	16.50	16.50	19.5
802.11ac-VHT20 MCS0		52	5260	16.50	16.50	19.5
		56	5280	16.50	16.50	19.5
		60	5300	16.50	16.50	19.5
		64	5320	16.50	16.50	19.5
802.11ac-VHT40 MCS0		54	5270	16.50	16.50	19.5
		62	5310	16.50	16.50	19.5
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	16.50	16.50	19.5
		56	5280	16.50	16.50	19.5
		60	5300	16.50	16.50	19.5
		64	5320	16.50	16.50	19.5
802.11ax-HE40 MCS0		54	5270	16.50	16.50	19.5
		62	5310	16.50	16.50	19.5
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
	802.11n-HT20 MCS0	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
		142	5710	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
		142	5710	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	106	5530	15.00	15.00	18.0
		122	5610	15.00	15.00	18.0
		138	5690	15.00	15.00	18.0
	802.11ac-VHT160 MCS0	114	5570	15.00	15.00	18.0
	802.11ax-HE20 MCS0	100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		140	5700	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
	802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
134		5670	15.00	15.00	18.0	
142		5710	15.00	15.00	18.0	
802.11ax-HE80 MCS0	106	5530	15.00	15.00	18.0	
	122	5610	15.00	15.00	18.0	
	138	5690	15.00	15.00	18.0	
802.11ax-HE160 MCS0	114	5570	15.00	15.00	18.0	



Burst Average Power (dBm)						
5.8GHz 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
	802.11a 6Mbps	149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
	802.11n-HT20 MCS0	149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
	802.11n-HT40 MCS0	151	5755	14.50	14.50	17.5
		159	5795	14.50	14.50	17.5
	802.11ac-VHT20 MCS0	149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
	802.11ac-VHT40 MCS0	151	5755	14.50	14.50	17.5
		159	5795	14.50	14.50	17.5
	802.11ac-VHT80 MCS0	155	5775	14.50	14.50	17.5
	802.11ax-HE20 MCS0	149	5745	14.50	14.50	17.5
		157	5785	14.50	14.50	17.5
		165	5825	14.50	14.50	17.5
	802.11ax-HE40 MCS0	151	5755	14.50	14.50	17.5
		159	5795	14.50	14.50	17.5
	802.11ax-HE80 MCS0	155	5775	14.50	14.50	17.5



<Power Index 9>

<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz 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
	802.11a 6Mbps	36	5180	16.00	16.00	19.0
		40	5200	16.00	16.00	19.0
		44	5220	16.00	16.00	19.0
		48	5240	16.00	16.00	19.0
	802.11n-HT20 MCS0	36	5180	16.00	16.00	19.0
		40	5200	16.00	16.00	19.0
		44	5220	16.00	16.00	19.0
		48	5240	16.00	16.00	19.0
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	16.00	16.00	19.0
	802.11ac-VHT20 MCS0	36	5180	16.00	16.00	19.0
		40	5200	16.00	16.00	19.0
		44	5220	16.00	16.00	19.0
		48	5240	16.00	16.00	19.0
	802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	16.00	16.00	19.0
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.0
	802.11ax-HE20 MCS0	36	5180	16.00	16.00	19.0
		40	5200	16.00	16.00	19.0
		44	5220	16.00	16.00	19.0
48		5240	16.00	16.00	19.0	
802.11ax-HE40 MCS0	38	5190	16.00	16.00	19.0	
	46	5230	16.00	16.00	19.0	
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 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	17.50	17.50
56			5280	17.50	17.50	20.5
60			5300	17.50	17.50	20.5
64			5320	17.50	17.50	20.5
802.11n-HT20 MCS0		52	5260	17.50	17.50	20.5
		56	5280	17.50	17.50	20.5
		60	5300	17.50	17.50	20.5
		64	5320	17.50	17.50	20.5
802.11n-HT40 MCS0		54	5270	17.50	17.50	20.5
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	17.50	17.50	20.5
		56	5280	17.50	17.50	20.5
		60	5300	17.50	17.50	20.5
		64	5320	17.50	17.50	20.5
802.11ac-VHT40 MCS0		54	5270	17.50	17.50	20.5
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	17.50	17.50	20.5
		56	5280	17.50	17.50	20.5
		60	5300	17.50	17.50	20.5
		64	5320	17.50	17.50	20.5
802.11ax-HE40 MCS0		54	5270	17.50	17.50	20.5
		62	5310	17.00	17.00	20.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)						
	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
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.0
		116	5580	16.00	16.00	19.0
		124	5620	16.00	16.00	19.0
		132	5660	16.00	16.00	19.0
		140	5700	16.00	16.00	19.0
		144	5720	16.00	16.00	19.0
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	16.00	16.00	19.0
		124	5620	16.00	16.00	19.0
		132	5660	16.00	16.00	19.0
		140	5700	16.00	16.00	19.0
		144	5720	16.00	16.00	19.0
	802.11n-HT40 MCS0	102	5510	16.00	16.00	19.0
		110	5550	16.00	16.00	19.0
		126	5630	16.00	16.00	19.0
		134	5670	16.00	16.00	19.0
		142	5710	16.00	16.00	19.0
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	16.00	16.00	19.0
		124	5620	16.00	16.00	19.0
		132	5660	16.00	16.00	19.0
		140	5700	16.00	16.00	19.0
	802.11ac-VHT40 MCS0	102	5510	16.00	16.00	19.0
		110	5550	16.00	16.00	19.0
		126	5630	16.00	16.00	19.0
		134	5670	16.00	16.00	19.0
		142	5710	16.00	16.00	19.0
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	19.0
		122	5610	16.00	16.00	19.0
		138	5690	16.00	16.00	19.0
	802.11ac-VHT160 MCS0	114	5570	16.00	16.00	19.0
	802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	16.00	16.00	19.0
		124	5620	16.00	16.00	19.0
		132	5660	16.00	16.00	19.0
		140	5700	16.00	16.00	19.0
		144	5720	16.00	16.00	19.0
	802.11ax-HE40 MCS0	102	5510	16.00	16.00	19.0
		110	5550	16.00	16.00	19.0
		126	5630	16.00	16.00	19.0
134		5670	16.00	16.00	19.0	
142		5710	16.00	16.00	19.0	
802.11ax-HE80 MCS0	106	5530	16.00	16.00	19.0	
	122	5610	16.00	16.00	19.0	
	138	5690	16.00	16.00	19.0	
802.11ax-HE160 MCS0	114	5570	16.00	16.00	19.0	





Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz 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
	802.11a 6Mbps	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11n-HT20 MCS0	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11n-HT40 MCS0	151	5755	15.00	15.00	18.0
		159	5795	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	149	5745	15.00	15.00	18.0
		157	5785	15.00	15.00	18.0
		165	5825	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	151	5755	15.00	15.00	18.0
		159	5795	15.00	15.00	18.0
802.11ac-VHT80 MCS0	155	5775	15.00	15.00	18.0	
802.11ax-HE20 MCS0	149	5745	15.00	15.00	18.0	
	157	5785	15.00	15.00	18.0	
	165	5825	15.00	15.00	18.0	
802.11ax-HE40 MCS0	151	5755	15.00	15.00	18.0	
	159	5795	15.00	15.00	18.0	
802.11ax-HE80 MCS0	155	5775	15.00	15.00	18.0	

<6GHz WLAN Maximum Power>

<Mobile Condition - Power Index 0>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
WiFi 6 GHz	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11ax-HE20 MCS0	1	5955	5.00	5.00	8.00
		57	6235	5.00	5.00	8.00
		113	6515	4.00	4.00	7.00
		173	6815	6.00	6.00	9.00
		233	7115	7.00	7.00	10.00
	802.11ax-HE40 MCS0	3	5965	8.00	8.00	11.00
		59	6245	7.00	7.00	10.00
		107	6485	6.00	6.00	9.00
		171	6805	8.00	8.00	11.00
	802.11ax-HE80 MCS0	227	7085	9.50	9.50	12.50
		7	5985	10.00	10.00	13.00
		71	6305	10.00	10.00	13.00
		119	6545	10.00	10.00	13.00
802.11ax-HE160 MCS0	167	6785	11.50	11.50	14.50	
	215	7025	11.50	11.50	14.50	
	15	6025	13.50	13.50	16.50	
	47	6185	13.50	13.50	16.50	
802.11ax-HE160 MCS0	111	6505	12.00	12.00	15.00	
	175	6825	14.00	14.00	17.00	
	207	6985	14.00	14.00	17.00	



<Power Index 1, 2>

Burst Average Power (dBm)						
WiFi 6 GHz	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
WiFi 6 GHz	802.11ax-HE20 MCS0	1	5955	5.00	5.00	8.00
		57	6235	5.00	5.00	8.00
		113	6515	4.00	4.00	7.00
		173	6815	6.00	6.00	9.00
		233	7115	7.00	7.00	10.00
	802.11ax-HE40 MCS0	3	5965	8.00	8.00	11.00
		59	6245	7.00	7.00	10.00
		107	6485	6.00	6.00	9.00
		171	6805	8.00	8.00	11.00
	802.11ax-HE80 MCS0	227	7085	9.50	9.50	12.50
		7	5985	10.00	10.00	13.00
		71	6305	10.00	10.00	13.00
		119	6545	10.00	10.00	13.00
	802.11ax-HE160 MCS0	167	6785	11.50	11.50	14.50
		215	7025	11.50	11.50	14.50
		15	6025	12.50	12.50	15.50
47		6185	12.50	12.50	15.50	
111		6505	12.00	12.00	15.00	
	175	6825	14.00	14.00	17.00	
	207	6985	14.00	14.00	17.00	

<Power Index 3, 4>

Burst Average Power (dBm)						
WiFi 6 GHz	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
WiFi 6 GHz	802.11ax-HE20 MCS0	1	5955	5.00	5.00	8.00
		57	6235	5.00	5.00	8.00
		113	6515	4.00	4.00	7.00
		173	6815	6.00	6.00	9.00
		233	7115	7.00	7.00	10.00
	802.11ax-HE40 MCS0	3	5965	8.00	8.00	11.00
		59	6245	7.00	7.00	10.00
		107	6485	6.00	6.00	9.00
		171	6805	8.00	8.00	11.00
	802.11ax-HE80 MCS0	227	7085	9.50	9.50	12.50
		7	5985	10.00	10.00	13.00
		71	6305	10.00	10.00	13.00
		119	6545	10.00	10.00	13.00
	802.11ax-HE160 MCS0	167	6785	11.50	11.50	14.50
		215	7025	11.50	11.50	14.50
		15	6025	9.50	9.50	12.50
47		6185	9.50	9.50	12.50	
111		6505	10.00	10.00	13.00	
	175	6825	10.50	10.50	13.50	
	207	6985	11.50	11.50	14.50	



**<Power Index 5, 6, 7, 8, 9>**

Burst Average Power (dBm)						
WiFi 6 GHz	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
	802.11ax-HE20 MCS0	1	5955	5.00	5.00	8.00
		57	6235	5.00	5.00	8.00
		113	6515	4.00	4.00	7.00
		173	6815	6.00	6.00	9.00
		233	7115	7.00	7.00	10.00
	802.11ax-HE40 MCS0	3	5965	8.00	8.00	11.00
		59	6245	7.00	7.00	10.00
		107	6485	6.00	6.00	9.00
		171	6805	8.00	8.00	11.00
		227	7085	9.50	9.50	12.50
	802.11ax-HE80 MCS0	7	5985	10.00	10.00	13.00
		71	6305	10.00	10.00	13.00
		119	6545	10.00	10.00	13.00
		167	6785	11.50	11.50	14.50
		215	7025	11.50	11.50	14.50
	802.11ax-HE160 MCS0	15	6025	12.50	12.50	15.50
		47	6185	12.50	12.50	15.50
		111	6505	12.00	12.00	15.00
		175	6825	14.00	14.00	17.00
		207	6985	14.00	14.00	17.00



**<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	20	18.5	17.5	20	20

Mode	Average power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20	18.5	17.5	20	20

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		17	17	20	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	12	12	12	12

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



<Power Index 2, 3>

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20	18.5	17.5	20	20

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20	18.5	17.5	20	20

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		17	17	20	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	18.5	18.5	17.5	18.5	18.5

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18	18	17.5	18	18

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		16.5	16.5	19.5	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	A4RGB7N6																																																														
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><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" style="text-align: center;">≥ 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		A4RGB7N6														
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 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: 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														
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 B2/5/7/13/41/66														
NR Band 2																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz									
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)								
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860								
M	376000	1880	376000	1880	376000	1880	376000	1880								
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900								
NR Band 5																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz									
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)								
L	165300	826.5	165800	829	166300	831.5	166800	834								
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5								
H	169300	846.5	168800	844	168300	841.5	167800	839								
NR Band 7																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		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								
522498NR 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								
NR 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	3715.02	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	664500	3967.5	664334	3965.01	664168	3962.52	664000	3960	663834	3957.51	663668	3955.02	663500	3952.51	663334	3950.01
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 corresponding 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	TDD duty cycle	Head		Hotspot	Body-worn/Extremity			P Max Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous		
				Index 2	Index 3	Index 4	Index 5	Index 6		
				P limit <sup>(1)</sup> Burst average power (dBm)						
GSM850 GPRS 1TX	TX0	0	12.50%	40.2	39	36.2	38.8	37.6	32.5	
GSM850 GPRS 2TX	TX0	0	25.00%	37.2	36	33.2	35.8	34.6	31.5	
GSM850 GPRS 3TX	TX0	0	37.50%	35.5	34.3	31.5	34.1	32.9	30.5	
GSM850 GPRS 4TX	TX0	0	50.00%	34.2	33	30.2	32.8	31.6	29.5	
GSM1900 GPRS 1TX	TX0	2	12.50%	42.9	41.7	29.3	30.5	29.3	30	
GSM1900 GPRS 2TX	TX0	2	25.00%	39.9	38.7	26.3	27.5	26.3	28.5	
GSM1900 GPRS 3TX	TX0	2	37.50%	38.2	37	24.5	25.7	24.5	28	
GSM1900 GPRS 4TX	TX0	2	50.00%	36.9	35.7	23.3	24.5	23.3	27	
WCDMA B2	TX0	2	100.00%	33.5	32.3	20.4	21.8	20.6	24.25	
WCDMA B4	TX0	2	100.00%	30.5	29.3	21.6	23.2	22	24.25	
WCDMA B5	TX0	0	100.00%	30.1	28.9	29.2	30.6	29.4	24.4	

Wireless technology/ band (No Accounting duty cycle)	Config	Antenna	TDD duty cycle	Head		Hotspot	Body-worn/Extremity			P Max Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous		
				Index 2	Index 3	Index 4	Index 5	Index 6		
				P limit <sup>(1)</sup> Burst average power (dBm)						
GSM850 GPRS 1TX	TX1	1	12.50%	32.6	31.4	35.8	37	35.8	32.75	
GSM850 GPRS 2TX	TX1	1	25.00%	29.6	28.4	32.8	34	32.8	31.25	
GSM850 GPRS 3TX	TX1	1	37.50%	27.8	26.6	31.1	32.3	31.1	30.25	
GSM850 GPRS 4TX	TX1	1	50.00%	26.6	25.4	29.8	31	29.8	29.25	
GSM1900 GPRS 1TX	TX1	0	12.50%	36.7	35.5	31.2	32.6	31.4	29.6	
GSM1900 GPRS 2TX	TX1	0	25.00%	33.7	32.5	28.2	29.6	28.4	28.1	
GSM1900 GPRS 3TX	TX1	0	37.50%	32	30.8	26.4	27.9	26.7	27.6	
GSM1900 GPRS 4TX	TX1	0	50.00%	30.7	29.5	25.2	26.6	25.4	26.6	
WCDMA B2	TX1	0	100.00%	27.9	26.7	21.8	23.1	21.9	23.85	
WCDMA B4	TX1	0	100.00%	28.9	27.7	24.2	26.8	25.6	23.75	
WCDMA B5	TX1	1	100.00%	24.1	22.9	26.8	28	26.8	24.15	



<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	TDD 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 <sup>(1)</sup> time-average power (dBm)									
LTE B7	TX0	2	100.00%	28.7	27.5	19	20.7	19.5	23.8
LTE B12/17	TX0	0	100.00%	30.5	29.3	26.9	30.2	29	24.4
LTE B13	TX0	0	100.00%	30	28.8	27.3	29.3	28.1	24.4
LTE B14	TX0	0	100.00%	29.8	28.6	27.4	29.3	28.1	24.4
LTE B25/2	TX0	2	100.00%	33.9	32.7	19.9	22.1	20.9	24.25
LTE B26/5	TX0	0	100.00%	30.2	29	27.2	30.2	29	24.4
LTE B30	TX0	2	100.00%	31.4	30.2	19.6	21.8	20.6	24.2
LTE B41/38 PC3	TX0	2	63.30%	27.3	26.1	19.3	20.6	20.4	21
LTE B41/38 PC2	TX0	2	43.30%	27.3	26.1	19.3	20.6	20.4	22.4
LTE B48 PC3	TX0	6	63.30%	25.5	24.3	21.3	24.7	23.5	21
LTE B66/4	TX0	2	100.00%	31.8	30.6	21.2	22.8	21.6	24.25
LTE B71	TX0	0	100.00%	30.7	29.5	27.2	29.8	28.6	24.4
FR1 n25/2	TX0	2	100.00%	34.2	33	19.4	21.5	20.3	24.25
FR1 n5	TX0	0	100.00%	30.6	29.4	27.7	31	29.8	24.4
FR1 n7	TX0	2	100.00%	29	27.8	18.7	21.2	20	23.8
FR1 n12	TX0	0	100.00%	31.3	30.1	27.9	30.1	28.9	24.4
FR1 n30	TX0	2	100.00%	31.9	30.7	20.2	22	20.8	24.2
FR1 n41/n38 PC3	TX0	5	100.00%	17.4	16.2	20.3	21.5	20.3	24
FR1 n41 PC2	TX0	5	50.00%	17.4	16.2	20.3	21.5	20.3	23
FR1 n66	TX0	2	100.00%	31.5	30.3	21.9	23.9	22.7	24.25
FR1 n71	TX0	0	100.00%	31.3	30.1	30.3	31.6	30.4	24.4
FR1 n77 PC3	TX0	6	100.00%	24.8	23.6	20.6	21.8	20.6	24
FR1 n77 PC2	TX0	6	50.00%	24.8	23.6	20.6	21.8	20.6	23

1. LTE and 5G NR 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	TDD 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 <sup>(1)</sup> time-average power (dBm)									
LTE B4	TX1	0	100.00%	28	26.8	24.8	26.8	25.6	23.75
LTE B7	TX1	0	100.00%	27.4	26.2	23.7	27	25.8	23.1
LTE B12/17	TX1	1	100.00%	25.8	24.6	29	30.2	29	24
LTE B13	TX1	1	100.00%	22.9	21.7	27.2	28.4	27.2	24.15
LTE B14	TX1	1	100.00%	23.3	22.1	26.7	27.9	26.7	24.15
LTE B25/2	TX1	0	100.00%	27.9	26.7	21.7	22.9	21.7	23.85
LTE B26/5	TX1	1	100.00%	24.1	22.9	26.7	27.9	26.7	24.15
LTE B30	TX1	0	100.00%	28.4	27.2	23.1	26.7	25.5	23.55
LTE B41/38 PC3	TX1	0	63.30%	26.7	25.5	22	25.5	24.3	20.3
LTE B38 PC2	TX1	0	43.30%	26.7	25.5	22	25.5	24.3	21.7
LTE B41 PC2	TX1	0	43.30%	26.7	25.5	22	25.5	24.3	21.7
LTE B48 PC3	TX1	2	63.30%	25.7	24.5	20.8	25.3	24.1	21.1
LTE B66	TX1	0	100.00%	27.8	26.6	24.6	27.3	26.1	23.8
LTE B71	TX1	1	100.00%	24.3	23.1	30.2	31.3	30.2	24.05
FR1 n25/2	TX1	0	100.00%	27.7	26.5	21.8	23.1	21.9	23.85
FR1 n5	TX1	1	100.00%	24.6	23.4	27.7	28.9	27.7	24.15
FR1 n7	TX1	0	100.00%	28.2	27	24.5	27.7	26.5	23.1
FR1 n12	TX1	1	100.00%	25.7	24.5	27.9	29.1	27.9	24
FR1 n30	TX1	0	100.00%	29.3	28.1	24.3	27.7	26.5	23.55
FR1 n38 PC3	TX1	1	100.00%	18.2	17	24.9	27.6	26.4	24.2
FR1 n41 PC3	TX1	1	100.00%	18.2	17	24.9	27.6	26.4	24.2
FR1 n41 PC2	TX1	1	50.00%	18.2	17	24.9	27.6	26.4	23.2
FR1 n66	TX1	0	100.00%	28.6	27.4	24.3	27.1	25.9	23.8
FR1 n71	TX1	1	100.00%	25	23.8	27.5	28.7	27.5	24.05
FR1 n77 PC3	TX1	2	100.00%	23.5	22.3	20	21.2	20	23.05
FR1 n77 PC2	TX1	2	50.00%	23.5	22.3	20	21.2	20	22.05

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)

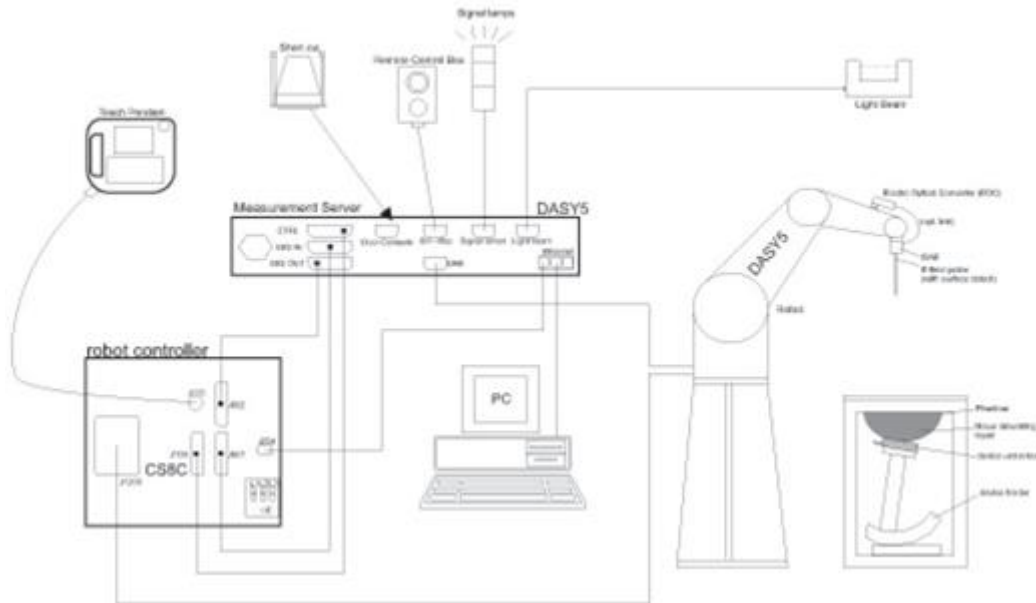
$$SAR = \frac{\sigma |E|^2}{\rho}$$

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**

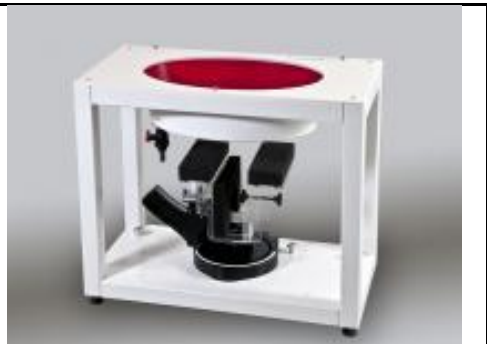
**7.4 Phantom**

**<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	2300MHz System Validation Kit <sup>(2)</sup>	D2300V2	1006	Jan. 28, 2019	Jan. 25, 2022
SPEAG	2450MHz System Validation Kit <sup>(2)</sup>	D2450V2	929	Nov. 21, 2019	Nov. 19, 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	E-Field mmWave Probe	EUmmWV3	9424	Mar. 23, 2021	Mar. 22, 2022
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 19, 2021	Jan. 18, 2022
SPEAG	Data Acquisition Electronics	DAE4	376	Nov. 23, 2020	Nov. 22, 2021
SPEAG	Data Acquisition Electronics	DAE4	778	May. 21, 2021	May. 20, 2022
SPEAG	Data Acquisition Electronics	DAE4	1399	Feb. 16, 2021	Feb. 15, 2022
SPEAG	Data Acquisition Electronics	DAE4	1424	Jan. 19, 2021	Jan. 18, 2022
SPEAG	Data Acquisition Electronics	DAE4	1647	Jan. 07, 2021	Jan. 06, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 23, 2020	Sep. 22, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Feb. 23, 2021	Feb. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Apr. 23, 2021	Apr. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 22, 2020	Oct. 21, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7439	Feb. 23, 2021	Feb. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7590	Mar. 25, 2021	Mar. 24, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Jan. 19, 2021	Jan. 18, 2022
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	22.8	0.896	42.597	0.89	41.90	0.67	1.66	±5	2021/6/29
750	22.6	0.885	42.251	0.89	41.90	-0.56	0.84	±5	2021/6/30
750	22.3	0.887	42.877	0.89	41.90	-0.34	2.33	±5	2021/6/30
750	22.1	0.894	42.445	0.89	41.90	0.45	1.30	±5	2021/7/4
750	22.6	0.894	41.420	0.89	41.90	0.45	-1.15	±5	2021/7/5
750	22.4	0.897	41.463	0.89	41.90	0.79	-1.04	±5	2021/7/6
750	22.8	0.887	40.847	0.89	41.90	-0.34	-2.51	±5	2021/7/14
750	22.4	0.889	42.306	0.89	41.90	-0.11	0.97	±5	2021/7/18
835	22.8	0.876	42.558	0.90	41.50	-2.67	2.55	±5	2021/6/29
835	22.6	0.893	42.911	0.90	41.50	-0.78	3.40	±5	2021/6/30
835	22.3	0.883	42.702	0.90	41.50	-1.89	2.90	±5	2021/6/30
835	22.1	0.895	41.964	0.90	41.50	-0.56	1.12	±5	2021/7/4
835	22.6	0.886	42.685	0.90	41.50	-1.56	2.86	±5	2021/7/5
835	22.4	0.880	42.371	0.90	41.50	-2.22	2.10	±5	2021/7/12
835	22.2	0.868	41.758	0.90	41.50	-3.56	0.62	±5	2021/7/16
1750	22.6	1.362	40.685	1.37	40.10	-0.58	1.46	±5	2021/7/10
1750	22.8	1.361	40.633	1.37	40.10	-0.66	1.33	±5	2021/7/14
1750	22.5	1.374	40.948	1.37	40.10	0.29	2.11	±5	2021/7/21
1900	22.6	1.441	38.096	1.40	40.00	2.93	-4.76	±5	2021/7/10
1900	22.8	1.449	39.863	1.40	40.00	3.50	-0.34	±5	2021/7/14
1900	22.6	1.413	40.494	1.40	40.00	0.93	1.24	±5	2021/7/20
2300	22.7	1.646	40.041	1.67	39.50	-1.44	1.37	±5	2021/7/9
2300	22.5	1.655	39.701	1.67	39.50	-0.90	0.51	±5	2021/7/13
2300	22.5	1.664	39.869	1.67	39.50	-0.36	0.93	±5	2021/7/21
2450	22.6	1.779	38.089	1.80	39.20	-1.17	-2.83	±5	2021/7/2
2450	22.4	1.790	39.930	1.80	39.20	-0.56	1.86	±5	2021/7/11
2450	22.6	1.821	40.162	1.80	39.20	1.17	2.45	±5	2021/7/12
2450	22.4	1.795	38.196	1.80	39.20	-0.28	-2.56	±5	2021/7/19
2450	22.5	1.819	38.396	1.80	39.20	1.06	-2.05	±5	2021/7/20
2600	22.4	1.979	38.553	1.96	39.00	0.97	-1.15	±5	2021/7/6
2600	22.7	1.985	38.843	1.96	39.00	1.28	-0.40	±5	2021/7/9
2600	22.2	1.952	39.094	1.96	39.00	-0.41	0.24	±5	2021/7/10
2600	22.5	1.974	38.514	1.96	39.00	0.71	-1.25	±5	2021/7/13
2600	22.1	1.912	37.769	1.96	39.00	-2.45	-3.16	±5	2021/7/13
2600	22.4	1.954	38.788	1.96	39.00	-0.31	-0.54	±5	2021/7/19
2600	22.5	1.896	38.182	1.96	39.00	-3.27	-2.10	±5	2021/7/21
2600	22.7	1.977	38.635	1.96	39.00	0.87	-0.94	±5	2021/7/29
3500	22.4	2.952	38.007	2.91	37.90	1.44	0.28	±5	2021/7/11
3500	22.6	2.970	37.698	2.91	37.90	2.06	-0.53	±5	2021/7/12
3500	22.3	2.851	37.240	2.91	37.90	-2.03	-1.74	±5	2021/7/21
3700	22.3	3.031	36.941	3.12	37.70	-2.85	-2.01	±5	2021/7/21
3900	22.3	3.228	36.662	3.33	37.51	-3.06	-2.26	±5	2021/7/21



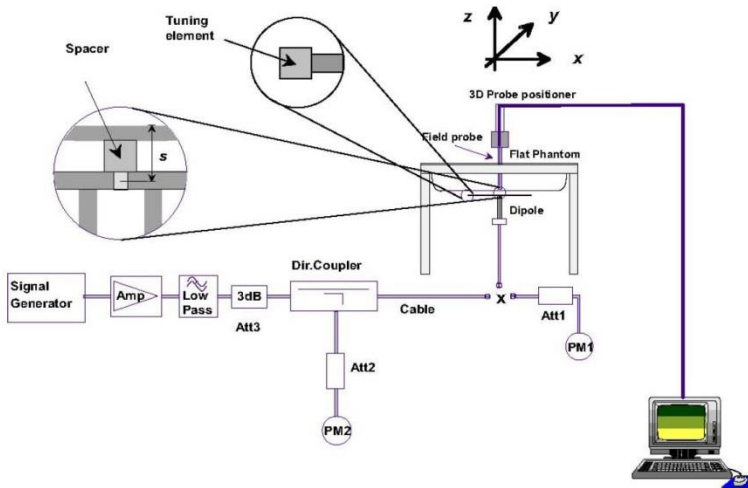
Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (εr)	Conductivity Target (σ)	Permittivity Target (εr)	Delta (σ) (%)	Delta (εr) (%)	Limit (%)	Date
5250	22.1	4.666	37.649	4.71	35.95	-0.93	4.73	±5	2021/7/8
5250	22.3	4.751	36.567	4.71	35.95	0.87	1.72	±5	2021/7/9
5250	22.3	4.639	35.875	4.71	35.95	-1.51	-0.21	±5	2021/7/10
5250	22.5	4.663	37.630	4.71	35.95	-1.00	4.67	±5	2021/7/11
5600	22.1	5.023	37.170	5.07	35.50	-0.93	4.70	±5	2021/7/8
5600	22.3	5.090	36.133	5.07	35.50	0.39	1.78	±5	2021/7/9
5600	22.3	4.981	35.364	5.07	35.50	-1.76	-0.38	±5	2021/7/10
5600	22.5	5.021	37.151	5.07	35.50	-0.97	4.65	±5	2021/7/11
5750	22.1	5.170	36.930	5.22	35.35	-0.96	4.47	±5	2021/7/8
5750	22.3	5.248	35.952	5.22	35.35	0.54	1.70	±5	2021/7/9
5750	22.3	5.138	35.157	5.22	35.35	-1.57	-0.55	±5	2021/7/10
5750	22.5	5.167	36.911	5.22	35.35	-1.02	4.42	±5	2021/7/11
6500	22.2	6.104	35.470	6.07	34.50	0.56	2.81	±5	2021/7/12
6500	22.6	5.978	35.220	6.07	34.50	-1.52	2.09	±5	2021/7/14

### 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 (%)
SAR12-HY	2021/6/29	750	250	D750V3-1107	EX3DV4 - SN3931	DAE4 Sn1399	2.24	8.32	8.96	7.69	1.51	5.61	6.04	7.66
SAR12-HY	2021/6/30	750	50	D750V3-1107	EX3DV4 - SN3931	DAE4 Sn1399	0.405	8.32	8.1	-2.64	0.268	5.61	5.36	-4.46
SAR14-HY	2021/6/30	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.382	8.32	7.64	-8.17	0.253	5.61	5.06	-9.80
SAR14-HY	2021/7/4	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.385	8.32	7.7	-7.45	0.255	5.61	5.1	-9.09
SAR14-HY	2021/7/5	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.385	8.32	7.7	-7.45	0.255	5.61	5.1	-9.09
SAR14-HY	2021/7/6	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.386	8.32	7.72	-7.21	0.256	5.61	5.12	-8.73
SAR14-HY	2021/7/14	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.381	8.32	7.62	-8.41	0.253	5.61	5.06	-9.80
SAR14-HY	2021/7/18	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.382	8.32	7.64	-8.17	0.253	5.61	5.06	-9.80
SAR12-HY	2021/6/29	835	250	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	2.46	9.55	9.84	3.04	1.59	6.21	6.36	2.42
SAR12-HY	2021/6/30	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	0.458	9.55	9.16	-4.08	0.295	6.21	5.9	-4.99
SAR14-HY	2021/6/30	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.432	9.55	8.64	-9.53	0.282	6.21	5.64	-9.18
SAR14-HY	2021/7/4	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.437	9.55	8.74	-8.48	0.286	6.21	5.72	-7.89
SAR14-HY	2021/7/5	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.433	9.55	8.66	-9.32	0.283	6.21	5.66	-8.86
SAR14-HY	2021/7/12	835	250	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	2.52	9.55	10.08	5.55	1.64	6.21	6.56	5.64
SAR14-HY	2021/7/16	835	250	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	2.48	9.55	9.92	3.87	1.61	6.21	6.44	3.70
SAR14-HY	2021/7/10	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.77	36.70	35.4	-3.54	0.943	19.40	18.86	-2.78
SAR14-HY	2021/7/14	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.77	36.70	35.4	-3.54	0.943	19.40	18.86	-2.78
SAR14-HY	2021/7/21	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.78	36.70	35.6	-3.00	0.952	19.40	19.04	-1.86
SAR14-HY	2021/7/10	1900	50	D1900V2-5d041	EX3DV4 - SN7439	DAE4 Sn376	2.02	40.20	40.4	0.50	1.06	21.20	21.2	0.00
SAR14-HY	2021/7/14	1900	50	D1900V2-5d041	EX3DV4 - SN7439	DAE4 Sn376	2.03	40.20	40.6	1.00	1.06	21.20	21.2	0.00
SAR14-HY	2021/7/20	1900	50	D1900V2-5d041	EX3DV4 - SN7439	DAE4 Sn376	1.98	40.20	39.6	-1.49	1.04	21.20	20.8	-1.89
SAR14-HY	2021/7/9	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.28	48.70	45.6	-6.37	1.11	23.20	22.2	-4.31
SAR14-HY	2021/7/13	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.30	48.70	46	-5.54	1.12	23.20	22.4	-3.45
SAR14-HY	2021/7/21	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.31	48.70	46.2	-5.13	1.13	23.20	22.6	-2.59

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 (%)
SAR09-HY	2021/7/2	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	13.60	53.10	54.4	2.45	6.67	24.70	26.68	8.02
SAR09-HY	2021/7/11	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	12.10	53.10	48.4	-8.85	5.96	24.70	23.84	-3.48
SAR09-HY	2021/7/12	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	12.30	53.10	49.2	-7.34	6.07	24.70	24.28	-1.70
SAR09-HY	2021/7/19	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	12.20	53.10	48.8	-8.10	5.98	24.70	23.92	-3.16
SAR09-HY	2021/7/20	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	12.30	53.10	49.2	-7.34	6.06	24.70	24.24	-1.86
SAR14-HY	2021/7/6	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.96	56.40	59.2	4.96	1.36	25.30	27.2	7.51
SAR14-HY	2021/7/9	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.97	56.40	59.4	5.32	1.37	25.30	27.4	8.30
SAR12-HY	2021/7/10	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	2.88	56.40	57.6	2.13	1.34	25.30	26.8	5.93
SAR14-HY	2021/7/13	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.96	56.40	59.2	4.96	1.36	25.30	27.2	7.51
SAR12-HY	2021/7/13	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	2.74	56.40	54.8	-2.84	1.25	25.30	25	-1.19
SAR10-HY	2021/7/19	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn316	2.59	56.40	51.8	-8.16	1.16	25.30	23.2	-8.30
SAR14-HY	2021/7/21	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.84	56.40	56.8	0.71	1.31	25.30	26.2	3.56
SAR09-HY	2021/7/29	2600	250	D2600V2-1078	ES3DV3 - SN3184	DAE4 Sn1647	13.90	57.60	55.6	-3.47	6.54	25.50	26.16	2.59
SAR12-HY	2021/7/11	3500	100	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn1399	6.87	67.90	68.7	1.18	2.54	25.60	25.4	-0.78
SAR12-HY	2021/7/12	3500	50	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn1399	3.55	67.90	71	4.57	1.34	25.60	26.8	4.69
SAR10-HY	2021/7/21	3500	100	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn316	6.35	67.90	63.5	-6.48	2.38	25.60	23.8	-7.03
SAR10-HY	2021/7/21	3700	50	D3700V2-1006	EX3DV4 - SN3925	DAE4 Sn316	3.14	67.30	62.8	-6.69	1.13	24.50	22.6	-7.76
SAR10-HY	2021/7/21	3900	100	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn316	7.55	69.50	75.5	8.63	2.60	24.20	26	7.44
SAR05-HY	2021/7/8	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN7590	DAE4 Sn1424	7.43	80.70	74.3	-7.93	2.15	23.20	21.5	-7.33
SAR05-HY	2021/7/9	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7590	DAE4 Sn1424	7.57	80.00	75.7	-5.38	2.19	22.90	21.9	-4.37
SAR05-HY	2021/7/10	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN7590	DAE4 Sn1424	7.39	80.70	73.9	-8.43	2.14	23.20	21.4	-7.76
SAR05-HY	2021/7/11	5250	50	D5GHzV2-1128-5250	EX3DV4 - SN7590	DAE4 Sn1424	3.71	80.00	74.2	-7.25	1.04	22.90	20.8	-9.17
SAR05-HY	2021/7/8	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN7590	DAE4 Sn1424	8.27	83.30	82.7	-0.72	2.34	23.80	23.4	-1.68
SAR05-HY	2021/7/9	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7590	DAE4 Sn1424	8.38	82.40	83.8	1.70	2.38	23.60	23.8	0.85
SAR05-HY	2021/7/10	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN7590	DAE4 Sn1424	8.20	83.30	82	-1.56	2.32	23.80	23.2	-2.52
SAR05-HY	2021/7/11	5600	50	D5GHzV2-1128-5600	EX3DV4 - SN7590	DAE4 Sn1424	3.81	82.40	76.2	-7.52	1.08	23.60	21.6	-8.47
SAR05-HY	2021/7/8	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	7.22	79.10	72.2	-8.72	2.07	22.60	20.7	-8.41
SAR05-HY	2021/7/9	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	7.32	79.10	73.2	-7.46	2.10	22.60	21	-7.08
SAR05-HY	2021/7/10	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	7.17	79.10	71.7	-9.36	2.05	22.60	20.5	-9.29
SAR05-HY	2021/7/11	5750	50	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	3.73	79.10	74.6	-5.69	1.03	22.60	20.6	-8.85
SAR06-HY	2021/7/12	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE4 Sn778	30.30	299.00	303	1.34	5.65	55.10	56.5	2.54
SAR06-HY	2021/7/14	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE4 Sn778	31.80	299.00	318	6.35	5.91	55.10	59.1	7.26



**Fig 8.3.1 System Performance Check Setup**

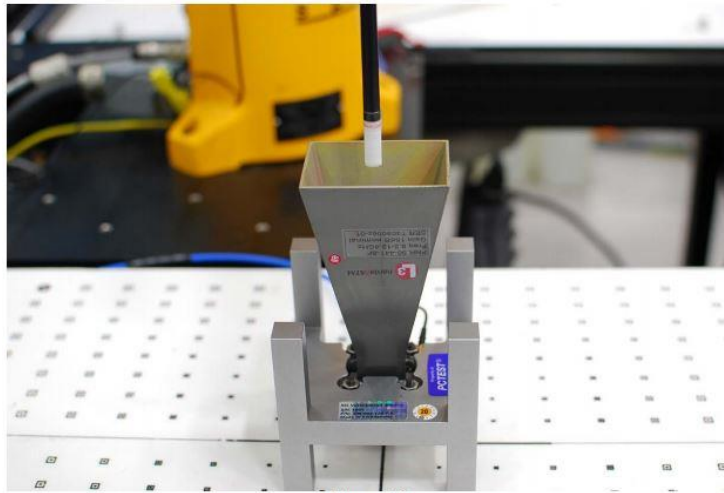


**Fig 8.3.2 Setup Photo**

**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	EUmmWV3 - SN9424	DAE4 Sn778	10mm	41.4	42.2	-0.08	2021/7/8



**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.

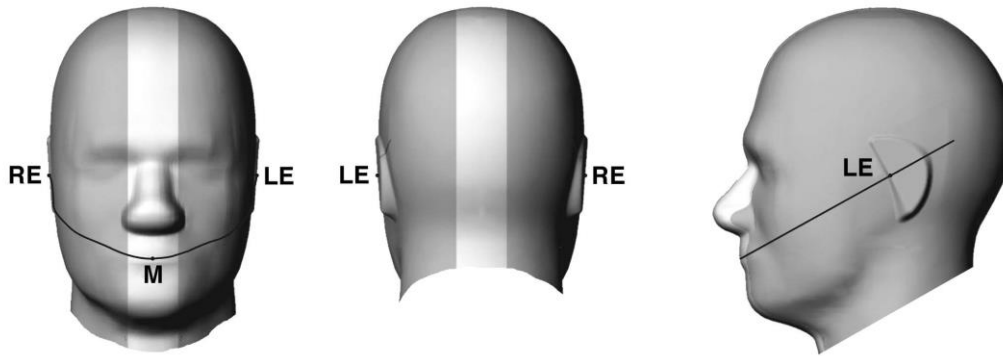


Fig 9.1.1 Front, back, and side views of SAM twin phantom



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

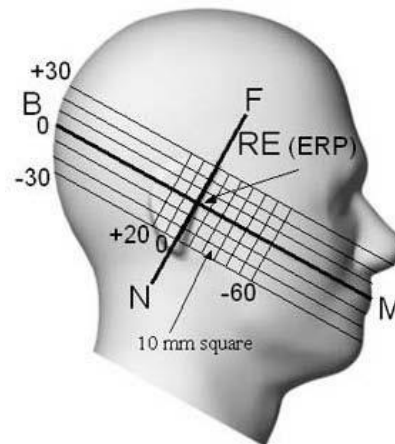
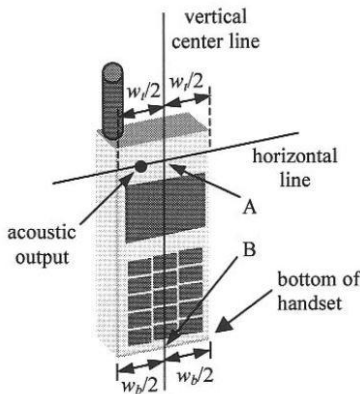


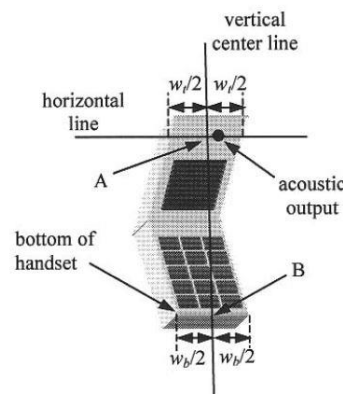
Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

**11.2 Definition of the cheek position**

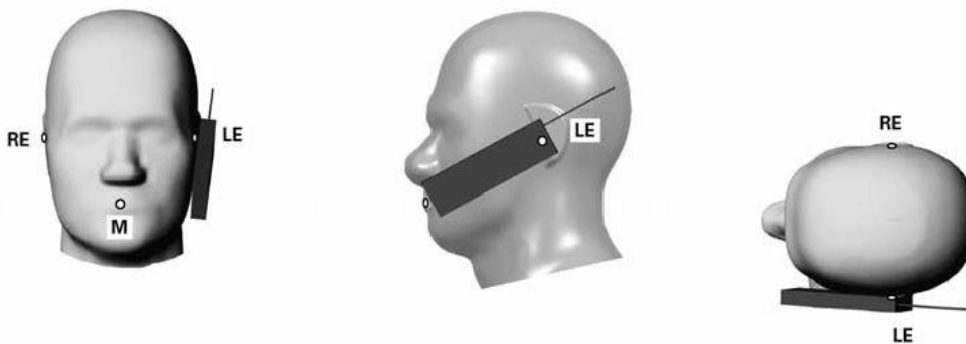
1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal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



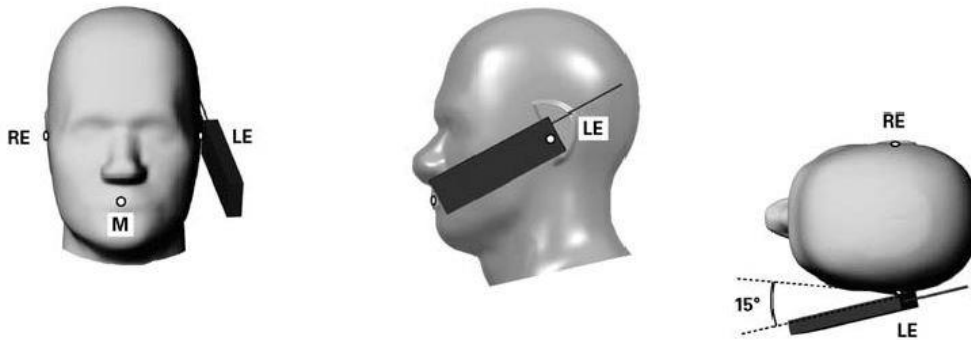
**Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”**



**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

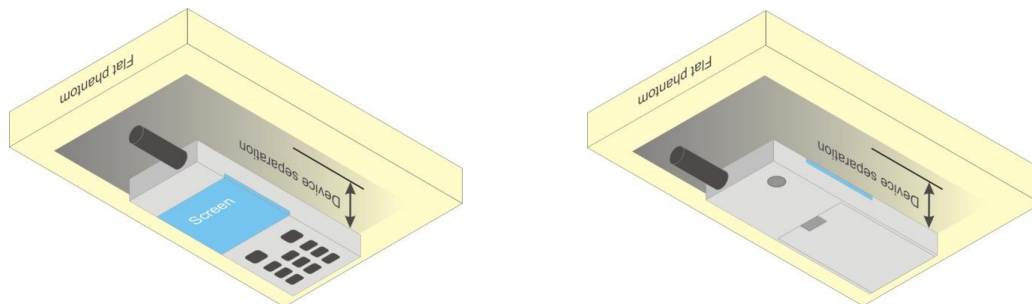


**Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.**

**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 handset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-chip 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 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  $\leq \frac{1}{4}$  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.

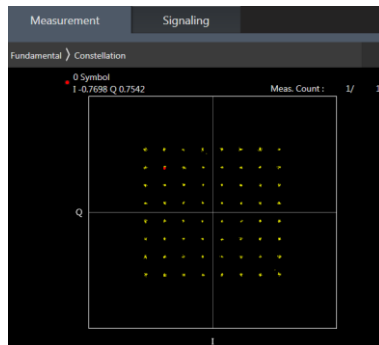
**Setup Configuration**

**<LTE Note>**

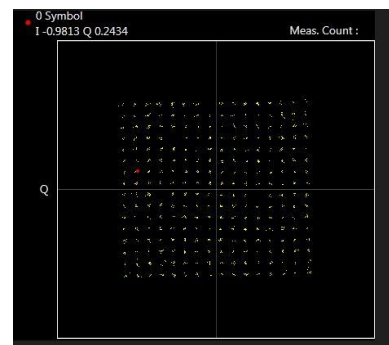
1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested 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**



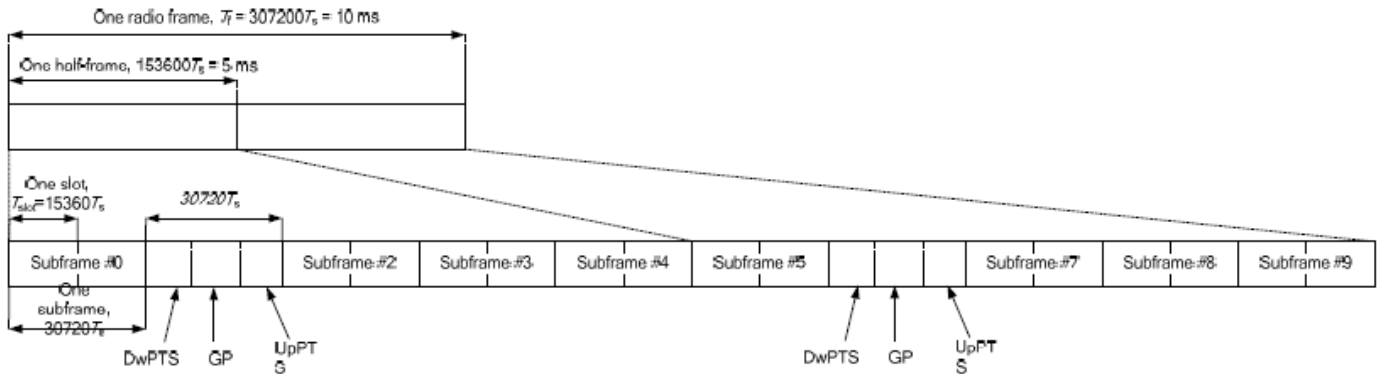
**256QAM**

**<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 FR1 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	QPSK		≤ 4.5	
		≤ 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 procedure 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 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 77.22 for ant 4, 76.84% for ant 3, ant 4+3 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 two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- 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	5	1907.5	19175	QPSK	1	12	17	10	740	5790	23.98	24.01
	CA_5A-25A	5	10	829	20450	QPSK	1	0	25	20	1960	8340	24.08	24.11



<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	1900	19100	QPSK	1	49	13	10	751	5230	46	20	5537.5	50665	23.96	24.03
	CA_2A-14A-30A	2	20	1900	19100	QPSK	1	49	14	10	762	5330	30	10	2355	9820	24.01	24.03

<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	1900	19100	QPSK	1	49	2	5	1932.5	625	4	20	2132.5	2175	71	20	634.5	68761	23.96	24.03
	CA_2A-2A-5B	2	20	1900	19100	QPSK	1	49	2	5	1932.5	625	5	10	881.5	2525	5	10	891.4	2624	23.94	24.03

<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	1900	19100	QPSK	1	49	12	10	737.5	5095	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	23.95	24.03
	CA_2A-13A-48A-48A-66A	2	20	1900	19100	QPSK	1	49	13	10	751	5230	48	20	3641	56150	48	5	3552.5	55265	66	20	2155	66886	23.99	24.03



<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	22.72	23.00
20575	20476	QPSK	1	0	1	49	2	0	22.99	23.00
20600	20501	QPSK	1	0	1	49	2	0	22.95	23.00

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	22.98	23.00
21100	20902	QPSK	1	0	1	99	2	0	22.93	23.00
21350	21152	QPSK	1	0	1	99	2	0	22.94	23.00



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	18.87	19.80
21100	20902	QPSK	1	0	1	99	2	0	18.86	19.80
21350	21152	QPSK	1	0	1	99	2	0	18.73	19.80

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	19.93	21.50
21100	20902	QPSK	1	0	1	99	2	0	19.91	21.50
21350	21152	QPSK	1	0	1	99	2	0	19.90	21.50

Index 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	19.93	20.30
21100	20902	QPSK	1	0	1	99	2	0	19.91	20.30
21350	21152	QPSK	1	0	1	99	2	0	19.90	20.30

Index 1/2/3/5										
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	22.99	23.00
132322	132229	QPSK	1	0	1	24	2	0	22.94	23.00
132597	132504	QPSK	1	0	1	24	2	0	22.87	23.00

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	20.58	22.00
132322	132229	QPSK	1	0	1	24	2	0	20.56	22.00
132597	132504	QPSK	1	0	1	24	2	0	20.51	22.00

Index 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	21.22	22.40
132322	132229	QPSK	1	0	1	24	2	0	21.31	22.40
132597	132504	QPSK	1	0	1	24	2	0	21.24	22.40



Index 1/2/3/5										
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	22.88	23.00
132322	132124	QPSK	1	0	1	99	2	0	22.97	23.00
132572	132374	QPSK	1	0	1	99	2	0	22.99	23.00

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	20.98	22.00
132322	132124	QPSK	1	0	1	99	2	0	21.07	22.00
132572	132374	QPSK	1	0	1	99	2	0	21.11	22.00

Index 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	21.25	22.40
132322	132124	QPSK	1	0	1	99	2	0	21.33	22.40
132572	132374	QPSK	1	0	1	99	2	0	21.42	22.40

Index 1/2/3/5/6										
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	22.95	23.00
40185	39987	QPSK	1	0	1	99	2	0	22.97	23.00
40620	40422	QPSK	1	0	1	99	2	0	22.99	23.00
41055	40857	QPSK	1	0	1	99	2	0	22.89	23.00
41490	41292	QPSK	1	0	1	99	2	0	22.93	23.00

Index 4										
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	20.98	22.10
40185	39987	QPSK	1	0	1	99	2	0	21.02	22.10
40620	40422	QPSK	1	0	1	99	2	0	20.97	22.10
41055	40857	QPSK	1	0	1	99	2	0	20.83	22.10
41490	41292	QPSK	1	0	1	99	2	0	20.90	22.10



**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	22.94	23.00
20575	20476	QPSK	1	0	1	49	2	0	22.95	23.00
20600	20501	QPSK	1	0	1	49	2	0	22.91	23.00

Index 1/2/3/4/5/6										
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	22.50	23.00
21100	20902	QPSK	1	0	1	99	2	0	22.42	23.00
21350	21152	QPSK	1	0	1	99	2	0	22.17	23.00

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	22.55	23.00
132322	132229	QPSK	1	0	1	24	2	0	22.61	23.00
132597	132504	QPSK	1	0	1	24	2	0	22.24	23.00

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	22.59	23.00
132322	132124	QPSK	1	0	1	99	2	0	22.51	23.00
132572	132374	QPSK	1	0	1	99	2	0	22.37	23.00

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	22.49	23.00
40185	39987	QPSK	1	0	1	99	2	0	22.44	23.00
40620	40422	QPSK	1	0	1	99	2	0	22.23	23.00
41055	40857	QPSK	1	0	1	99	2	0	22.19	23.00
41490	41292	QPSK	1	0	1	99	2	0	22.1	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

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
WLAN/BT Ant 3	Yes	Yes	Yes	No	Yes	Yes

**General Note:**

1. 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
2. The antenna location is illustrated in the Appendix E





## 15. RF Exposure Test Result

### 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. For 5.3GHz / 5.5GHz / 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, 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 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	128	824.2	26.46	27.70	1.330	-0.13	0.635	0.845
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	189	836.4	26.30	27.70	1.380	-0.09	0.609	0.841
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	251	848.8	26.06	27.70	1.459	-0.09	0.710	1.036
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	128	824.2	26.46	27.70	1.330	-0.06	0.672	0.894
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	189	836.4	26.30	27.70	1.380	0.14	0.564	0.779
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	251	848.8	26.06	27.70	1.459	-0.18	0.697	1.017
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2	128	824.2	26.46	27.70	1.330	-0.1	0.316	0.420
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2	128	824.2	26.46	27.70	1.330	-0.16	0.308	0.410
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	128	824.2	26.46	26.50	1.009	-0.13	0.635	0.641
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	128	824.2	26.46	26.50	1.009	-0.06	0.672	0.678
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	189	836.4	26.30	26.50	1.047	0.14	0.564	0.591
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	251	848.8	26.06	26.50	1.107	-0.18	0.697	0.771
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 3	128	824.2	26.46	26.50	1.009	-0.1	0.316	0.319
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 3	128	824.2	26.46	26.50	1.009	-0.16	0.308	0.311

<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 V_Ant 1	RMC 12.2Kbps	Right Cheek	10mm	Index 2	4132	826.4	23.96	24.80	1.213	-0.06	0.851	1.033
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2	4182	836.4	23.95	24.80	1.216	-0.07	0.723	0.879
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2	4233	846.6	23.93	24.80	1.222	-0.08	0.825	1.008
02	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4132	826.4	23.96	24.80	1.213	-0.03	0.891	1.081
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4182	836.4	23.95	24.80	1.216	-0.09	0.739	0.899
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4233	846.6	23.93	24.80	1.222	-0.01	0.838	1.024
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Index 2	4132	826.4	23.96	24.80	1.213	-0.13	0.459	0.557
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Index 2	4132	826.4	23.96	24.80	1.213	-0.06	0.428	0.519
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 3	4182	836.4	23.22	23.60	1.091	-0.15	0.677	0.739
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 3	4182	836.4	23.22	23.60	1.091	-0.17	0.684	0.747
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 3	4132	826.4	23.20	23.60	1.096	-0.12	0.642	0.704
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 3	4233	846.6	23.17	23.60	1.104	-0.04	0.748	0.826
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Index 3	4182	836.4	23.22	23.60	1.091	-0.17	0.388	0.423
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Index 3	4182	836.4	23.22	23.60	1.091	-0.03	0.349	0.381



<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)
03	LTE Band 12_Ant 1	10M	QPSK	1	25	Right Cheek	0mm	Index 2 / Index 3	23095	707.5	23.75	24.90	1.303	-0.14	0.581	0.757
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	Index 2 / Index 3	23095	707.5	23.79	23.90	1.026	-0.12	0.415	0.426
	LTE Band 12_Ant 1	10M	QPSK	1	25	Right Tilted	0mm	Index 2 / Index 3	23095	707.5	23.75	24.90	1.303	-0.14	0.604	0.787
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	Index 2 / Index 3	23095	707.5	23.79	23.90	1.026	-0.19	0.399	0.409
	LTE Band 12_Ant 1	10M	QPSK	1	25	Left Cheek	0mm	Index 2 / Index 3	23095	707.5	23.75	24.90	1.303	-0.19	0.281	0.366
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	Index 2 / Index 3	23095	707.5	23.79	23.90	1.026	-0.12	0.216	0.222
	LTE Band 12_Ant 1	10M	QPSK	1	25	Left Tilted	0mm	Index 2 / Index 3	23095	707.5	23.75	24.90	1.303	-0.16	0.258	0.336
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	Index 2 / Index 3	23095	707.5	23.79	23.90	1.026	-0.13	0.188	0.193
04	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 2	23230	782	22.12	23.60	1.406	-0.08	0.684	0.962
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Index 2	23230	782	22.16	23.60	1.393	-0.08	0.707	0.985
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	Index 2	23230	782	22.21	23.60	1.377	-0.07	0.843	1.161
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 2	23230	782	22.12	23.60	1.406	-0.09	0.801	1.126
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Index 2	23230	782	22.16	23.60	1.393	-0.03	0.859	1.197
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	Index 2	23230	782	22.21	23.60	1.377	-0.05	0.729	1.004
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 2	23230	782	22.12	23.60	1.406	-0.19	0.311	0.437
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Index 2	23230	782	22.16	23.60	1.393	-0.01	0.323	0.450
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 2	23230	782	22.12	23.60	1.406	-0.09	0.268	0.377
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Index 2	23230	782	22.16	23.60	1.393	-0.17	0.275	0.383
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 3	23230	782	22.12	22.40	1.067	-0.08	0.684	0.730
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Index 3	23230	782	22.16	22.40	1.057	-0.08	0.707	0.747
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 3	23230	782	22.12	22.40	1.067	-0.09	0.801	0.854
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Index 3	23230	782	22.16	22.40	1.057	-0.03	0.859	0.908
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	Index 3	23230	782	22.21	22.40	1.045	-0.05	0.729	0.762
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 3	23230	782	22.12	22.40	1.067	-0.19	0.311	0.332
LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Index 3	23230	782	22.16	22.40	1.057	-0.01	0.323	0.341	
LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 3	23230	782	22.12	22.40	1.067	-0.09	0.268	0.286	
LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Index 3	23230	782	22.16	22.40	1.057	-0.17	0.275	0.291	
05	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 2	23330	793	22.43	24.00	1.435	-0.02	0.815	1.170
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Index 2	23330	793	22.47	23.90	1.390	-0.09	0.793	1.102
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	Index 2	23330	793	22.48	23.90	1.387	-0.05	0.793	1.100
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 2	23330	793	22.43	24.00	1.435	-0.03	0.761	1.092
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Index 2	23330	793	22.47	23.90	1.390	-0.05	0.766	1.065
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	Index 2	23330	793	22.48	23.90	1.387	-0.08	0.760	1.054
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 2	23330	793	22.43	24.00	1.435	-0.04	0.398	0.571
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Index 2	23330	793	22.47	23.90	1.390	-0.04	0.401	0.557
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 2	23330	793	22.43	24.00	1.435	-0.06	0.349	0.501
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Index 2	23330	793	22.47	23.90	1.390	-0.09	0.358	0.498
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 3	23330	793	22.43	22.80	1.089	-0.02	0.815	0.887
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Index 3	23330	793	22.47	22.80	1.079	-0.09	0.793	0.856
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	Index 3	23330	793	22.48	22.80	1.076	-0.05	0.793	0.854
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 3	23330	793	22.43	22.80	1.089	-0.03	0.761	0.829
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Index 3	23330	793	22.47	22.80	1.079	-0.05	0.766	0.826
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	Index 3	23330	793	22.48	22.80	1.076	-0.08	0.760	0.818
LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 3	23330	793	22.43	22.80	1.089	-0.04	0.398	0.433	
LTE Band 14_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Index 3	23330	793	22.47	22.80	1.079	-0.04	0.401	0.433	
LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 3	23330	793	22.43	22.80	1.089	-0.06	0.349	0.380	
LTE Band 14_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Index 3	23330	793	22.47	22.80	1.079	-0.09	0.358	0.386	



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)
06	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Index 2	26865	831.5	23.45	24.80	1.365	-0.05	0.791	1.079
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	Index 2	26865	831.5	23.22	23.90	1.169	-0.17	0.664	0.777
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	Index 2	26865	831.5	23.13	23.90	1.194	0	0.616	0.735
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	Index 2	26865	831.5	23.45	24.80	1.365	-0.02	0.688	0.939
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	Index 2	26865	831.5	23.22	23.90	1.169	-0.1	0.617	0.722
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Tilted	0mm	Index 2	26865	831.5	23.13	23.90	1.194	-0.09	0.407	0.486
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	Index 2	26865	831.5	23.45	24.80	1.365	-0.06	0.431	0.588
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	Index 2	26865	831.5	23.22	23.90	1.169	-0.07	0.398	0.465
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	Index 2	26865	831.5	23.45	24.80	1.365	-0.07	0.377	0.514
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	Index 2	26865	831.5	23.22	23.90	1.169	-0.07	0.343	0.401
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 2	20575+20476	841.5	22.95	23.00	1.012	-0.09	0.700	0.708
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Index 3	26865	831.5	23.45	23.60	1.035	-0.05	0.791	0.819
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	Index 3	26865	831.5	23.22	23.60	1.091	-0.17	0.664	0.725
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	Index 3	26865	831.5	23.13	23.60	1.114	0	0.616	0.686
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	Index 3	26865	831.5	23.45	23.60	1.035	-0.02	0.688	0.712
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	Index 3	26865	831.5	23.22	23.60	1.091	-0.1	0.617	0.673
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	Index 3	26865	831.5	23.45	23.60	1.035	-0.06	0.431	0.446
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	Index 3	26865	831.5	23.22	23.60	1.091	-0.07	0.398	0.434
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	Index 3	26865	831.5	23.45	23.60	1.035	-0.07	0.377	0.390
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	Index 3	26865	831.5	23.22	23.60	1.091	-0.07	0.343	0.374
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Index 2	133322	683	23.62	24.90	1.343	-0.05	0.710	0.953
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	Index 2	133322	683	22.67	23.90	1.327	-0.18	0.738	0.980
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	Index 2	133322	683	22.64	23.90	1.337	-0.01	0.609	0.814
07	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Index 2	133322	683	23.62	24.90	1.343	-0.07	0.752	1.010
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	Index 2	133322	683	22.67	23.90	1.327	-0.16	0.675	0.896
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	Index 2	133322	683	22.64	23.90	1.337	-0.02	0.564	0.754
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Index 2	133322	683	23.62	24.90	1.343	-0.19	0.254	0.341
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	Index 2	133322	683	22.67	23.90	1.327	-0.1	0.245	0.325
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Index 2	133322	683	23.62	24.90	1.343	-0.16	0.242	0.325
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	Index 2	133322	683	22.67	23.90	1.327	-0.07	0.224	0.297
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Index 3	133322	683	23.19	23.90	1.178	-0.17	0.655	0.771
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	Index 3	133322	683	22.94	23.90	1.247	-0.18	0.581	0.725
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Index 3	133322	683	23.19	23.90	1.178	-0.1	0.736	0.867
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	Index 3	133322	683	22.94	23.90	1.247	-0.08	0.615	0.767
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	Index 3	133322	683	22.92	23.90	1.253	-0.06	0.555	0.695
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Index 3	133322	683	23.19	23.90	1.178	-0.19	0.271	0.319
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	Index 3	133322	683	22.94	23.90	1.247	-0.1	0.259	0.323
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Index 3	133322	683	23.19	23.90	1.178	-0.06	0.283	0.333
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	Index 3	133322	683	22.94	23.90	1.247	-0.08	0.258	0.322



<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 1	20M	BPSK	1	53	Right Cheek	0mm	Index 2	167300	836.5	24.19	24.90	1.178	-0.13	0.670	0.789
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 2	167300	836.5	24.06	24.90	1.213	-0.04	0.695	0.843
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	Index 2	167300	836.5	23.95	24.40	1.109	-0.09	0.718	0.796
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 2	167300	836.5	24.19	24.90	1.178	-0.12	0.662	0.780
08	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 2	167300	836.5	24.06	24.90	1.213	-0.16	0.873	1.059
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	Index 2	167300	836.5	23.95	24.40	1.109	-0.16	0.862	0.956
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 2	167300	836.5	24.19	24.90	1.178	-0.09	0.391	0.460
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 2	167300	836.5	24.06	24.90	1.213	-0.08	0.356	0.432
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 2	167300	836.5	24.19	24.90	1.178	-0.05	0.339	0.399
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 2	167300	836.5	24.06	24.90	1.213	-0.08	0.374	0.454
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 3	167300	836.5	23.19	24.10	1.233	-0.1	0.561	0.692
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 3	167300	836.5	23.06	24.10	1.271	-0.1	0.546	0.694
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 3	167300	836.5	23.19	24.10	1.233	-0.13	0.581	0.716
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 3	167300	836.5	23.06	24.10	1.271	-0.05	0.541	0.687
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 3	167300	836.5	23.19	24.10	1.233	-0.15	0.325	0.401
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 3	167300	836.5	23.06	24.10	1.271	-0.07	0.310	0.394
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 3	167300	836.5	23.19	24.10	1.233	-0.14	0.274	0.338
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 3	167300	836.5	23.06	24.10	1.271	-0.15	0.269	0.342
09	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	Index 2 / Index 3	141500	707.5	23.94	24.90	1.247	-0.13	0.642	0.801
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	Index 2 / Index 3	141500	707.5	23.87	24.90	1.268	-0.02	0.543	0.688
	FR1 n12_Ant 1	15M	BPSK	75	0	Right Cheek	0mm	Index 2 / Index 3	141500	707.5	23.76	24.40	1.159	0.04	0.498	0.577
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	Index 2 / Index 3	141500	707.5	23.94	24.90	1.247	-0.14	0.543	0.677
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	Index 2 / Index 3	141500	707.5	23.87	24.90	1.268	-0.17	0.507	0.643
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Index 2 / Index 3	141500	707.5	23.94	24.90	1.247	-0.1	0.277	0.346
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	Index 2 / Index 3	141500	707.5	23.87	24.90	1.268	-0.06	0.235	0.298
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	Index 2 / Index 3	141500	707.5	23.94	24.90	1.247	-0.04	0.247	0.308
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	Index 2 / Index 3	141500	707.5	23.87	24.90	1.268	-0.07	0.216	0.274
10	FR1 n71_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 2	136100	680.5	23.94	24.90	1.247	-0.19	0.758	0.946
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 2	136100	680.5	23.85	24.90	1.274	-0.05	0.650	0.828
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	Index 2	136100	680.5	23.74	24.40	1.164	-0.18	0.721	0.839
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 2	136100	680.5	23.94	24.90	1.247	-0.1	0.718	0.896
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 2	136100	680.5	23.85	24.90	1.274	-0.11	0.646	0.823
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	Index 2	136100	680.5	23.74	24.40	1.164	-0.17	0.667	0.776
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 2	136100	680.5	23.94	24.90	1.247	-0.17	0.238	0.297
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 2	136100	680.5	23.85	24.90	1.274	-0.18	0.182	0.232
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 2	136100	680.5	23.94	24.90	1.247	-0.18	0.177	0.221
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 2	136100	680.5	23.85	24.90	1.274	-0.07	0.168	0.214
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 3	136100	680.5	23.94	24.60	1.164	-0.19	0.758	0.882
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 3	136100	680.5	23.85	24.60	1.189	-0.05	0.650	0.773
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	Index 3	136100	680.5	23.74	24.10	1.086	-0.18	0.721	0.783
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 3	136100	680.5	23.94	24.60	1.164	-0.1	0.718	0.836
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 3	136100	680.5	23.85	24.60	1.189	-0.11	0.646	0.768
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	Index 3	136100	680.5	23.74	24.10	1.086	-0.17	0.667	0.725
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 3	136100	680.5	23.94	24.60	1.164	-0.17	0.238	0.277
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 3	136100	680.5	23.85	24.60	1.189	-0.18	0.182	0.216
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 3	136100	680.5	23.94	24.60	1.164	-0.18	0.177	0.206
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 3	136100	680.5	23.85	24.60	1.189	-0.07	0.168	0.200



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 5	100M	BPSK	1	1	Right Cheek	0mm	Index 2	518598	2592.99	18.06	18.20	1.033	-0.09	0.278	0.287
	FR1 n41_Ant 5	100M	BPSK	135	138	Right Cheek	0mm	Index 2	518598	2592.99	18.08	18.20	1.028	-0.18	0.344	0.354
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	Index 2	518598	2592.99	18.06	18.20	1.033	0.06	0.188	0.194
	FR1 n41_Ant 5	100M	BPSK	135	138	Right Tilted	0mm	Index 2	518598	2592.99	18.08	18.20	1.028	-0.1	0.185	0.190
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	Index 2	518598	2592.99	18.06	18.20	1.033	0.13	1.150	1.188
	FR1 n41_Ant 5	100M	BPSK	135	138	Left Cheek	0mm	Index 2	518598	2592.99	18.08	18.20	1.028	-0.09	1.160	1.192
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 2	518598	2592.99	17.92	18.20	1.067	-0.13	0.929	0.991
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	Index 2	518598	2592.99	18.06	18.20	1.033	0.13	0.368	0.380
	FR1 n41_Ant 5	100M	BPSK	135	138	Left Tilted	0mm	Index 2	518598	2592.99	18.08	18.20	1.028	0.03	0.339	0.348
	FR1 n41_Ant 5_HPUE	100M	BPSK	1	1	Left Cheek	0mm	Index 2	518598	2592.99	20.72	21.20	1.117	-0.11	1.000	1.117
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Cheek	0mm	Index 3	518598	2592.99	16.53	17.00	1.114	-0.12	0.246	0.274
	FR1 n41_Ant 5	100M	BPSK	135	138	Right Cheek	0mm	Index 3	518598	2592.99	16.29	17.00	1.178	-0.11	0.264	0.311
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	Index 3	518598	2592.99	16.53	17.00	1.114	-0.18	0.132	0.147
	FR1 n41_Ant 5	100M	BPSK	135	138	Right Tilted	0mm	Index 3	518598	2592.99	16.29	17.00	1.178	-0.09	0.127	0.150
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	Index 3	518598	2592.99	16.53	17.00	1.114	0.19	0.769	0.857
	FR1 n41_Ant 5	100M	BPSK	135	138	Left Cheek	0mm	Index 3	518598	2592.99	16.29	17.00	1.178	-0.08	0.712	0.838
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 3	518598	2592.99	16.21	17.00	1.199	0.07	0.739	0.886
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	Index 3	518598	2592.99	16.53	17.00	1.114	0.1	0.217	0.242
	FR1 n41_Ant 5	100M	BPSK	135	138	Left Tilted	0mm	Index 3	518598	2592.99	16.29	17.00	1.178	-0.16	0.207	0.244
	FR1 n41_Ant 5_HPUE	100M	BPSK	1	137	Left Cheek	0mm	Index 3	518598	2592.99	19.31	20.00	1.172	-0.06	0.710	0.832
11	FR1 n41_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	Index 2	518598	2592.99	17.97	19.40	1.390	0.13	0.859	1.194
	FR1 n41_Ant 1	100M	BPSK	135	0	Right Cheek	0mm	Index 2	518598	2592.99	17.42	19.40	1.578	-0.09	0.725	1.144
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	Index 2	518598	2592.99	17.67	19.40	1.489	-0.07	0.800	1.191
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	Index 2	518598	2592.99	17.97	19.40	1.390	-0.07	0.435	0.605
	FR1 n41_Ant 1	100M	BPSK	135	0	Right Tilted	0mm	Index 2	518598	2592.99	17.42	19.40	1.578	-0.08	0.517	0.816
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	Index 2	518598	2592.99	17.67	19.40	1.489	-0.06	0.546	0.813
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	Index 2	518598	2592.99	17.97	19.40	1.390	-0.07	0.154	0.214
	FR1 n41_Ant 1	100M	BPSK	135	0	Left Cheek	0mm	Index 2	518598	2592.99	17.42	19.40	1.578	-0.02	0.151	0.238
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	Index 2	518598	2592.99	17.97	19.40	1.390	-0.08	0.124	0.172
	FR1 n41_Ant 1	100M	BPSK	135	0	Left Tilted	0mm	Index 2	518598	2592.99	17.42	19.40	1.578	-0.09	0.158	0.249
	FR1 n41_Ant 1_HPUE	100M	BPSK	1	1	Right Cheek	0mm	Index 2	518598	2592.99	21.20	22.40	1.318	0.1	0.826	1.089
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	Index 3	518598	2592.99	17.97	18.20	1.054	0.13	0.859	0.906
	FR1 n41_Ant 1	100M	BPSK	135	0	Right Cheek	0mm	Index 3	518598	2592.99	17.42	18.20	1.197	-0.09	0.725	0.868
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	Index 3	518598	2592.99	17.67	18.20	1.130	-0.07	0.800	0.904
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	Index 3	518598	2592.99	17.97	18.20	1.054	-0.07	0.435	0.459
	FR1 n41_Ant 1	100M	BPSK	135	0	Right Tilted	0mm	Index 3	518598	2592.99	17.42	18.20	1.197	-0.08	0.517	0.619
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	Index 3	518598	2592.99	17.97	18.20	1.054	-0.07	0.154	0.162
	FR1 n41_Ant 1	100M	BPSK	135	0	Left Cheek	0mm	Index 3	518598	2592.99	17.42	18.20	1.197	-0.02	0.151	0.181
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	Index 3	518598	2592.99	17.97	18.20	1.054	-0.08	0.124	0.131
	FR1 n41_Ant 1	100M	BPSK	135	0	Left Tilted	0mm	Index 3	518598	2592.99	17.42	18.20	1.197	-0.09	0.158	0.189
	FR1 n41_Ant 1_HPUE	100M	BPSK	1	1	Right Cheek	0mm	Index 3	518598	2592.99	21.20	21.20	1.000	0.1	0.731	0.731





<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	1	Ant 4+3(4)	11	2462	16.45	16.50	1.012	98.91	1.011	-0.07	0.415	0.424
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	11	2462	16.25	16.50	1.059	98.91	1.011	-0.07	0.768	0.822
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	1	2412	16.45	16.50	1.012	98.91	1.011	0.05	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	1	2412	15.95	16.50	1.135	98.91	1.011	0.05	0.652	0.748
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	6	2437	16.45	16.50	1.012	98.91	1.011	-0.19	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	6	2437	16.05	16.50	1.109	98.91	1.011	-0.19	0.807	0.905
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	12	2467	16.45	16.50	1.012	98.91	1.011	-0.12	0.535	0.547
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	12	2467	16.15	16.50	1.084	98.91	1.011	-0.12	0.480	0.526
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	13	2472	16.45	16.50	1.012	98.91	1.011	-0.15	0.498	0.509
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	13	2472	15.95	16.50	1.135	98.91	1.011	-0.15	0.475	0.545
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	11	2462	16.45	16.50	1.012	98.91	1.011	-0.03	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	11	2462	16.25	16.50	1.059	98.91	1.011	-0.03	0.821	0.879
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	1	2412	16.45	16.50	1.012	98.91	1.011	0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	1	2412	15.95	16.50	1.135	98.91	1.011	0.15	0.924	1.060
12	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	6	2437	16.45	16.50	1.012	98.91	1.011	-0.04	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	6	2437	16.05	16.50	1.109	98.91	1.011	-0.04	0.979	1.098
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	12	2467	16.45	16.50	1.012	98.91	1.011	-0.03	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	12	2467	16.15	16.50	1.084	98.91	1.011	-0.03	0.818	0.896
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	13	2472	16.45	16.50	1.012	98.91	1.011	-0.02	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	13	2472	15.95	16.50	1.135	98.91	1.011	-0.02	0.790	0.907
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	Ant 4+3(4)	11	2462	16.45	16.50	1.012	98.91	1.011	-0.07	0.676	0.691
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	Ant 4+3(3)	11	2462	16.25	16.50	1.059	98.91	1.011	-0.07	0.240	0.257
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4+3(4)	11	2462	16.45	16.50	1.012	98.91	1.011	-0.02	0.673	0.688
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4+3(3)	11	2462	16.25	16.50	1.059	98.91	1.011	-0.02	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(4)	6	2437	13.95	14.00	1.012	98.91	1.011	-0.01	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(3)	6	2437	13.95	14.00	1.012	98.91	1.011	-0.01	0.475	0.486
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(4)	6	2437	13.95	14.00	1.012	98.91	1.011	-0.11	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(3)	6	2437	13.95	14.00	1.012	98.91	1.011	-0.11	0.494	0.505
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(4)	1	2412	13.95	14.00	1.012	98.91	1.011	-0.18	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(3)	1	2412	13.55	14.00	1.109	98.91	1.011	-0.18	0.340	0.381
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(4)	11	2462	13.95	14.00	1.012	98.91	1.011	-0.19	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(3)	11	2462	13.75	14.00	1.059	98.91	1.011	-0.19	0.467	0.500
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(4)	12	2467	13.95	14.00	1.012	98.91	1.011	-0.14	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(3)	12	2467	13.65	14.00	1.084	98.91	1.011	-0.14	0.509	0.558
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(4)	13	2472	13.85	14.00	1.035	98.91	1.011	-0.14	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(3)	13	2472	13.55	14.00	1.109	98.91	1.011	-0.14	0.483	0.542
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	2	Ant 4+3(4)	6	2437	13.95	14.00	1.012	98.91	1.011	0.03	0.351	0.359
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	2	Ant 4+3(3)	6	2437	13.95	14.00	1.012	98.91	1.011	0.03	0.297	0.304
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	2	Ant 4+3(4)	6	2437	13.95	14.00	1.012	98.91	1.011	-0.05	0.327	0.334
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	2	Ant 4+3(3)	6	2437	13.95	14.00	1.012	98.91	1.011	-0.05	0.470	0.481



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	3	Ant 4+3(4)	1	2412	14.45	14.50	1.012	98.91	1.011	0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(3)	1	2412	14.45	14.50	1.012	98.91	1.011	0.17	0.344	0.352
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(4)	1	2412	14.45	14.50	1.012	98.91	1.011	0.13	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(3)	1	2412	14.45	14.50	1.012	98.91	1.011	0.13	0.545	0.557
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(4)	6	2437	14.45	14.50	1.012	98.91	1.011	-0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(3)	6	2437	14.35	14.50	1.035	98.91	1.011	-0.15	0.583	0.610
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(4)	11	2462	14.45	14.50	1.012	98.91	1.011	-0.12	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(3)	11	2462	14.35	14.50	1.035	98.91	1.011	-0.12	0.616	0.645
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(4)	12	2467	14.45	14.50	1.012	98.91	1.011	-0.12	0.499	0.510
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(3)	12	2467	14.35	14.50	1.035	98.91	1.011	-0.12	0.499	0.522
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(4)	13	2472	14.25	14.50	1.059	98.91	1.011	-0.08	0.559	0.599
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(3)	13	2472	14.05	14.50	1.109	98.91	1.011	-0.08	0.559	0.627
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	3	Ant 4+3(4)	1	2412	14.45	14.50	1.012	98.91	1.011	-0.12	0.430	0.440
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	3	Ant 4+3(3)	1	2412	14.45	14.50	1.012	98.91	1.011	-0.12	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	3	Ant 4+3(4)	1	2412	14.45	14.50	1.012	98.91	1.011	-0.12	0.541	0.553
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	3	Ant 4+3(3)	1	2412	14.45	14.50	1.012	98.91	1.011	-0.12	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(4)	11	2462	8.95	9.00	1.012	98.91	1.011	-0.16	0.088	0.090
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(3)	11	2462	8.95	9.00	1.012	98.91	1.011	-0.16	0.088	0.090
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	4	Ant 4+3(4)	11	2462	8.95	9.00	1.012	98.91	1.011	-0.08	0.132	0.135
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	4	Ant 4+3(3)	11	2462	8.95	9.00	1.012	98.91	1.011	-0.08	0.132	0.135
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	4	Ant 4+3(4)	11	2462	8.95	9.00	1.012	98.91	1.011	0.11	0.165	0.169
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	4	Ant 4+3(3)	11	2462	8.95	9.00	1.012	98.91	1.011	0.11	0.025	0.026
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(4)	11	2462	8.95	9.00	1.012	98.91	1.011	-0.06	0.195	0.199
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(3)	11	2462	8.95	9.00	1.012	98.91	1.011	-0.06	0.195	0.199
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(4)	1	2402	8.95	9.00	1.012	98.91	1.011	0.16	0.084	0.086
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(3)	1	2402	8.55	9.00	1.109	98.91	1.011	0.16	0.117	0.131
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(4)	6	2437	8.95	9.00	1.012	98.91	1.011	0.01	0.180	0.184
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(3)	6	2437	8.75	9.00	1.059	98.91	1.011	0.01	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(4)	12	2467	8.95	9.00	1.012	98.91	1.011	0.01	0.085	0.087
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(3)	12	2467	8.75	9.00	1.059	98.91	1.011	0.01	0.125	0.134
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(4)	13	2472	8.85	9.00	1.035	98.91	1.011	0.09	0.105	0.110
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(3)	13	2472	8.85	9.00	1.035	98.91	1.011	0.09	0.116	0.121

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
13	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	58	5290	15.00	15.50	1.122	87.81	1.139	0.03	0.467	0.597
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	58	5290	14.90	15.50	1.148	87.81	1.139	0.03	0.848	1.109
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	62	5310	14.90	15.50	1.148	96.13	1.040	-0.05	0.364	0.435
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	62	5310	14.70	15.50	1.202	96.13	1.040	-0.05	0.877	1.097
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	58	5290	15.00	15.50	1.122	87.81	1.139	0.08	0.340	0.435
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	58	5290	14.90	15.50	1.148	87.81	1.139	0.08	0.345	0.451
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	58	5290	15.00	15.50	1.122	87.81	1.139	0.15	0.545	0.696
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	58	5290	14.90	15.50	1.148	87.81	1.139	0.15	0.184	0.241
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	58	5290	15.00	15.50	1.122	87.81	1.139	-0.15	0.502	0.642
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	58	5290	14.90	15.50	1.148	87.81	1.139	-0.15	0.215	0.281
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	58	5290	15.00	15.00	1.000	87.81	1.139	0.03	0.467	0.532
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	58	5290	14.90	15.00	1.023	87.81	1.139	0.03	0.848	0.988
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	62	5310	14.90	15.00	1.023	96.13	1.040	-0.05	0.364	0.387
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	62	5310	14.70	15.00	1.072	96.13	1.040	-0.05	0.877	0.977
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	58	5290	15.00	15.00	1.000	87.81	1.139	0.08	0.340	0.387
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	58	5290	14.90	15.00	1.023	87.81	1.139	0.08	0.345	0.402
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	58	5290	15.00	15.00	1.000	87.81	1.139	0.15	0.545	0.621
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	58	5290	14.90	15.00	1.023	87.81	1.139	0.15	0.545	0.635
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	58	5290	15.00	15.00	1.000	87.81	1.139	-0.15	0.502	0.572
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	58	5290	14.90	15.00	1.023	87.81	1.139	-0.15	0.215	0.251
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	50	5250	11.50	11.50	1.000	88.09	1.135	-0.17	0.132	0.150
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	50	5250	10.65	11.50	1.216	88.09	1.135	-0.17	0.291	0.402
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	50	5250	11.50	11.50	1.000	88.09	1.135	0.14	0.124	0.141
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	50	5250	10.65	11.50	1.216	88.09	1.135	0.14	0.118	0.163
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	50	5250	11.50	11.50	1.000	88.09	1.135	0.14	0.244	0.277
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	50	5250	10.65	11.50	1.216	88.09	1.135	0.14	0.063	0.087
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	50	5250	11.50	11.50	1.000	88.09	1.135	-0.12	0.182	0.207
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	50	5250	10.65	11.50	1.216	88.09	1.135	-0.12	0.069	0.095
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	50	5250	11.50	12.00	1.122	88.09	1.135	-0.17	0.132	0.168
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	50	5250	10.65	12.00	1.365	88.09	1.135	-0.17	0.291	0.451
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	50	5250	11.50	12.00	1.122	88.09	1.135	0.14	0.124	0.158
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	50	5250	10.65	12.00	1.365	88.09	1.135	0.14	0.118	0.183
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	50	5250	11.50	12.00	1.122	88.09	1.135	0.14	0.244	0.311
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(3)	50	5250	10.65	12.00	1.365	88.09	1.135	0.14	0.063	0.098
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	50	5250	11.50	12.00	1.122	88.09	1.135	-0.12	0.182	0.232
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	50	5250	10.65	12.00	1.365	88.09	1.135	-0.12	0.069	0.107



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	114	5570	15.40	16.00	1.148	88.09	1.135	-0.01	0.608	0.792
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	114	5570	15.30	16.00	1.175	88.09	1.135	-0.01	0.828	1.104
14	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	87.81	1.139	0.05	0.535	0.684
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	106	5530	14.90	15.50	1.148	87.81	1.139	0.05	0.848	1.109
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	114	5570	15.40	16.00	1.148	88.09	1.135	0.03	0.650	0.847
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	114	5570	15.30	16.00	1.175	88.09	1.135	0.03	0.410	0.547
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	87.81	1.139	0.19	0.557	0.712
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	106	5530	14.90	15.50	1.148	87.81	1.139	0.19	0.366	0.479
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	114	5570	15.40	16.00	1.148	88.09	1.135	-0.12	0.846	1.102
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	114	5570	15.30	16.00	1.175	88.09	1.135	-0.12	0.157	0.209
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	87.81	1.139	-0.09	0.825	1.054
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	106	5530	14.90	15.50	1.148	87.81	1.139	-0.09	0.291	0.381
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	114	5570	15.40	16.00	1.148	88.09	1.135	-0.15	0.785	1.023
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	114	5570	15.30	16.00	1.175	88.09	1.135	-0.15	0.119	0.159
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	87.81	1.139	-0.06	0.771	0.985
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	106	5530	14.90	15.50	1.148	87.81	1.139	-0.06	0.104	0.136
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	114	5570	15.40	15.50	1.023	88.09	1.135	-0.01	0.608	0.706
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	114	5570	15.30	15.50	1.047	88.09	1.135	-0.01	0.828	0.984
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	106	5530	15.00	15.00	1.000	87.81	1.139	0.05	0.535	0.609
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	106	5530	14.90	15.00	1.023	87.81	1.139	0.05	0.848	0.988
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	114	5570	15.40	15.50	1.023	88.09	1.135	0.03	0.650	0.755
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	114	5570	15.30	15.50	1.047	88.09	1.135	0.03	0.410	0.487
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	114	5570	15.40	15.50	1.023	88.09	1.135	-0.12	0.846	0.983
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	114	5570	15.30	15.50	1.047	88.09	1.135	-0.12	0.157	0.187
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	106	5530	15.00	15.00	1.000	87.81	1.139	-0.09	0.825	0.940
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	106	5530	14.90	15.00	1.023	87.81	1.139	-0.09	0.291	0.339
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	114	5570	15.40	15.50	1.023	88.09	1.135	-0.15	0.785	0.912
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	114	5570	15.30	15.50	1.047	88.09	1.135	-0.15	0.119	0.141
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	106	5530	15.00	15.00	1.000	87.81	1.139	-0.06	0.771	0.878
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	106	5530	14.90	15.00	1.023	87.81	1.139	-0.06	0.104	0.121
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	114	5570	11.00	11.00	1.000	88.09	1.135	0.13	0.210	0.238
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	114	5570	10.55	11.00	1.109	88.09	1.135	0.13	0.272	0.342
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	114	5570	11.00	11.00	1.000	88.09	1.135	0.13	0.209	0.237
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	114	5570	10.55	11.00	1.109	88.09	1.135	0.13	0.132	0.166
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	114	5570	11.00	11.00	1.000	88.09	1.135	-0.11	0.313	0.355
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	114	5570	10.55	11.00	1.109	88.09	1.135	-0.11	0.078	0.098
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	114	5570	11.00	11.00	1.000	88.09	1.135	-0.12	0.328	0.372
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	114	5570	10.55	11.00	1.109	88.09	1.135	-0.12	0.107	0.135
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	114	5570	11.00	12.00	1.259	88.09	1.135	0.13	0.210	0.300
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	114	5570	10.55	12.00	1.396	88.09	1.135	0.13	0.272	0.431
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	114	5570	11.00	12.00	1.259	88.09	1.135	0.13	0.209	0.299
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	114	5570	10.55	12.00	1.396	88.09	1.135	0.13	0.132	0.209
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	114	5570	11.00	12.00	1.259	88.09	1.135	-0.11	0.313	0.447
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(3)	114	5570	10.55	12.00	1.396	88.09	1.135	-0.11	0.078	0.124
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	114	5570	11.00	12.00	1.259	88.09	1.135	-0.12	0.328	0.469
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	114	5570	10.55	12.00	1.396	88.09	1.135	-0.12	0.107	0.170



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	155	5775	14.50	15.50	1.259	87.81	1.139	0.15	0.543	0.779
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	155	5775	13.50	15.50	1.585	87.81	1.139	0.15	0.394	0.711
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	155	5775	14.50	15.50	1.259	87.81	1.139	0.12	0.593	0.850
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	155	5775	13.50	15.50	1.585	87.81	1.139	0.12	0.221	0.399
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	151	5755	14.50	15.00	1.122	96.13	1.040	-0.15	0.650	0.758
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	151	5755	13.25	15.00	1.496	96.13	1.040	-0.15	0.241	0.375
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	155	5775	14.50	15.50	1.259	87.81	1.139	0.01	0.718	1.030
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	155	5775	13.50	15.50	1.585	87.81	1.139	0.01	0.092	0.166
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	151	5755	14.50	15.00	1.122	96.13	1.040	-0.04	0.804	0.938
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	151	5755	13.25	15.00	1.496	96.13	1.040	-0.04	0.250	0.389
15	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	155	5775	14.50	15.50	1.259	87.81	1.139	-0.11	0.746	1.070
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	155	5775	13.50	15.50	1.585	87.81	1.139	-0.11	0.159	0.287
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	151	5755	14.50	15.00	1.122	96.13	1.040	-0.13	0.807	0.942
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	151	5755	13.25	15.00	1.496	96.13	1.040	-0.13	0.297	0.462
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	155	5775	14.50	14.50	1.000	87.81	1.139	0.15	0.543	0.618
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	155	5775	13.50	14.50	1.259	87.81	1.139	0.15	0.394	0.565
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	155	5775	14.50	14.50	1.000	87.81	1.139	0.12	0.593	0.675
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	155	5775	13.50	14.50	1.259	87.81	1.139	0.12	0.221	0.317
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	155	5775	14.50	14.50	1.000	87.81	1.139	0.01	0.718	0.818
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	155	5775	13.50	14.50	1.259	87.81	1.139	0.01	0.092	0.132
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	151	5755	14.50	14.50	1.000	96.13	1.040	-0.04	0.804	0.836
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	151	5755	13.25	14.50	1.334	96.13	1.040	-0.04	0.250	0.347
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	155	5775	14.50	14.50	1.000	87.81	1.139	-0.11	0.746	0.850
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	155	5775	13.50	14.50	1.259	87.81	1.139	-0.11	0.159	0.228
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	151	5755	14.50	14.50	1.000	96.13	1.040	-0.13	0.807	0.839
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	151	5755	13.25	14.50	1.334	96.13	1.040	-0.13	0.297	0.412
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	155	5775	11.00	11.00	1.000	87.81	1.139	0.16	0.201	0.229
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	155	5775	9.50	11.00	1.413	87.81	1.139	0.16	0.134	0.216
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	155	5775	11.00	11.00	1.000	87.81	1.139	0.09	0.208	0.237
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	155	5775	9.50	11.00	1.413	87.81	1.139	0.09	0.100	0.161
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	155	5775	11.00	11.00	1.000	87.81	1.139	0	0.306	0.349
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	155	5775	9.50	11.00	1.413	87.81	1.139	0	0.001	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	155	5775	11.00	11.00	1.000	87.81	1.139	-0.07	0.316	0.360
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	155	5775	9.50	11.00	1.413	87.81	1.139	-0.07	0.023	0.037
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	155	5775	11.00	11.50	1.122	87.81	1.139	0.16	0.201	0.257
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	155	5775	9.50	11.50	1.585	87.81	1.139	0.16	0.134	0.242
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	155	5775	11.00	11.50	1.122	87.81	1.139	0.09	0.208	0.266
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	155	5775	9.50	11.50	1.585	87.81	1.139	0.09	0.100	0.181
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	155	5775	11.00	11.50	1.122	87.81	1.139	0	0.306	0.391
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	4	Ant 4+3(3)	155	5775	9.50	11.50	1.585	87.81	1.139	0	0.001	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	155	5775	11.00	11.50	1.122	87.81	1.139	-0.07	0.316	0.404
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	155	5775	9.50	11.50	1.585	87.81	1.139	-0.07	0.023	0.042



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	1	Ant 4	78	2480	11.45	12.00	1.135	77.22	1.079	-0.04	0.051	0.062
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4	78	2480	11.45	12.00	1.135	77.22	1.079	-0.11	0.065	0.080
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4	78	2480	11.45	12.00	1.135	77.22	1.079	0.13	0.157	0.192
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	78	2480	11.45	12.00	1.135	77.22	1.079	0.05	0.173	0.212
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	0	2402	11.10	12.00	1.230	77.22	1.079	0.11	0.141	0.187
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	39	2441	11.37	12.00	1.156	77.22	1.079	0.05	0.193	0.241
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 3	78	2480	11.30	12.00	1.175	76.84	1.084	-0.16	0.090	0.115
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 3	78	2480	11.30	12.00	1.175	76.84	1.084	-0.05	0.156	0.199
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 3	0	2402	10.94	12.00	1.276	76.84	1.084	0.15	0.146	0.202
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 3	39	2441	11.21	12.00	1.199	76.84	1.084	0.19	0.168	0.218
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 3	78	2480	11.30	12.00	1.175	76.84	1.084	0.13	0.077	0.098
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 3	78	2480	11.30	12.00	1.175	76.84	1.084	0.07	0.102	0.130
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	78	2480	11.46	12.00	1.132	76.84	1.084	-0.08	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	78	2480	11.25	12.00	1.189	76.84	1.084	-0.08	0.163	0.210
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	78	2480	11.46	12.00	1.132	76.84	1.084	0.06	0.001	0.001
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	78	2480	11.25	12.00	1.189	76.84	1.084	0.06	0.248	0.320
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	0	2402	11.22	12.00	1.197	76.84	1.084	0.06	0.001	0.001
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	0	2402	10.74	12.00	1.337	76.84	1.084	0.06	0.131	0.190
16	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	39	2441	11.50	12.00	1.122	76.84	1.084	0.09	0.001	0.001
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	39	2441	11.32	12.00	1.169	76.84	1.084	0.09	0.354	0.449
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4+3(4)	78	2480	11.46	12.00	1.132	76.84	1.084	0.1	0.137	0.168
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4+3(3)	78	2480	11.25	12.00	1.189	76.84	1.084	0.1	0.001	0.001
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4+3(4)	78	2480	11.46	12.00	1.132	76.84	1.084	-0.11	0.193	0.237
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4+3(3)	78	2480	11.25	12.00	1.189	76.84	1.084	-0.11	0.001	0.001



<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 4+3(4)	1/2	207	6985	13.90	14.00	1.023	86.19	1.160	-0.16	0.355	0.421	2.29
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.295	0.421	1.85
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	15	6025	12.30	12.50	1.047	86.19	1.160	-0.03	0.250	0.304	2.12
					Ant 4+3(3)				11.50	12.50	1.259	86.19	1.160		0.173	0.253	1.35
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	47	6185	12.40	12.50	1.023	86.19	1.160	-0.02	0.167	0.198	1.34
					Ant 4+3(3)				11.80	12.50	1.175	86.19	1.160		0.160	0.218	1.24
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	111	6505	11.50	12.00	1.122	86.19	1.160	0.02	0.203	0.264	1.54
					Ant 4+3(3)				11.50	12.00	1.122	86.19	1.160		0.198	0.258	1.42
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	175	6825	13.60	14.00	1.096	86.19	1.160	0.05	0.393	0.500	2.84
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.315	0.450	2.15
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	207	6985	13.90	14.00	1.023	86.19	1.160	0.16	0.341	0.405	2.15
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.316	0.451	1.87
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	15	6025	12.30	12.50	1.047	86.19	1.160	-0.05	0.290	0.352	2.40
					Ant 4+3(3)				11.50	12.50	1.259	86.19	1.160		0.150	0.219	0.90
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	47	6185	12.40	12.50	1.023	86.19	1.160	0.03	0.155	0.184	1.10
					Ant 4+3(3)				11.80	12.50	1.175	86.19	1.160		0.132	0.180	0.80
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	111	6505	11.50	12.00	1.122	86.19	1.160	0.02	0.218	0.284	1.66
					Ant 4+3(3)				11.50	12.00	1.122	86.19	1.160		0.184	0.239	1.34
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	175	6825	13.60	14.00	1.096	86.19	1.160	0.05	0.426	0.542	2.86
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.391	0.558	2.58
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	207	6985	13.90	14.00	1.023	86.19	1.160	0.11	0.566	0.672	3.82
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.231	0.330	1.74
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	15	6025	12.30	12.50	1.047	86.19	1.160	-0.15	0.508	0.617	3.54
					Ant 4+3(3)				11.50	12.50	1.259	86.19	1.160		0.203	0.296	1.60
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	47	6185	12.40	12.50	1.023	86.19	1.160	-0.11	0.306	0.363	2.21
					Ant 4+3(3)				11.80	12.50	1.175	86.19	1.160		0.007	0.010	1.03
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	111	6505	11.50	12.00	1.122	86.19	1.160	-0.08	0.399	0.519	2.80
					Ant 4+3(3)				11.50	12.00	1.122	86.19	1.160		0.144	0.187	1.13
17	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	175	6825	13.60	14.00	1.096	86.19	1.160	0.02	0.547	0.696	3.94
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.306	0.437	2.14
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	207	6985	13.90	14.00	1.023	86.19	1.160	0.16	0.513	0.609	3.51
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.219	0.313	1.64
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	15	6025	12.30	12.50	1.047	86.19	1.160	-0.06	0.495	0.601	3.22
					Ant 4+3(3)				11.50	12.50	1.259	86.19	1.160		0.281	0.410	1.52
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	47	6185	12.40	12.50	1.023	86.19	1.160	0.19	0.285	0.338	2.06
					Ant 4+3(3)				11.80	12.50	1.175	86.19	1.160		0.131	0.179	0.99
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	111	6505	11.50	12.00	1.122	86.19	1.160	0.03	0.341	0.444	2.51
					Ant 4+3(3)				11.50	12.00	1.122	86.19	1.160		0.156	0.203	1.35
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	175	6825	13.60	14.00	1.096	86.19	1.160	-0.08	0.524	0.666	3.77
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.299	0.427	2.35



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 4+3(4)	3/4	207	6985	11.30	11.50	1.047	86.19	1.160	-0.17	0.158	0.192	0.90
					Ant 4+3(3)				10.10	11.50	1.380	86.19	1.160		0.123	0.197	0.73
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	3/4	207	6985	11.30	11.50	1.047	86.19	1.160	0.16	0.193	0.234	1.23
					Ant 4+3(3)				10.10	11.50	1.380	86.19	1.160		0.085	0.136	0.60
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	207	6985	11.30	11.50	1.047	86.19	1.160	0.14	0.267	0.324	1.83
					Ant 4+3(3)				10.10	11.50	1.380	86.19	1.160		0.117	0.187	0.91
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	15	6025	9.30	9.50	1.047	86.19	1.160	0.18	0.253	0.307	1.86
					Ant 4+3(3)				8.80	9.50	1.175	86.19	1.160		0.111	0.151	0.90
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	47	6185	9.30	9.50	1.047	86.19	1.160	0.13	0.150	0.182	1.13
					Ant 4+3(3)				9.10	9.50	1.096	86.19	1.160		0.066	0.084	0.55
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	111	6505	9.90	10.00	1.023	86.19	1.160	-0.13	0.222	0.264	1.60
					Ant 4+3(3)				9.90	10.00	1.023	86.19	1.160		0.097	0.115	0.78
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	175	6825	10.40	10.50	1.023	86.19	1.160	0.07	0.185	0.220	1.48
					Ant 4+3(3)				9.60	10.50	1.230	86.19	1.160		0.081	0.116	0.73
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	3/4	207	6985	11.30	11.50	1.047	86.19	1.160	0.05	0.237	0.288	1.75
					Ant 4+3(3)				10.10	11.50	1.380	86.19	1.160		0.104	0.167	0.85

**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 1	GPRS (4 Tx slots)	Front	10mm	Index 4	128	824.2	28.65	30.40	1.496	-0.16	0.364	0.545
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	128	824.2	28.65	30.40	1.496	-0.12	0.495	0.741
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	189	836.4	28.58	30.40	1.521	0.03	0.519	0.789
18	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	251	848.8	28.45	30.40	1.567	-0.14	0.526	0.824
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	Index 4	128	824.2	28.65	30.40	1.496	-0.11	0.188	0.281
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	Index 4	128	824.2	28.65	30.40	1.496	-0.11	0.148	0.221
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	Index 4	128	824.2	28.65	30.40	1.496	-0.03	0.309	0.462

**<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 V_Ant 1	RMC 12.2Kbps	Front	10mm	Index 4	4132	826.4	23.96	24.90	1.242	0.11	0.281	0.349
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4132	826.4	23.96	24.90	1.242	-0.06	0.391	0.485
19	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4182	836.4	23.95	24.90	1.245	-0.16	0.396	0.493
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4233	846.6	23.93	24.90	1.250	0.03	0.361	0.451
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	Index 4	4132	826.4	23.96	24.90	1.242	-0.05	0.165	0.205
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	Index 4	4132	826.4	23.96	24.90	1.242	0.09	0.085	0.106
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	Index 4	4132	826.4	23.96	24.90	1.242	-0.11	0.239	0.297





<FDD LTE SAR>

Table with 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 LTE Bands 12, 13, 14, 26, and 71.



<5G NR SAR>

Table with 16 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 bands n5, n12, n71, and n41.



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	-0.11	0.186	0.226
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	-0.11	0.263	0.343
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	-0.11	0.219	0.266
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	-0.11	0.256	0.333
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	1	2412	17.40	18.50	1.288	98.91	1.011	-0.15	0.217	0.283
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	1	2412	17.00	18.50	1.413	98.91	1.011	-0.15	0.118	0.169
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	11	2462	17.70	18.50	1.202	98.91	1.011	0.01	0.258	0.314
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	11	2462	17.35	18.50	1.303	98.91	1.011	0.01	0.167	0.220
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	12	2467	17.50	18.50	1.259	98.91	1.011	-0.18	0.301	0.383
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	12	2467	17.00	18.50	1.413	98.91	1.011	-0.18	0.072	0.103
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	13	2472	17.70	18.50	1.202	98.91	1.011	-0.16	0.329	0.400
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	13	2472	17.20	18.50	1.349	98.91	1.011	-0.16	0.329	0.449
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	-0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	-0.17	0.098	0.128
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	0.11	0.104	0.126
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	0.11	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	-0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	-0.17	0.635	0.827
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(4)	1	2412	17.40	18.50	1.288	98.91	1.011	-0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(3)	1	2412	17.00	18.50	1.413	98.91	1.011	-0.15	0.445	0.635
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(4)	11	2462	17.70	18.50	1.202	98.91	1.011	-0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(3)	11	2462	17.35	18.50	1.303	98.91	1.011	-0.15	0.626	0.825
29	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(4)	12	2467	17.50	18.50	1.259	98.91	1.011	-0.07	0.065	0.083
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(3)	12	2467	17.00	18.50	1.413	98.91	1.011	-0.07	0.617	0.881
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(4)	13	2472	17.70	18.50	1.202	98.91	1.011	-0.15	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(3)	13	2472	17.20	18.50	1.349	98.91	1.011	-0.15	0.483	0.659
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.13	0.052	0.053
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.13	0.138	0.143
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.15	0.165	0.167
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.15	0.028	0.029
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	1	2412	15.30	15.50	1.047	98.91	1.011	-0.13	0.117	0.124
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	1	2412	15.10	15.50	1.096	98.91	1.011	-0.13	0.094	0.104
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	11	2462	15.10	15.50	1.096	98.91	1.011	-0.01	0.147	0.163
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	11	2462	15.00	15.50	1.122	98.91	1.011	-0.01	0.101	0.115
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	12	2467	15.10	15.50	1.096	98.91	1.011	-0.07	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	12	2467	14.70	15.50	1.202	98.91	1.011	-0.07	0.171	0.208
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	13	2472	15.20	15.50	1.072	98.91	1.011	-0.19	0.180	0.195
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	13	2472	14.80	15.50	1.175	98.91	1.011	-0.19	0.180	0.214
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.05	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.05	0.105	0.109
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.16	0.032	0.032
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.16	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.17	0.075	0.076
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.17	0.384	0.397
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(4)	1	2412	15.30	15.50	1.047	98.91	1.011	0.05	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(3)	1	2412	15.10	15.50	1.096	98.91	1.011	0.05	0.317	0.351
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(4)	11	2462	15.10	15.50	1.096	98.91	1.011	-0.03	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(3)	11	2462	15.00	15.50	1.122	98.91	1.011	-0.03	0.311	0.353
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(4)	12	2467	15.10	15.50	1.096	98.91	1.011	-0.03	0.073	0.081
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(3)	12	2467	14.70	15.50	1.202	98.91	1.011	-0.03	0.125	0.152
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(4)	13	2472	15.20	15.50	1.072	98.91	1.011	-0.04	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(3)	13	2472	14.80	15.50	1.175	98.91	1.011	-0.04	0.362	0.430



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
30	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(4)	46	5230	16.95	17.50	1.135	96.13	1.040	-0.12	0.204	0.241
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(3)	46	5230	16.51	17.50	1.256	96.13	1.040	-0.12	0.208	0.272
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(4)	46	5230	16.95	17.50	1.135	96.13	1.040	-0.19	0.358	0.423
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(3)	46	5230	16.51	17.50	1.256	96.13	1.040	-0.19	0.279	0.364
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(4)	46	5270	16.95	17.50	1.135	96.13	1.040	-0.18	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(3)	46	5270	16.51	17.50	1.256	96.13	1.040	-0.18	0.513	0.670
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(4)	38	5190	16.66	17.50	1.213	96.13	1.040	-0.16	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(3)	38	5190	16.88	17.50	1.153	96.13	1.040	-0.16	0.344	0.413
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	7	Ant 4+3(4)	46	5230	16.95	17.50	1.135	96.13	1.040	0.13	0.214	0.253
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	7	Ant 4+3(3)	46	5230	16.51	17.50	1.256	96.13	1.040	0.13	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	7	Ant 4+3(4)	46	5230	16.95	17.50	1.135	96.13	1.040	-0.05	0.187	0.221
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	7	Ant 4+3(3)	46	5230	16.51	17.50	1.256	96.13	1.040	-0.05	0.100	0.131
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	42	5210	14.96	16.00	1.271	87.81	1.139	-0.03	0.104	0.151
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	42	5210	14.23	16.00	1.503	87.81	1.139	-0.03	0.107	0.183
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	42	5210	14.96	16.00	1.271	87.81	1.139	-0.17	0.199	0.288
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	42	5210	14.23	16.00	1.503	87.81	1.139	-0.17	0.122	0.209
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(4)	42	5210	14.96	16.00	1.271	87.81	1.139	0.09	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(3)	42	5210	14.23	16.00	1.503	87.81	1.139	0.09	0.225	0.385
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(4)	42	5210	14.96	16.00	1.271	87.81	1.139	0.18	0.105	0.152
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(3)	42	5210	14.23	16.00	1.503	87.81	1.139	0.18	0.001	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(4)	42	5210	14.96	16.00	1.271	87.81	1.139	-0.18	0.105	0.152
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(3)	42	5210	14.23	16.00	1.503	87.81	1.139	-0.18	0.051	0.087
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	42	5210	14.96	15.00	1.009	87.81	1.139	-0.03	0.104	0.120
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	42	5210	14.23	15.00	1.194	87.81	1.139	-0.03	0.107	0.146
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	42	5210	14.96	15.00	1.009	87.81	1.139	-0.17	0.199	0.229
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	42	5210	14.23	15.00	1.194	87.81	1.139	-0.17	0.122	0.166
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(4)	42	5210	14.96	15.00	1.009	87.81	1.139	0.09	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(3)	42	5210	14.23	15.00	1.194	87.81	1.139	0.09	0.225	0.306
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(4)	42	5210	14.96	15.00	1.009	87.81	1.139	0.18	0.105	0.121
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(3)	42	5210	14.23	15.00	1.194	87.81	1.139	0.18	0.001	0.001
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(4)	42	5210	14.96	15.00	1.009	87.81	1.139	-0.18	0.105	0.121	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(3)	42	5210	14.23	15.00	1.194	87.81	1.139	-0.18	0.051	0.069	



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
31	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	-0.07	0.298	0.386
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	-0.07	0.147	0.246
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	-0.14	0.446	0.578
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	-0.14	0.178	0.298
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	0.12	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	0.12	0.315	0.527
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	-0.07	0.184	0.238
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	-0.07	0.001	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	0.11	0.334	0.433
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	0.11	0.173	0.289
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	-0.11	0.129	0.197
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	-0.11	0.067	0.120
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	-0.11	0.248	0.378
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	-0.11	0.092	0.164
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	0.14	0.001	0.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	0.14	0.145	0.259
WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	-0.14	0.080	0.122	
WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	-0.14	0.001	0.002	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	0.14	0.146	0.223	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	0.14	0.076	0.136	
WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	-0.11	0.129	0.175	
WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	-0.11	0.067	0.107	
WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	-0.11	0.248	0.337	
WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	-0.11	0.092	0.146	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	0.14	0.001	0.001	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	0.14	0.145	0.231	
WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	-0.14	0.080	0.109	
WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	-0.14	0.001	0.002	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	0.14	0.146	0.199	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	0.14	0.076	0.121	



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	-0.07	0.081	0.105
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	-0.19	0.082	0.106
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	0	2402	17.25	18.50	1.334	77.22	1.079	-0.05	0.086	0.124
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	39	2441	17.46	18.50	1.271	77.22	1.079	-0.07	0.095	0.130
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	0.17	0.012	0.015
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	0.16	0.066	0.085
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	-0.01	0.112	0.145
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4	0	2402	17.25	18.50	1.334	77.22	1.079	-0.05	0.105	0.151
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4	39	2441	17.46	18.50	1.271	77.22	1.079	0.02	0.133	0.182
	Bluetooth	1Mbps	Front	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	0.07	0.075	0.094
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	-0.07	0.098	0.122
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	0	2402	17.28	18.00	1.180	76.84	1.084	-0.04	0.098	0.125
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	39	2441	17.30	18.00	1.175	76.84	1.084	0.15	0.092	0.117
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	-0.14	0.044	0.055
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	-0.03	0.012	0.015
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	-0.09	0.165	0.206
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 3	0	2402	17.28	18.00	1.180	76.84	1.084	-0.04	0.167	0.214
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 3	39	2441	17.30	18.00	1.175	76.84	1.084	0.1	0.158	0.201
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.83	1.084	0.05	0.037	0.049
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.83	1.084	0.05	0.116	0.142
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.83	1.084	-0.03	0.086	0.114
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.83	1.084	-0.03	0.063	0.077
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	39	2441	15.61	16.50	1.227	76.83	1.084	0.07	0.099	0.132
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	39	2441	15.73	16.50	1.194	76.83	1.084	0.07	0.095	0.123
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	78	2480	15.56	16.50	1.242	76.83	1.084	-0.06	0.109	0.147
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	78	2480	15.58	16.50	1.236	76.83	1.084	-0.06	0.051	0.068
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.83	1.084	0.09	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.83	1.084	0.09	0.062	0.076
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.83	1.084	0.1	0.075	0.100
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.83	1.084	0.1	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.83	1.084	-0.01	0.132	0.175
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.83	1.084	-0.01	0.224	0.275
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(4)	39	2441	15.61	16.50	1.227	76.83	1.084	-0.09	0.227	0.302
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(3)	39	2441	15.73	16.50	1.194	76.83	1.084	-0.09	0.002	0.003
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(4)	78	2480	15.56	16.50	1.242	76.83	1.084	-0.01	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(3)	78	2480	15.58	16.50	1.236	76.83	1.084	-0.01	0.029	0.039



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	2/3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	0	0.095	0.128
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	-0.05	0.112	0.151
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4	0	2402	18.18	20.00	1.521	77.22	1.079	-0.04	0.130	0.213
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4	39	2441	18.73	20.00	1.340	77.22	1.079	0.07	0.146	0.211
	Bluetooth	1Mbps	Left Side	10mm	2/3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	-0.08	0.016	0.022
	Bluetooth	1Mbps	Right Side	10mm	2/3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	-0.08	0.083	0.112
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	-0.06	0.151	0.203
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4	0	2402	18.18	20.00	1.521	77.22	1.079	-0.12	0.157	0.258
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4	39	2441	18.73	20.00	1.340	77.22	1.079	-0.01	0.169	0.244
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	-0.05	0.102	0.148
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	-0.07	0.125	0.182
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 3	0	2402	18.44	20.00	1.432	76.84	1.084	0	0.132	0.205
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 3	39	2441	18.60	20.00	1.380	76.84	1.084	-0.13	0.132	0.198
	Bluetooth	1Mbps	Left Side	10mm	2/3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	-0.07	0.058	0.084
	Bluetooth	1Mbps	Right Side	10mm	2/3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	0.02	0.014	0.020
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	-0.09	0.225	0.328
32	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 3	0	2402	18.44	20.00	1.432	76.84	1.084	0.06	0.233	0.362
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 3	39	2441	18.60	20.00	1.380	76.84	1.084	-0.05	0.229	0.343
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	-0.14	0.084	0.097
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	-0.14	0.113	0.124
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	-0.09	0.105	0.121
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	-0.09	0.145	0.159
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(4)	39	2441	15.88	17.00	1.294	76.84	1.084	0.03	0.135	0.189
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(3)	39	2441	16.70	17.00	1.072	76.84	1.084	0.03	0.129	0.150
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(4)	78	2480	16.52	17.00	1.117	76.84	1.084	-0.09	0.068	0.082
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(3)	78	2480	16.44	17.00	1.138	76.84	1.084	-0.09	0.154	0.190
	Bluetooth	1Mbps	Left Side	10mm	2/3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	0.14	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	2/3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	0.14	0.071	0.078
	Bluetooth	1Mbps	Right Side	10mm	2/3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	-0.11	0.075	0.087
	Bluetooth	1Mbps	Right Side	10mm	2/3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	-0.11	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	-0.09	0.149	0.172
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	-0.09	0.053	0.058
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4+3(4)	39	2441	15.88	17.00	1.294	76.84	1.084	0.06	0.205	0.288
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4+3(3)	39	2441	16.70	17.00	1.072	76.84	1.084	0.06	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4+3(4)	78	2480	16.52	17.00	1.117	76.84	1.084	-0.05	0.048	0.058
	Bluetooth	1Mbps	Top Side	10mm	2/3	Ant 4+3(3)	78	2480	16.44	17.00	1.138	76.84	1.084	-0.05	0.136	0.168



**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 1	GPRS (4 Tx slots)	Front	10mm	Index 5 / Index 6	128	824.2	28.65	30.40	1.496	-0.16	0.364	0.545
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5 / Index 6	128	824.2	28.65	30.40	1.496	-0.12	0.495	0.741
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5 / Index 6	189	836.4	28.58	30.40	1.521	0.03	0.519	0.789
33	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5 / Index 6	251	848.8	28.45	30.40	1.567	-0.14	0.526	0.824

**<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 V_Ant 1	RMC 12.2Kbps	Front	10mm	Index 5 / Index 6	4132	826.4	23.96	24.90	1.242	0.11	0.281	0.349
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5 / Index 6	4132	826.4	23.96	24.90	1.242	-0.06	0.391	0.485
34	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5 / Index 6	4182	836.4	23.95	24.90	1.245	-0.16	0.396	0.493
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5 / Index 6	4233	846.6	23.93	24.90	1.250	0.03	0.361	0.451

**<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 12_Ant 1	10M	QPSK	1	25	Front	10mm	Index 5 / Index 6	23095	707.5	23.75	24.90	1.303	-0.08	0.165	0.215
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	Index 5 / Index 6	23095	707.5	23.79	23.90	1.026	0.12	0.127	0.130
35	LTE Band 12_Ant 1	10M	QPSK	1	25	Back	10mm	Index 5 / Index 6	23095	707.5	23.75	24.90	1.303	-0.13	0.218	0.284
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	Index 5 / Index 6	23095	707.5	23.79	23.90	1.026	-0.07	0.169	0.173
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	Index 5 / Index 6	23230	782	23.78	24.90	1.294	-0.06	0.256	0.331
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	Index 5 / Index 6	23230	782	22.93	23.90	1.250	0.14	0.212	0.265
36	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5 / Index 6	23230	782	23.78	24.90	1.294	-0.12	0.343	0.444
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	Index 5 / Index 6	23230	782	22.93	23.90	1.250	0.07	0.295	0.369
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	Index 5 / Index 6	23330	793	24.01	24.90	1.227	-0.07	0.270	0.331
	LTE Band 14_Ant 1	10M	QPSK	25	0	Front	10mm	Index 5 / Index 6	23330	793	22.98	23.90	1.236	0.14	0.222	0.274
37	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5 / Index 6	23330	793	24.01	24.90	1.227	-0.13	0.406	0.498
	LTE Band 14_Ant 1	10M	QPSK	25	0	Back	10mm	Index 5 / Index 6	23330	793	22.98	23.90	1.236	0.09	0.319	0.394
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	Index 5 / Index 6	26865	831.5	23.91	24.90	1.256	0	0.264	0.332
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	Index 5 / Index 6	26865	831.5	22.97	23.90	1.239	0.04	0.220	0.273
38	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Index 5 / Index 6	26865	831.5	23.91	24.90	1.256	-0.05	0.396	0.497
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	Index 5 / Index 6	26865	831.5	22.97	23.90	1.239	-0.11	0.322	0.399
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5 / Index 6	20575+20476	841.5	22.95	23.00	1.012	-0.02	0.262	0.265
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	Index 5 / Index 6	133322	683	23.62	24.90	1.343	-0.01	0.134	0.181
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	Index 5 / Index 6	133322	683	22.67	23.90	1.327	0.06	0.133	0.176
39	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Index 5 / Index 6	133322	683	23.62	24.90	1.343	-0.05	0.164	0.220
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	Index 5 / Index 6	133322	683	22.67	23.90	1.327	-0.15	0.161	0.214





<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 1	20M	BPSK	1	53	Front	10mm	Index 5 / Index 6	167300	836.5	24.19	24.90	1.178	-0.01	0.226	0.266
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	Index 5 / Index 6	167300	836.5	24.06	24.90	1.213	0	0.218	0.265
40	FR1 n5_Ant 1	20M	BPSK	1	53	Back	10mm	Index 5 / Index 6	167300	836.5	24.19	24.90	1.178	-0.09	0.336	0.396
	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	Index 5 / Index 6	167300	836.5	24.06	24.90	1.213	0.06	0.324	0.394
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	Index 5 / Index 6	141500	707.5	23.94	24.90	1.247	0.13	0.150	0.187
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	Index 5 / Index 6	141500	707.5	23.87	24.90	1.268	0.09	0.147	0.187
41	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Index 5 / Index 6	141500	707.5	23.94	24.90	1.247	-0.12	0.201	0.251
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	Index 5 / Index 6	141500	707.5	23.87	24.90	1.268	-0.08	0.197	0.249
	FR1 n71_Ant 1	20M	BPSK	1	53	Front	10mm	Index 5 / Index 6	136100	680.5	23.94	24.90	1.247	0.01	0.124	0.155
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	Index 5 / Index 6	136100	680.5	23.85	24.90	1.274	-0.06	0.112	0.142
42	FR1 n71_Ant 1	20M	BPSK	1	53	Back	10mm	Index 5 / Index 6	136100	680.5	23.94	24.90	1.247	-0.14	0.155	0.193
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	Index 5 / Index 6	136100	680.5	23.85	24.90	1.274	0	0.141	0.179
	FR1 n41_Ant 5	100M	BPSK	1	137	Front	10mm	Index 5 / Index 6	518598	2592.99	21.00	22.30	1.349	0.01	0.508	0.685
	FR1 n41_Ant 5	100M	BPSK	135	138	Front	10mm	Index 5 / Index 6	518598	2592.99	20.99	22.30	1.352	0.06	0.428	0.579
43	FR1 n41_Ant 5	100M	BPSK	1	137	Back	10mm	Index 5 / Index 6	518598	2592.99	21.00	22.30	1.349	0.14	0.513	0.692
	FR1 n41_Ant 5	100M	BPSK	135	138	Back	10mm	Index 5 / Index 6	518598	2592.99	20.99	22.30	1.352	-0.02	0.485	0.656
	FR1 n41_Ant 5	100M	BPSK	270	0	Back	10mm	Index 5 / Index 6	518598	2592.99	20.80	22.30	1.413	-0.09	0.457	0.646
	FR1 n41_HPUE_Ant 5	100M	BPSK	1	137	Back	10mm	Index 5 / Index 6	518598	2592.99	24.90	25.30	1.096	-0.08	0.578	0.634
	FR1 n41_Ant 1	100M	BPSK	1	271	Front	10mm	Index 5 / Index 6	518598	2592.99	24.22	25.40	1.312	-0.14	0.381	0.500
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Index 5 / Index 6	518598	2592.99	24.07	25.40	1.358	-0.17	0.364	0.494
	FR1 n41_Ant 1	100M	BPSK	1	271	Back	10mm	Index 5 / Index 6	518598	2592.99	24.22	25.40	1.312	-0.03	0.330	0.433
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Index 5 / Index 6	518598	2592.99	24.07	25.40	1.358	-0.16	0.328	0.446
	FR1 n41_HPUE_Ant 1	100M	BPSK	1	271	Front	10mm	Index 5 / Index 6	518598	2592.99	26.81	27.40	1.146	-0.05	0.327	0.375



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	5	Ant 4+3(4)	11	2462	19.50	19.50	1.000	98.91	1.011	-0.1	0.125	0.126
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	5	Ant 4+3(3)	11	2462	19.10	19.50	1.000	98.91	1.011	-0.1	0.318	0.321
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	11	2462	19.50	19.50	1.000	98.91	1.011	-0.1	0.410	0.415
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	11	2462	19.10	19.50	1.000	98.91	1.011	-0.1	0.091	0.092
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	1	2412	19.00	19.50	1.000	98.91	1.011	-0.01	0.224	0.226
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	1	2412	18.50	19.50	1.000	98.91	1.011	-0.01	0.325	0.329
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	6	2437	19.15	19.50	1.084	98.91	1.011	-0.14	0.415	0.455
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	6	2437	19.10	19.50	1.096	98.91	1.011	-0.14	0.415	0.460
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	12	2467	19.05	19.50	1.000	98.91	1.011	-0.08	0.413	0.418
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	12	2467	18.70	19.50	1.000	98.91	1.011	-0.08	0.098	0.099
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	13	2472	19.15	19.50	1.000	98.91	1.011	-0.1	0.311	0.314
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	13	2472	18.90	19.50	1.000	98.91	1.011	-0.1	0.301	0.304
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	6	Ant 4+3(4)	11	2462	19.50	19.50	1.000	98.91	1.011	-0.1	0.125	0.126
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	6	Ant 4+3(3)	11	2462	19.10	19.50	1.096	98.91	1.011	-0.1	0.318	0.353
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	11	2462	19.50	19.50	1.000	98.91	1.011	-0.1	0.410	0.415
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	11	2462	19.10	19.50	1.096	98.91	1.011	-0.1	0.091	0.101
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	1	2412	19.00	19.50	1.122	98.91	1.011	-0.01	0.325	0.369
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	1	2412	18.50	19.50	1.259	98.91	1.011	-0.01	0.325	0.414
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	6	2437	19.15	19.50	1.084	98.91	1.011	-0.14	0.415	0.455
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	6	2437	19.10	19.50	1.096	98.91	1.011	-0.14	0.415	0.460
44	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	12	2467	19.05	19.50	1.109	98.91	1.011	-0.08	0.413	0.463
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	12	2467	18.70	19.50	1.202	98.91	1.011	-0.08	0.098	0.119
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	13	2472	19.15	19.50	1.084	98.91	1.011	-0.1	0.311	0.341
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	13	2472	18.90	19.50	1.148	98.91	1.011	-0.1	0.301	0.349
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	-0.11	0.186	0.226
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	-0.11	0.263	0.343
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	6	2437	17.70	18.50	1.202	98.91	1.011	-0.11	0.219	0.266
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	6	2437	17.40	18.50	1.288	98.91	1.011	-0.11	0.256	0.333
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	1	2412	17.40	18.50	1.288	98.91	1.011	-0.15	0.217	0.283
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	1	2412	17.00	18.50	1.413	98.91	1.011	-0.15	0.118	0.169
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	11	2462	17.70	18.50	1.202	98.91	1.011	0.01	0.258	0.314
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	11	2462	17.35	18.50	1.303	98.91	1.011	0.01	0.167	0.220
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	12	2467	17.50	18.50	1.259	98.91	1.011	-0.18	0.301	0.383
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	12	2467	17.00	18.50	1.413	98.91	1.011	-0.18	0.072	0.103
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	13	2472	17.70	18.50	1.202	98.91	1.011	-0.16	0.329	0.400
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	13	2472	17.20	18.50	1.349	98.91	1.011	-0.16	0.329	0.449
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.13	0.052	0.053
	WLAN2.4GHZ	802.11b 1Mbps	Front	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.13	0.138	0.143
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	6	2437	15.50	15.50	1.000	98.91	1.011	-0.15	0.165	0.167
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	6	2437	15.40	15.50	1.023	98.91	1.011	-0.15	0.028	0.029
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	1	2412	15.30	15.50	1.047	98.91	1.011	-0.13	0.117	0.124
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	1	2412	15.10	15.50	1.096	98.91	1.011	-0.13	0.094	0.104
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	11	2462	15.10	15.50	1.096	98.91	1.011	-0.01	0.147	0.163
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	11	2462	15.00	15.50	1.122	98.91	1.011	-0.01	0.101	0.115
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	12	2467	15.10	15.50	1.096	98.91	1.011	-0.07	0.001	0.001
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	12	2467	14.70	15.50	1.202	98.91	1.011	-0.07	0.171	0.208
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	13	2472	15.20	15.50	1.072	98.91	1.011	-0.19	0.180	0.195
	WLAN2.4GHZ	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	13	2472	14.80	15.50	1.175	98.91	1.011	-0.19	0.180	0.214



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
45	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	5	Ant 4+3(4)	46	5230	20.00	20.00	1.000	96.13	1.040	-0.13	0.346	0.360
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	5	Ant 4+3(3)	46	5230	19.75	20.00	1.059	96.13	1.040	-0.13	0.427	0.470
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	5	Ant 4+3(4)	46	5230	20.00	20.00	1.000	96.13	1.040	-0.16	0.635	0.660
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	5	Ant 4+3(3)	46	5230	19.75	20.00	1.059	96.13	1.040	-0.16	0.523	0.576
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	6	Ant 4+3(4)	46	5230	20.00	20.00	1.000	96.13	1.040	-0.13	0.346	0.360
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	6	Ant 4+3(3)	46	5230	19.75	20.00	1.059	96.13	1.040	-0.13	0.427	0.470
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	6	Ant 4+3(4)	46	5230	20.00	20.00	1.000	96.13	1.040	-0.16	0.635	0.660
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	6	Ant 4+3(3)	46	5230	19.75	20.00	1.059	96.13	1.040	-0.16	0.523	0.576
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(4)	54	5270	18.78	19.00	1.052	96.13	1.040	0.09	0.270	0.295
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(3)	54	5270	18.30	19.00	1.175	96.13	1.040	0.09	0.396	0.484
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(4)	54	5270	18.78	19.00	1.052	96.13	1.040	-0.19	0.548	0.600
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(3)	54	5270	18.30	19.00	1.175	96.13	1.040	-0.19	0.445	0.544
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(4)	62	5310	16.60	17.00	1.096	96.13	1.040	-0.07	0.310	0.354
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(3)	62	5310	16.45	17.00	1.135	96.13	1.040	-0.07	0.235	0.277
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	9	Ant 4+3(4)	54	5270	16.10	17.50	1.380	96.13	1.040	-0.07	0.109	0.156
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	9	Ant 4+3(3)	54	5270	15.50	17.50	1.585	96.13	1.040	-0.07	0.180	0.297
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(4)	54	5270	16.10	17.50	1.380	96.13	1.040	-0.09	0.309	0.444
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(3)	54	5270	15.50	17.50	1.585	96.13	1.040	-0.09	0.223	0.368
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(4)	62	5310	15.97	17.00	1.268	96.13	1.040	-0.01	0.300	0.396
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(3)	62	5310	15.90	17.00	1.288	96.13	1.040	-0.01	0.201	0.269
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	8	Ant 4+3(4)	54	5270	16.10	16.50	1.096	96.13	1.040	-0.07	0.109	0.124
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	8	Ant 4+3(3)	54	5270	15.50	16.50	1.259	96.13	1.040	-0.07	0.180	0.236
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	8	Ant 4+3(4)	54	5270	16.10	16.50	1.096	96.13	1.040	-0.09	0.284	0.324
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	8	Ant 4+3(3)	54	5270	15.50	16.50	1.259	96.13	1.040	-0.09	0.223	0.292
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	8	Ant 4+3(4)	62	5310	15.97	16.50	1.130	96.13	1.040	-0.01	0.300	0.352
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	8	Ant 4+3(3)	62	5310	15.90	16.50	1.148	96.13	1.040	-0.01	0.201	0.240



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
46	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	0.16	0.318	0.460
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	0.16	0.206	0.352
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	-0.13	0.708	1.025
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	-0.13	0.310	0.530
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(4)	138	5690	17.82	19.00	1.312	87.81	1.139	-0.15	0.622	0.930
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(3)	138	5690	17.01	19.00	1.581	87.81	1.139	-0.15	0.231	0.416
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(4)	106	5530	17.50	18.00	1.122	87.81	1.139	-0.02	0.613	0.783
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(3)	106	5530	17.35	18.00	1.161	87.81	1.139	-0.02	0.255	0.337
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	0.16	0.318	0.410
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	0.16	0.206	0.314
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	-0.13	0.708	0.913
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	-0.13	0.310	0.472
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(4)	138	5690	17.82	18.50	1.169	87.81	1.139	-0.15	0.622	0.829
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(3)	138	5690	17.01	18.50	1.409	87.81	1.139	-0.15	0.231	0.371
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(4)	106	5530	17.50	18.00	1.122	87.81	1.139	-0.02	0.613	0.783
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(3)	106	5530	17.35	18.00	1.161	87.81	1.139	-0.02	0.255	0.337
WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	7	Ant 4+3(4)	114	5570	17.00	17.00	1.000	88.09	1.135	-0.15	0.246	0.279	
WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	7	Ant 4+3(3)	114	5570	16.75	17.00	1.059	88.09	1.135	-0.15	0.205	0.246	
WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	7	Ant 4+3(4)	114	5570	17.00	17.00	1.000	88.09	1.135	-0.1	0.539	0.612	
WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	7	Ant 4+3(3)	114	5570	16.75	17.00	1.059	88.09	1.135	-0.1	0.274	0.329	
WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	9	Ant 4+3(4)	114	5570	14.72	16.00	1.343	88.09	1.135	-0.03	0.130	0.198	
WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	9	Ant 4+3(3)	114	5570	14.38	16.00	1.452	88.09	1.135	-0.03	0.110	0.181	
WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	9	Ant 4+3(4)	114	5570	14.72	16.00	1.343	88.09	1.135	-0.19	0.267	0.407	
WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	9	Ant 4+3(3)	114	5570	14.38	16.00	1.452	88.09	1.135	-0.19	0.137	0.226	
WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	8	Ant 4+3(4)	114	5570	14.72	15.00	1.067	88.09	1.135	-0.03	0.130	0.157	
WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	8	Ant 4+3(3)	114	5570	14.38	15.00	1.153	88.09	1.135	-0.03	0.110	0.144	
WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	8	Ant 4+3(4)	114	5570	14.72	15.00	1.067	88.09	1.135	-0.19	0.267	0.323	
WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	8	Ant 4+3(3)	114	5570	14.38	15.00	1.153	88.09	1.135	-0.19	0.137	0.179	



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
47	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	5	Ant 4+3(4)	155	5775	19.07	20.00	1.239	87.81	1.139	0.14	0.364	0.514
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	5	Ant 4+3(3)	155	5775	18.01	20.00	1.581	87.81	1.139	0.14	0.189	0.340
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(4)	155	5775	19.07	20.00	1.239	87.81	1.139	-0.1	0.672	0.948
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5	Ant 4+3(3)	155	5775	18.01	20.00	1.581	87.81	1.139	-0.1	0.296	0.533
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	5	Ant 4+3(4)	151	5755	18.46	19.50	1.271	96.13	1.040	-0.15	0.703	0.929
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	5	Ant 4+3(3)	151	5755	17.50	19.50	1.585	96.13	1.040	-0.15	0.289	0.476
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	6	Ant 4+3(4)	155	5775	19.07	19.50	1.104	87.81	1.139	0.14	0.364	0.458
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	6	Ant 4+3(3)	155	5775	18.01	19.50	1.409	87.81	1.139	0.14	0.189	0.303
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(4)	155	5775	19.07	19.50	1.104	87.81	1.139	-0.1	0.672	0.845
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	6	Ant 4+3(3)	155	5775	18.01	19.50	1.409	87.81	1.139	-0.1	0.296	0.475
47	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	6	Ant 4+3(4)	151	5755	18.46	19.00	1.132	96.13	1.040	-0.15	0.703	0.828
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	6	Ant 4+3(3)	151	5755	17.50	19.00	1.413	96.13	1.040	-0.15	0.289	0.425
47	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	-0.07	0.298	0.386
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	-0.07	0.147	0.246
47	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	155	5775	17.44	18.00	1.138	87.81	1.139	-0.14	0.446	0.578
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	155	5775	16.33	18.00	1.469	87.81	1.139	-0.14	0.178	0.298
47	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	-0.11	0.129	0.197
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	-0.11	0.067	0.120
47	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	155	5775	13.73	15.00	1.340	87.81	1.139	-0.11	0.248	0.378
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	155	5775	13.05	15.00	1.567	87.81	1.139	-0.11	0.092	0.164
47	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	-0.11	0.129	0.175
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	-0.11	0.067	0.107
47	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	155	5775	13.73	14.50	1.194	87.81	1.139	-0.11	0.248	0.337
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	155	5775	13.05	14.50	1.396	87.81	1.139	-0.11	0.092	0.146



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	0	0.095	0.128
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	78	2480	19.04	20.00	1.247	77.22	1.079	-0.05	0.112	0.151
48	Bluetooth	1Mbps	Back	10mm	3	Ant 4	0	2402	18.18	20.00	1.521	77.22	1.079	-0.04	0.130	0.213
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	39	2441	18.73	20.00	1.340	77.22	1.079	0.07	0.146	0.211
	Bluetooth	1Mbps	Front	10mm	3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	-0.05	0.102	0.148
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	78	2480	18.72	20.00	1.343	76.84	1.084	-0.07	0.125	0.182
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	0	2402	18.44	20.00	1.432	76.84	1.084	0	0.132	0.205
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	39	2441	18.60	20.00	1.380	76.84	1.084	-0.13	0.132	0.198
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	-0.14	0.084	0.097
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	-0.14	0.113	0.124
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	0	2402	16.72	17.00	1.067	76.84	1.084	-0.09	0.105	0.121
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	0	2402	16.95	17.00	1.012	76.84	1.084	-0.09	0.145	0.159
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	39	2441	15.88	17.00	1.294	76.84	1.084	0.03	0.135	0.189
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	39	2441	16.70	17.00	1.072	76.84	1.084	0.03	0.129	0.150
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	78	2480	16.52	17.00	1.117	76.84	1.084	-0.09	0.068	0.082
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	78	2480	16.44	17.00	1.138	76.84	1.084	-0.09	0.154	0.190
	Bluetooth	1Mbps	Front	10mm	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	-0.07	0.081	0.105
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	78	2480	17.72	18.50	1.197	77.22	1.079	-0.19	0.082	0.106
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	0	2402	17.25	18.50	1.334	77.22	1.079	-0.05	0.086	0.124
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	39	2441	17.46	18.50	1.271	77.22	1.079	-0.07	0.095	0.130
	Bluetooth	1Mbps	Front	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	0.07	0.075	0.094
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	78	2480	17.39	18.00	1.151	76.84	1.084	-0.07	0.098	0.122
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	0	2402	17.28	18.00	1.180	76.84	1.084	-0.04	0.098	0.125
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	39	2441	17.30	18.00	1.175	76.84	1.084	0.15	0.092	0.117
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.84	1.084	0.05	0.037	0.049
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.84	1.084	0.05	0.116	0.142
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	0	2402	15.62	16.50	1.225	76.84	1.084	-0.03	0.086	0.114
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	0	2402	15.96	16.50	1.132	76.84	1.084	-0.03	0.063	0.077
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	39	2441	15.61	16.50	1.227	76.84	1.084	0.07	0.099	0.132
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	39	2441	15.73	16.50	1.194	76.84	1.084	0.07	0.095	0.123
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	78	2480	15.56	16.50	1.242	76.84	1.084	-0.06	0.109	0.147
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	78	2480	15.58	16.50	1.236	76.84	1.084	-0.06	0.051	0.068

<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 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	0.18	0.091	0.108	0.712
				Ant 4+3(3)	13.10				14.00	1.230	86.19	1.160	0.069		0.098	0.552	
49	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	0.01	0.130	0.154	1.000
				Ant 4+3(3)	13.10				14.00	1.230	86.19	1.160	0.102		0.146	0.886	



15.4 Product Specific SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)	
50	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	0.12	1.080	1.149	
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	0.12	1.650	1.903	
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.16	0.724	0.770	
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.16	0.976	1.126	
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	0.001	
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.450	2.826	
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	0.001	
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.370	2.734	
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(4)	62	5310	16.60	17.00	1.096	96.13	1.040	-0.14	0.001	0.001	
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(3)	62	5310	16.45	17.00	1.135	96.13	1.040	-0.14	1.210	1.428	
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	5	Ant 4+3(4)	60	5300	18.60	19.00	1.096	93.44	1.070	-0.02	0.001	0.001	
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	5	Ant 4+3(3)	60	5300	18.55	19.00	1.109	93.44	1.070	-0.02	1.820	2.160	
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.1	0.522	0.556	
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.1	0.001	0.001	
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	0.19	1.180	1.256	
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	0.19	0.299	0.345	
	51	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	-0.18	1.110	1.606
		WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	-0.18	0.826	1.411
WLAN5GHz		802.11ac-VHT80 MCS0	Back	0mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	-0.04	0.692	1.001	
WLAN5GHz		802.11ac-VHT80 MCS0	Back	0mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	-0.04	0.673	1.150	
WLAN5GHz		802.11ac-VHT80 MCS0	Left Side	0mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	0.12	0.001	0.001	
WLAN5GHz		802.11ac-VHT80 MCS0	Left Side	0mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	0.12	0.955	1.631	
WLAN5GHz		802.11ac-VHT80 MCS0	Left Side	0mm	5	Ant 4+3(4)	138	5690	17.82	19.00	1.312	87.81	1.139	0.06	0.001	0.001	
WLAN5GHz		802.11ac-VHT80 MCS0	Left Side	0mm	5	Ant 4+3(3)	138	5690	17.01	19.00	1.581	87.81	1.139	0.06	0.807	1.453	
WLAN5GHz		802.11ac-VHT80 MCS0	Left Side	0mm	5	Ant 4+3(4)	106	5530	17.50	18.00	1.122	87.81	1.139	0.15	0.001	0.001	
WLAN5GHz		802.11ac-VHT80 MCS0	Left Side	0mm	5	Ant 4+3(3)	106	5530	17.35	18.00	1.161	87.81	1.139	0.15	0.954	1.262	
WLAN5GHz		802.11ac-VHT80 MCS0	Right Side	0mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	0.02	0.361	0.522	
WLAN5GHz		802.11ac-VHT80 MCS0	Right Side	0mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	0.02	0.001	0.002	
WLAN5GHz		802.11ac-VHT80 MCS0	Top Side	0mm	5	Ant 4+3(4)	122	5610	17.96	19.00	1.271	87.81	1.139	-0.06	1.100	1.592	
WLAN5GHz		802.11ac-VHT80 MCS0	Top Side	0mm	5	Ant 4+3(3)	122	5610	17.24	19.00	1.500	87.81	1.139	-0.06	0.275	0.470	



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)
52	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	0.12	1.080	1.149
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	0.12	1.650	1.903
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.16	0.724	0.770
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.16	0.976	1.126
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.450	2.826
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.370	2.734
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(4)	62	5310	16.60	17.00	1.096	96.13	1.040	-0.14	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(3)	62	5310	16.45	17.00	1.135	96.13	1.040	-0.14	1.210	1.428
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	6	Ant 4+3(4)	60	5300	18.60	19.00	1.096	93.44	1.070	-0.02	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	6	Ant 4+3(3)	60	5300	18.55	19.00	1.109	93.44	1.070	-0.02	1.820	2.160
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.1	0.522	0.556
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.1	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	0.19	1.180	1.256
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	0.19	0.299	0.345
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	-0.18	1.110	1.432
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	-0.18	0.826	1.257
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	-0.04	0.692	0.893
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	-0.04	0.673	1.025
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	0.12	0.001	0.001	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	0.12	0.955	1.454	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	6	Ant 4+3(4)	138	5690	17.82	18.50	1.169	87.81	1.139	0.06	0.001	0.001	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	6	Ant 4+3(3)	138	5690	17.01	18.50	1.409	87.81	1.139	0.06	0.807	1.295	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	6	Ant 4+3(4)	106	5530	17.50	18.00	1.122	87.81	1.139	0.15	0.001	0.001	
WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	6	Ant 4+3(3)	106	5530	17.35	18.00	1.161	87.81	1.139	0.15	0.954	1.262	
WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	0.02	0.361	0.466	
WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	0.02	0.001	0.002	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	6	Ant 4+3(4)	122	5610	17.96	18.50	1.132	87.81	1.139	-0.06	1.100	1.419	
WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	6	Ant 4+3(3)	122	5610	17.24	18.50	1.337	87.81	1.139	-0.06	0.275	0.419	

<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
53	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	0.19	0.284	0.337	7.09
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.162	0.231	4.04
53	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 4+3(4)	5/6/7/8/9	15	6025	12.30	12.50	1.047	86.19	1.160	-0.07	0.250	0.304	6.27
					Ant 4+3(3)				11.50	12.50	1.259	86.19	1.160		0.152	0.222	3.81
53	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 4+3(4)	5/6/7/8/9	47	6185	12.40	12.50	1.023	86.19	1.160	-0.12	0.174	0.207	4.36
					Ant 4+3(3)				11.80	12.50	1.175	86.19	1.160		0.119	0.162	2.98
53	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 4+3(4)	5/6/7/8/9	111	6505	11.50	12.00	1.122	86.19	1.160	-0.12	0.205	0.267	5.12
					Ant 4+3(3)				11.50	12.00	1.122	86.19	1.160		0.135	0.176	3.38
53	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 4+3(4)	5/6/7/8/9	175	6825	13.60	14.00	1.096	86.19	1.160	0.15	0.327	0.416	8.18
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.184	0.263	4.6
53	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	-0.12	0.152	0.180	3.79
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.125	0.178	3.11
53	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	-0.18	0.001	0.001	5.33
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.213	0.304	
53	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	0.15	0.195	0.231	4.87
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.001	0.001	
53	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	13.90	14.00	1.023	86.19	1.160	-0.19	0.163	0.193	3.05
					Ant 4+3(3)				13.10	14.00	1.230	86.19	1.160		0.122	0.174	4.07





15.5 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grip Step (λ)	iPDn (W/m <sup>2</sup> )	iPD ratio (≥ -1)	Normal psPD (W/m <sup>2</sup> )	Total psPD (W/m <sup>2</sup> )
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	15	6025	12.30	0.0625	1.66	0.6781974	3.55	3.96
WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 4+3(4)	15	6025	12.30	0.25	1.42		0.959	0.98
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	207	6985	13.90	0.0625	2.38	-0.1787472	2.78	3.11
WLAN6GHz	802.11ax-HE160 MCS0	Front	8.59mm	Ant 4+3(4)	207	6985	13.90	0.25	2.48		1.05	1.28

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 (λ)	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> )
54	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	15	6025	12.30	12.50	1.047	86.19	1.160	0.0625	1.5535	-0.09	3.55	6.70	3.96	7.47
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	47	6185	12.40	12.50	1.023	86.19	1.160	0.0625	1.5535	0.15	1.74	3.21	2.07	3.82
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	111	6505	11.50	12.00	1.122	86.19	1.160	0.0625	1.5535	0.17	1.77	3.58	2.37	4.79
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	175	6825	13.60	14.00	1.096	86.19	1.160	0.0625	1.5535	-0.03	1.96	3.87	3.14	6.20
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	207	6985	13.90	14.00	1.023	86.19	1.160	0.0625	1.5535	-0.06	2.78	5.13	3.11	5.73

15.6 Repeated SAR Measurement

General Note:

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

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 V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4132	826.4	23.96	24.80	1.213	-0.03	0.891	-	1.081
2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2	4132	826.4	23.96	24.80	1.213	-0.06	0.865	1.03	1.050
1st	LTE Band 13_Ant 1	10M_QPSK_25_0	Right Tilted	0mm	Index 2	23230	782	22.16	23.60	1.393	-0.03	0.859	-	1.197
2nd	LTE Band 13_Ant 1	10M_QPSK_25_0	Right Tilted	0mm	Index 2	23230	782	22.16	23.60	1.393	-0.06	0.822	1.05	1.145
1st	FR1 n41_Ant 5	100M_BPSK_135_138	Left Cheek	0mm	Index 2	518598	2592.99	18.08	18.20	1.028	-0.09	1.160	-	1.192
2nd	FR1 n41_Ant 5	100M_BPSK_135_138	Left Cheek	0mm	Index 2	518598	2592.99	18.08	18.20	1.028	-0.11	1.120	1.04	1.151



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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	Right Tilted	0mm	1	Ant 4+3(4)	6	2437	16.45	16.50	1.012	98.91	1.011	-0.04	0.001	-	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	6	2437	16.05	16.50	1.109	98.91	1.011	-0.04	0.979		1.098
2st	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	6	2437	16.45	16.50	1.012	98.91	1.011	-0.04	0.001	1.01	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	6	2437	16.05	16.50	1.109	98.91	1.011	-0.04	0.968		1.085
1st	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	62	5310	14.90	15.50	1.148	96.13	1.040	-0.05	0.364	-	0.435
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	62	5310	14.70	15.50	1.202	96.13	1.040	-0.05	0.877		1.097
2st	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	62	5310	14.90	15.50	1.148	96.13	1.040	0.13	0.471	1.02	0.562
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	62	5310	14.70	15.50	1.202	96.13	1.040	0.13	0.856		1.070
1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	87.81	1.139	0.05	0.535	-	0.684
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	106	5530	14.90	15.50	1.148	87.81	1.139	0.05	0.848		1.109
2st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	87.81	1.139	-0.11	0.593	1.05	0.758
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	106	5530	14.90	15.50	1.148	87.81	1.139	-0.11	0.807		1.055
1st	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	151	5755	14.50	15.00	1.122	96.13	1.040	-0.13	0.807	-	0.942
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	151	5755	13.25	15.00	1.496	96.13	1.040	-0.13	0.297		0.462
2st	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	151	5755	14.50	15.00	1.122	96.13	1.040	-0.04	0.799	1.01	0.932
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	151	5755	13.25	15.00	1.496	96.13	1.040	-0.04	0.285		0.443

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	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)	Ratio	Reported 10g SAR (W/kg)
1st	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	-	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.450		2.826
2st	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	1.03	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.370		2.734
1st	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	-	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.450		2.826
2st	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(4)	54	5270	19.40	19.50	1.023	96.13	1.040	-0.17	0.001	1.03	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	6	Ant 4+3(3)	54	5270	19.05	19.50	1.109	96.13	1.040	-0.17	2.370		2.734



**15.7 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)	18.2	21.2
Reported 1g SAR (W/kg)	1.192	1.117
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	66.07	65.91
Linearity SAR(W/kg)	1.19	
% deviation from expected linearity		-6.07%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	19.4	22.4
Reported 1g SAR (W/kg)	1.194	1.089
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	87.10	86.89
Linearity SAR(W/kg)	1.19	
% deviation from expected linearity		-8.58%

**<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)	21.1	24.1
Reported 1g SAR (W/kg)	0.91	0.856
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	128.82	128.52
Linearity SAR(W/kg)	0.91	
% deviation from expected linearity		-5.71%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	25.4	27.4
Reported 1g SAR (W/kg)	0.613	0.505
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	346.74	274.77
Linearity SAR(W/kg)	0.49	
% deviation from expected linearity		3.96%



<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)	22.3	25.3
Reported 1g SAR (W/kg)	0.692	0.634
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	169.82	169.42
Linearity SAR(W/kg)	0.69	
% deviation from expected linearity		-8.16%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	25.4	27.4
Reported 1g SAR (W/kg)	0.5	0.375
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	346.74	274.77
Linearity SAR(W/kg)	0.40	
% deviation from expected linearity		-5.36%



**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	Index 4 (RSDB)
		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	
		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 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)				
		WiFi 6E MIMO (Ant7+3) + Bluetooth (Ant4+3)				
	WWAN + WiFi	WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)	Index 6 / Index 4 (Hostpot 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 (Hostpot 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 (Hostpot 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:**

- 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 FA0D2942-05A
- The Sim-Tx configuration combination include in operation description will be match the title in the below Sum-Tx evaluation table.
- This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
- The worst case WLAN reported SAR for each configuration was used for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - Scalar SAR summation < 1.6W/kg.
  - $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$ , 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.
  - If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary.
  - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
- 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.
- 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+5GNR+WiFi+BT can be justified from the compliance of LTE+WiFi +BT and 5GNR+WiFi+BT

**16.2 Head Exposure Conditions**

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

Exposure Position	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)
	5/6GHz WLAN Ant 4+3 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)			
Right Cheek	1.109	0.062	0.115	0.210	<b>1.171</b>	<b>1.224</b>	<b>1.319</b>
Right Tilted	0.850	0.080	0.218	0.449	<b>0.930</b>	<b>1.068</b>	<b>1.299</b>
Left Cheek	1.102	0.192	0.098	0.168	<b>1.294</b>	<b>1.200</b>	<b>1.270</b>
Left Tilted	1.070	0.241	0.130	0.237	<b>1.311</b>	<b>1.200</b>	<b>1.307</b>

**<WLAN Index 2>**

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 4+3 1g SAR (W/kg)	
Right Cheek	0.486	0.988	<b>1.474</b>
Right Tilted	0.558	0.755	<b>1.313</b>
Left Cheek	0.359	0.983	<b>1.342</b>
Left Tilted	0.481	0.912	<b>1.393</b>



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

WWAN Band	Exposure Position	1	2	3	4	5	6	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+3+6 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 4+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)	1g SAR (W/kg)								
GSM850_Ant 0	Right Cheek	0.251	0.352	0.402	0.062	0.115	0.210	0.715	0.768	0.863	0.653	0.603	0.313	0.366	0.461
	Right Tilted	0.163	0.645	0.237	0.080	0.218	0.449	0.480	0.618	0.849	0.400	0.808	0.243	0.381	0.612
	Left Cheek	0.403	0.440	0.355	0.192	0.098	0.168	0.950	0.856	0.926	0.758	0.843	0.595	0.501	0.571
	Left Tilted	0.251	0.553	0.372	0.241	0.130	0.237	0.864	0.753	0.860	0.623	0.804	0.492	0.381	0.488
GSM1900_Ant 2	Right Cheek	0.122	0.352	0.402	0.062	0.115	0.210	0.586	0.639	0.734	0.524	0.474	0.184	0.237	0.332
	Right Tilted	0.073	0.645	0.237	0.080	0.218	0.449	0.390	0.528	0.759	0.310	0.718	0.153	0.291	0.522
	Left Cheek	0.096	0.440	0.355	0.192	0.098	0.168	0.643	0.549	0.619	0.451	0.536	0.288	0.194	0.264
	Left Tilted	0.076	0.553	0.372	0.241	0.130	0.237	0.689	0.578	0.685	0.448	0.629	0.317	0.206	0.313
WCDMA II_Ant 2	Right Cheek	0.142	0.352	0.402	0.062	0.115	0.210	0.606	0.659	0.754	0.544	0.494	0.204	0.257	0.352
	Right Tilted	0.001	0.645	0.237	0.080	0.218	0.449	0.318	0.456	0.687	0.238	0.646	0.081	0.219	0.450
	Left Cheek	0.130	0.440	0.355	0.192	0.098	0.168	0.677	0.583	0.653	0.485	0.570	0.322	0.228	0.298
	Left Tilted	0.044	0.553	0.372	0.241	0.130	0.237	0.657	0.546	0.653	0.416	0.597	0.285	0.174	0.281
WCDMA IV_Ant 2	Right Cheek	0.280	0.352	0.402	0.062	0.115	0.210	0.744	0.797	0.892	0.682	0.632	0.342	0.395	0.490
	Right Tilted	0.001	0.645	0.237	0.080	0.218	0.449	0.318	0.456	0.687	0.238	0.646	0.081	0.219	0.450
	Left Cheek	0.137	0.440	0.355	0.192	0.098	0.168	0.684	0.590	0.660	0.492	0.577	0.329	0.235	0.305
	Left Tilted	0.001	0.553	0.372	0.241	0.130	0.237	0.614	0.503	0.610	0.373	0.554	0.242	0.131	0.238
WCDMA V_Ant 0	Right Cheek	0.229	0.352	0.402	0.062	0.115	0.210	0.693	0.746	0.841	0.631	0.581	0.291	0.344	0.439
	Right Tilted	0.064	0.645	0.237	0.080	0.218	0.449	0.381	0.519	0.750	0.301	0.709	0.144	0.282	0.513
	Left Cheek	0.321	0.440	0.355	0.192	0.098	0.168	0.868	0.774	0.844	0.676	0.761	0.513	0.419	0.489
	Left Tilted	0.122	0.553	0.372	0.241	0.130	0.237	0.735	0.624	0.731	0.494	0.675	0.363	0.252	0.359
LTE Band 7_Ant 2	Right Cheek	0.450	0.352	0.402	0.062	0.115	0.210	0.914	0.967	1.062	0.852	0.802	0.512	0.565	0.660
	Right Tilted	0.243	0.645	0.237	0.080	0.218	0.449	0.560	0.698	0.929	0.480	0.888	0.323	0.461	0.692
	Left Cheek	0.312	0.440	0.355	0.192	0.098	0.168	0.859	0.765	0.835	0.667	0.752	0.504	0.410	0.480
	Left Tilted	0.282	0.553	0.372	0.241	0.130	0.237	0.895	0.784	0.891	0.654	0.835	0.523	0.412	0.519
LTE Band 12_Ant 0	Right Cheek	0.208	0.352	0.402	0.062	0.115	0.210	0.672	0.725	0.820	0.610	0.560	0.270	0.323	0.418
	Right Tilted	0.123	0.645	0.237	0.080	0.218	0.449	0.440	0.578	0.809	0.360	0.768	0.203	0.341	0.572
	Left Cheek	0.289	0.440	0.355	0.192	0.098	0.168	0.836	0.742	0.812	0.644	0.729	0.481	0.387	0.457
	Left Tilted	0.158	0.553	0.372	0.241	0.130	0.237	0.771	0.660	0.767	0.530	0.711	0.399	0.288	0.395
LTE Band 13_Ant 0	Right Cheek	0.240	0.352	0.402	0.062	0.115	0.210	0.704	0.757	0.852	0.642	0.592	0.302	0.355	0.450
	Right Tilted	0.152	0.645	0.237	0.080	0.218	0.449	0.469	0.607	0.838	0.389	0.797	0.232	0.370	0.601
	Left Cheek	0.328	0.440	0.355	0.192	0.098	0.168	0.875	0.781	0.851	0.683	0.768	0.520	0.426	0.496
	Left Tilted	0.220	0.553	0.372	0.241	0.130	0.237	0.833	0.722	0.829	0.592	0.773	0.461	0.350	0.457
LTE Band 14_Ant 0	Right Cheek	0.254	0.352	0.402	0.062	0.115	0.210	0.718	0.771	0.866	0.656	0.606	0.316	0.369	0.464
	Right Tilted	0.154	0.645	0.237	0.080	0.218	0.449	0.471	0.609	0.840	0.391	0.799	0.234	0.372	0.603
	Left Cheek	0.344	0.440	0.355	0.192	0.098	0.168	0.891	0.797	0.867	0.699	0.784	0.536	0.442	0.512
	Left Tilted	0.211	0.553	0.372	0.241	0.130	0.237	0.824	0.713	0.820	0.583	0.764	0.452	0.341	0.448
LTE Band 25_Ant 2	Right Cheek	0.128	0.352	0.402	0.062	0.115	0.210	0.592	0.645	0.740	0.530	0.480	0.190	0.243	0.338
	Right Tilted	0.079	0.645	0.237	0.080	0.218	0.449	0.396	0.534	0.765	0.316	0.724	0.159	0.297	0.528
	Left Cheek	0.109	0.440	0.355	0.192	0.098	0.168	0.656	0.562	0.632	0.464	0.549	0.301	0.207	0.277
	Left Tilted	0.096	0.553	0.372	0.241	0.130	0.237	0.709	0.598	0.705	0.468	0.649	0.337	0.226	0.333
LTE Band 26_Ant 0	Right Cheek	0.214	0.352	0.402	0.062	0.115	0.210	0.678	0.731	0.826	0.616	0.566	0.276	0.329	0.424
	Right Tilted	0.141	0.645	0.237	0.080	0.218	0.449	0.458	0.596	0.827	0.378	0.786	0.221	0.359	0.590
	Left Cheek	0.309	0.440	0.355	0.192	0.098	0.168	0.856	0.762	0.832	0.664	0.749	0.501	0.407	0.477
	Left Tilted	0.158	0.553	0.372	0.241	0.130	0.237	0.771	0.660	0.767	0.530	0.711	0.399	0.288	0.395
LTE Band 30_Ant 2	Right Cheek	0.228	0.352	0.402	0.062	0.115	0.210	0.692	0.745	0.840	0.630	0.580	0.290	0.343	0.438
	Right Tilted	0.096	0.645	0.237	0.080	0.218	0.449	0.413	0.551	0.782	0.333	0.741	0.176	0.314	0.545
	Left Cheek	0.116	0.440	0.355	0.192	0.098	0.168	0.663	0.569	0.639	0.471	0.556	0.308	0.214	0.284
	Left Tilted	0.101	0.553	0.372	0.241	0.130	0.237	0.714	0.603	0.710	0.473	0.654	0.342	0.231	0.338
LTE Band 41_Ant 2	Right Cheek	0.272	0.352	0.402	0.062	0.115	0.210	0.736	0.789	0.884	0.674	0.624	0.334	0.387	0.482
	Right Tilted	0.090	0.645	0.237	0.080	0.218	0.449	0.407	0.545	0.776	0.327	0.735	0.170	0.308	0.539





**FCC SAR TEST REPORT**

Report No. : FA0D2942-05C

	Left Cheek	0.165	0.440	0.355	0.192	0.098	0.168	0.712	0.618	0.688	0.520	0.605	0.357	0.263	0.333
	Left Tilted	0.124	0.553	0.372	0.241	0.130	0.237	0.737	0.626	0.733	0.496	0.677	0.365	0.254	0.361
LTE Band 48_Ant 6	Right Cheek	0.280	0.352	0.402	0.062	0.115	0.210	0.744	0.797	0.892	0.682	0.632	0.342	0.395	0.490
	Right Tilted	0.233	0.645	0.237	0.080	0.218	0.449	0.550	0.688	0.919	0.470	0.878	0.313	0.451	0.682
	Left Cheek	0.450	0.440	0.355	0.192	0.098	0.168	0.997	0.903	0.973	0.805	0.890	0.642	0.548	0.618
	Left Tilted	0.161	0.553	0.372	0.241	0.130	0.237	0.774	0.663	0.770	0.533	0.714	0.402	0.291	0.398
LTE Band 66_Ant 2	Right Cheek	0.208	0.352	0.402	0.062	0.115	0.210	0.672	0.725	0.820	0.610	0.560	0.270	0.323	0.418
	Right Tilted	0.130	0.645	0.237	0.080	0.218	0.449	0.447	0.585	0.816	0.367	0.775	0.210	0.348	0.579
	Left Cheek	0.138	0.440	0.355	0.192	0.098	0.168	0.685	0.591	0.661	0.493	0.578	0.330	0.236	0.306
	Left Tilted	0.112	0.553	0.372	0.241	0.130	0.237	0.725	0.614	0.721	0.484	0.665	0.353	0.242	0.349
LTE Band 71_Ant 0	Right Cheek	0.204	0.352	0.402	0.062	0.115	0.210	0.668	0.721	0.816	0.606	0.556	0.266	0.319	0.414
	Right Tilted	0.113	0.645	0.237	0.080	0.218	0.449	0.430	0.568	0.799	0.350	0.758	0.193	0.331	0.562
	Left Cheek	0.276	0.440	0.355	0.192	0.098	0.168	0.823	0.729	0.799	0.631	0.716	0.468	0.374	0.444
	Left Tilted	0.149	0.553	0.372	0.241	0.130	0.237	0.762	0.651	0.758	0.521	0.702	0.390	0.279	0.386
FR1 n5_Ant 0	Right Cheek	0.208	0.352	0.402	0.062	0.115	0.210	0.672	0.725	0.820	0.610	0.560	0.270	0.323	0.418
	Right Tilted	0.127	0.645	0.237	0.080	0.218	0.449	0.444	0.582	0.813	0.364	0.772	0.207	0.345	0.576
	Left Cheek	0.281	0.440	0.355	0.192	0.098	0.168	0.828	0.734	0.804	0.636	0.721	0.473	0.379	0.449
	Left Tilted	0.168	0.553	0.372	0.241	0.130	0.237	0.781	0.670	0.777	0.540	0.721	0.409	0.298	0.405
FR1 n7_Ant 2	Right Cheek	0.356	0.352	0.402	0.062	0.115	0.210	0.820	0.873	0.968	0.758	0.708	0.418	0.471	0.566
	Right Tilted	0.164	0.645	0.237	0.080	0.218	0.449	0.481	0.619	0.850	0.401	0.809	0.244	0.382	0.613
	Left Cheek	0.076	0.440	0.355	0.192	0.098	0.168	0.623	0.529	0.599	0.431	0.516	0.268	0.174	0.244
	Left Tilted	0.067	0.553	0.372	0.241	0.130	0.237	0.680	0.569	0.676	0.439	0.620	0.308	0.197	0.304
FR1 n12_Ant 0	Right Cheek	0.177	0.352	0.402	0.062	0.115	0.210	0.641	0.694	0.789	0.579	0.529	0.239	0.292	0.387
	Right Tilted	0.113	0.645	0.237	0.080	0.218	0.449	0.430	0.568	0.799	0.350	0.758	0.193	0.331	0.562
	Left Cheek	0.242	0.440	0.355	0.192	0.098	0.168	0.789	0.695	0.765	0.597	0.682	0.434	0.340	0.410
	Left Tilted	0.153	0.553	0.372	0.241	0.130	0.237	0.766	0.655	0.762	0.525	0.706	0.394	0.283	0.390
FR1 n25_Ant 2	Right Cheek	0.101	0.352	0.402	0.062	0.115	0.210	0.565	0.618	0.713	0.503	0.453	0.163	0.216	0.311
	Right Tilted	0.067	0.645	0.237	0.080	0.218	0.449	0.384	0.522	0.753	0.304	0.712	0.147	0.285	0.516
	Left Cheek	0.121	0.440	0.355	0.192	0.098	0.168	0.668	0.574	0.644	0.476	0.561	0.313	0.219	0.289
	Left Tilted	0.098	0.553	0.372	0.241	0.130	0.237	0.711	0.600	0.707	0.470	0.651	0.339	0.228	0.335
FR1 n30_Ant 2	Right Cheek	0.200	0.352	0.402	0.062	0.115	0.210	0.664	0.717	0.812	0.602	0.552	0.262	0.315	0.410
	Right Tilted	0.084	0.645	0.237	0.080	0.218	0.449	0.401	0.539	0.770	0.321	0.729	0.164	0.302	0.533
	Left Cheek	0.117	0.440	0.355	0.192	0.098	0.168	0.664	0.570	0.640	0.472	0.557	0.309	0.215	0.285
	Left Tilted	0.119	0.553	0.372	0.241	0.130	0.237	0.732	0.621	0.728	0.491	0.672	0.360	0.249	0.356
FR1 n41_Ant 5	Right Cheek	0.311	0.352	0.402	0.062	0.115	0.210	0.775	0.828	0.923	0.713	0.663	0.373	0.426	0.521
	Right Tilted	0.150	0.645	0.237	0.080	0.218	0.449	0.467	0.605	0.836	0.387	0.795	0.230	0.368	0.599
	Left Cheek	0.886	0.440	0.355	0.192	0.098	0.168	1.433	1.339	1.409	1.241	1.326	1.078	0.984	1.054
	Left Tilted	0.244	0.553	0.372	0.241	0.130	0.237	0.857	0.746	0.853	0.616	0.797	0.485	0.374	0.481
FR1 n66_Ant 2	Right Cheek	0.225	0.352	0.402	0.062	0.115	0.210	0.689	0.742	0.837	0.627	0.577	0.287	0.340	0.435
	Right Tilted	0.157	0.645	0.237	0.080	0.218	0.449	0.474	0.612	0.843	0.394	0.802	0.237	0.375	0.606
	Left Cheek	0.160	0.440	0.355	0.192	0.098	0.168	0.707	0.613	0.683	0.515	0.600	0.352	0.258	0.328
	Left Tilted	0.118	0.553	0.372	0.241	0.130	0.237	0.731	0.620	0.727	0.490	0.671	0.359	0.248	0.355
FR1 n71_Ant 0	Right Cheek	0.184	0.352	0.402	0.062	0.115	0.210	0.648	0.701	0.796	0.586	0.536	0.246	0.299	0.394
	Right Tilted	0.106	0.645	0.237	0.080	0.218	0.449	0.423	0.561	0.792	0.343	0.751	0.186	0.324	0.555
	Left Cheek	0.244	0.440	0.355	0.192	0.098	0.168	0.791	0.697	0.767	0.599	0.684	0.436	0.342	0.412
	Left Tilted	0.146	0.553	0.372	0.241	0.130	0.237	0.759	0.648	0.755	0.518	0.699	0.387	0.276	0.383
FR1 n77_Ant 6	Right Cheek	0.546	0.352	0.402	0.062	0.115	0.210	1.010	1.063	1.158	0.948	0.898	0.608	0.661	0.756
	Right Tilted	0.395	0.645	0.237	0.080	0.218	0.449	0.712	0.850	1.081	0.632	1.040	0.475	0.613	0.844
	Left Cheek	0.846	0.440	0.355	0.192	0.098	0.168	1.393	1.299	1.369	1.201	1.286	1.038	0.944	1.014
	Left Tilted	0.300	0.553	0.372	0.241	0.130	0.237	0.913	0.802	0.909	0.672	0.853	0.541	0.430	0.537



**FCC SAR TEST REPORT**

Report No. : FA0D2942-05C

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

WWAN Band	Exposure Position	1	2	3	4	5	6	1+3+4	1+3+5	1+3+6	1+3	1+2	1+4	1+5	1+6	
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 4+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)	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)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850_Ant 1	Right Cheek	0.641	0.352	0.402	0.062	0.115	0.210	1.105	1.158	1.253	1.043	0.993	0.703	0.756	0.851	
	Right Tilted	0.771	0.645	0.237	0.080	0.218	0.449	1.088	1.226	1.457	1.008	1.416	0.851	0.989	1.220	
	Left Cheek	0.319	0.440	0.355	0.192	0.098	0.168	0.866	0.772	0.842	0.674	0.759	0.511	0.417	0.487	
	Left Tilted	0.311	0.553	0.372	0.241	0.130	0.237	0.924	0.813	0.920	0.683	0.864	0.552	0.441	0.548	
GSM1900_Ant 0	Right Cheek	0.184	0.352	0.402	0.062	0.115	0.210	0.648	0.701	0.796	0.586	0.536	0.246	0.299	0.394	
	Right Tilted	0.161	0.645	0.237	0.080	0.218	0.449	0.478	0.616	0.847	0.398	0.806	0.241	0.379	0.610	
	Left Cheek	0.460	0.440	0.355	0.192	0.098	0.168	1.007	0.913	0.983	0.815	0.900	0.652	0.558	0.628	
	Left Tilted	0.172	0.553	0.372	0.241	0.130	0.237	0.785	0.674	0.781	0.544	0.725	0.413	0.302	0.409	
WCDMA II_Ant 0	Right Cheek	0.138	0.352	0.402	0.062	0.115	0.210	0.602	0.655	0.750	0.540	0.490	0.200	0.253	0.348	
	Right Tilted	0.051	0.645	0.237	0.080	0.218	0.449	0.368	0.506	0.737	0.288	0.696	0.131	0.269	0.500	
	Left Cheek	0.470	0.440	0.355	0.192	0.098	0.168	1.017	0.923	0.993	0.825	0.910	0.662	0.568	0.638	
	Left Tilted	0.152	0.553	0.372	0.241	0.130	0.237	0.765	0.654	0.761	0.524	0.705	0.393	0.282	0.389	
WCDMA IV_Ant 0	Right Cheek	0.180	0.352	0.402	0.062	0.115	0.210	0.644	0.697	0.792	0.582	0.532	0.242	0.295	0.390	
	Right Tilted	0.144	0.645	0.237	0.080	0.218	0.449	0.461	0.599	0.830	0.381	0.789	0.224	0.362	0.593	
	Left Cheek	0.359	0.440	0.355	0.192	0.098	0.168	0.906	0.812	0.882	0.714	0.799	0.551	0.457	0.527	
	Left Tilted	0.168	0.553	0.372	0.241	0.130	0.237	0.781	0.670	0.777	0.540	0.721	0.409	0.298	0.405	
WCDMA V_Ant 1	Right Cheek	0.739	0.352	0.402	0.062	0.115	0.210	1.203	1.256	1.351	1.141	1.091	0.801	0.854	0.949	
	Right Tilted	0.826	0.645	0.237	0.080	0.218	0.449	1.143	1.281	1.512	1.063	1.471	0.906	1.044	1.275	
	Left Cheek	0.423	0.440	0.355	0.192	0.098	0.168	0.970	0.876	0.946	0.778	0.863	0.615	0.521	0.591	
	Left Tilted	0.381	0.553	0.372	0.241	0.130	0.237	0.994	0.883	0.990	0.753	0.934	0.622	0.511	0.618	
LTE Band 7_Ant 0	Right Cheek	0.193	0.352	0.402	0.062	0.115	0.210	0.657	0.710	0.805	0.595	0.545	0.255	0.308	0.403	
	Right Tilted	0.096	0.645	0.237	0.080	0.218	0.449	0.413	0.551	0.782	0.333	0.741	0.176	0.314	0.545	
	Left Cheek	0.435	0.440	0.355	0.192	0.098	0.168	0.982	0.888	0.958	0.790	0.875	0.627	0.533	0.603	
	Left Tilted	0.157	0.553	0.372	0.241	0.130	0.237	0.770	0.659	0.766	0.529	0.710	0.398	0.287	0.394	
LTE Band 12_Ant 1	Right Cheek	0.757	0.352	0.402	0.062	0.115	0.210	1.221	1.274	1.369	1.159	1.109	0.819	0.872	0.967	
	Right Tilted	0.787	0.645	0.237	0.080	0.218	0.449	1.104	1.242	1.473	1.024	1.432	0.867	1.005	1.236	
	Left Cheek	0.366	0.440	0.355	0.192	0.098	0.168	0.913	0.819	0.889	0.721	0.806	0.558	0.464	0.534	
	Left Tilted	0.336	0.553	0.372	0.241	0.130	0.237	0.949	0.838	0.945	0.708	0.889	0.577	0.466	0.573	
LTE Band 13_Ant 1	Right Cheek	0.747	0.352	0.402	0.062	0.115	0.210	1.211	1.264	1.359	1.149	1.099	0.809	0.862	0.957	
	Right Tilted	0.908	0.645	0.237	0.080	0.218	0.449	1.225	1.363	1.594	1.145	1.553	0.988	1.126	1.357	
	Left Cheek	0.341	0.440	0.355	0.192	0.098	0.168	0.888	0.794	0.864	0.696	0.781	0.533	0.439	0.509	
	Left Tilted	0.291	0.553	0.372	0.241	0.130	0.237	0.904	0.793	0.900	0.663	0.844	0.532	0.421	0.528	
LTE Band 14_Ant 1	Right Cheek	0.887	0.352	0.402	0.062	0.115	0.210	1.351	1.404	1.499	1.289	1.239	0.949	1.002	1.097	
	Right Tilted	0.829	0.645	0.237	0.080	0.218	0.449	1.146	1.284	1.515	1.066	1.474	0.909	1.047	1.278	
	Left Cheek	0.433	0.440	0.355	0.192	0.098	0.168	0.980	0.886	0.956	0.788	0.873	0.625	0.531	0.601	
	Left Tilted	0.386	0.553	0.372	0.241	0.130	0.237	0.999	0.888	0.995	0.758	0.939	0.627	0.516	0.623	
LTE Band 25_Ant 0	Right Cheek	0.256	0.352	0.402	0.062	0.115	0.210	0.720	0.773	0.868	0.658	0.608	0.318	0.371	0.466	
	Right Tilted	0.157	0.645	0.237	0.080	0.218	0.449	0.474	0.612	0.843	0.394	0.802	0.237	0.375	0.606	
	Left Cheek	0.469	0.440	0.355	0.192	0.098	0.168	1.016	0.922	0.992	0.824	0.909	0.661	0.567	0.637	
	Left Tilted	0.185	0.553	0.372	0.241	0.130	0.237	0.798	0.687	0.794	0.557	0.738	0.426	0.315	0.422	
LTE Band 26_Ant 1	Right Cheek	0.819	0.352	0.402	0.062	0.115	0.210	1.283	1.336	1.431	1.221	1.171	0.881	0.934	1.029	
	Right Tilted	0.712	0.645	0.237	0.080	0.218	0.449	1.029	1.167	1.398	0.949	1.357	0.792	0.930	1.161	
	Left Cheek	0.446	0.440	0.355	0.192	0.098	0.168	0.993	0.899	0.969	0.801	0.886	0.638	0.544	0.614	
	Left Tilted	0.390	0.553	0.372	0.241	0.130	0.237	1.003	0.892	0.999	0.762	0.943	0.631	0.520	0.627	
LTE Band 30_Ant 0	Right Cheek	0.161	0.352	0.402	0.062	0.115	0.210	0.625	0.678	0.773	0.563	0.513	0.223	0.276	0.371	
	Right Tilted	0.139	0.645	0.237	0.080	0.218	0.449	0.456	0.594	0.825	0.376	0.784	0.219	0.357	0.588	
	Left Cheek	0.384	0.440	0.355	0.192	0.098	0.168	0.931	0.837	0.907	0.739	0.824	0.576	0.482	0.552	
	Left Tilted	0.110	0.553	0.372	0.241	0.130	0.237	0.723	0.612	0.719	0.482	0.663	0.351	0.240	0.347	
LTE Band 41_Ant 0	Right Cheek	0.073	0.352	0.402	0.062	0.115	0.210	0.537	0.590	0.685	0.475	0.425	0.135	0.188	0.283	
	Right Tilted	0.064	0.645	0.237	0.080	0.218	0.449	0.381	0.519	0.750	0.301	0.709	0.144	0.282	0.513	
	Left Cheek	0.242	0.440	0.355	0.192	0.098	0.168	0.789	0.695	0.765	0.597	0.682	0.434	0.340	0.410	



**FCC SAR TEST REPORT**

**Report No. : FA0D2942-05C**

	Left Tilted	0.046	0.553	0.372	0.241	0.130	0.237	0.659	0.548	0.655	0.418	0.599	0.287	0.176	0.283
LTE Band 48_Ant 2	Right Cheek	0.410	0.352	0.402	0.062	0.115	0.210	0.874	0.927	1.022	0.812	0.762	0.472	0.525	0.620
	Right Tilted	0.139	0.645	0.237	0.080	0.218	0.449	0.456	0.594	0.825	0.376	0.784	0.219	0.357	0.588
	Left Cheek	0.177	0.440	0.355	0.192	0.098	0.168	0.724	0.630	0.700	0.532	0.617	0.369	0.275	0.345
	Left Tilted	0.086	0.553	0.372	0.241	0.130	0.237	0.699	0.588	0.695	0.458	0.639	0.327	0.216	0.323
LTE Band 66_Ant 0	Right Cheek	0.241	0.352	0.402	0.062	0.115	0.210	0.705	0.758	0.853	0.643	0.593	0.303	0.356	0.451
	Right Tilted	0.201	0.645	0.237	0.080	0.218	0.449	0.518	0.656	0.887	0.438	0.846	0.281	0.419	0.650
	Left Cheek	0.467	0.440	0.355	0.192	0.098	0.168	1.014	0.920	0.990	0.822	0.907	0.659	0.565	0.635
	Left Tilted	0.191	0.553	0.372	0.241	0.130	0.237	0.804	0.693	0.800	0.563	0.744	0.432	0.321	0.428
LTE Band 71_Ant 1	Right Cheek	0.771	0.352	0.402	0.062	0.115	0.210	1.235	1.288	1.383	1.173	1.123	0.833	0.886	0.981
	Right Tilted	0.867	0.645	0.237	0.080	0.218	0.449	1.184	1.322	1.553	1.104	1.512	0.947	1.085	1.316
	Left Cheek	0.323	0.440	0.355	0.192	0.098	0.168	0.870	0.776	0.846	0.678	0.763	0.515	0.421	0.491
	Left Tilted	0.333	0.553	0.372	0.241	0.130	0.237	0.946	0.835	0.942	0.705	0.886	0.574	0.463	0.570
FR1 n5_Ant 1	Right Cheek	0.694	0.352	0.402	0.062	0.115	0.210	1.158	1.211	1.306	1.096	1.046	0.756	0.809	0.904
	Right Tilted	0.716	0.645	0.237	0.080	0.218	0.449	1.033	1.171	1.402	0.953	1.361	0.796	0.934	1.165
	Left Cheek	0.401	0.440	0.355	0.192	0.098	0.168	0.948	0.854	0.924	0.756	0.841	0.593	0.499	0.569
	Left Tilted	0.342	0.553	0.372	0.241	0.130	0.237	0.955	0.844	0.951	0.714	0.895	0.583	0.472	0.579
FR1 n7_Ant 0	Right Cheek	0.134	0.352	0.402	0.062	0.115	0.210	0.598	0.651	0.746	0.536	0.486	0.196	0.249	0.344
	Right Tilted	0.085	0.645	0.237	0.080	0.218	0.449	0.402	0.540	0.771	0.322	0.730	0.165	0.303	0.534
	Left Cheek	0.363	0.440	0.355	0.192	0.098	0.168	0.910	0.816	0.886	0.718	0.803	0.555	0.461	0.531
	Left Tilted	0.150	0.553	0.372	0.241	0.130	0.237	0.763	0.652	0.759	0.522	0.703	0.391	0.280	0.387
FR1 n12_Ant 1	Right Cheek	0.801	0.352	0.402	0.062	0.115	0.210	1.265	1.318	1.413	1.203	1.153	0.863	0.916	1.011
	Right Tilted	0.677	0.645	0.237	0.080	0.218	0.449	0.994	1.132	1.363	0.914	1.322	0.757	0.895	1.126
	Left Cheek	0.346	0.440	0.355	0.192	0.098	0.168	0.893	0.799	0.869	0.701	0.786	0.538	0.444	0.514
	Left Tilted	0.308	0.553	0.372	0.241	0.130	0.237	0.921	0.810	0.917	0.680	0.861	0.549	0.438	0.545
FR1 n25_Ant 0	Right Cheek	0.192	0.352	0.402	0.062	0.115	0.210	0.656	0.709	0.804	0.594	0.544	0.254	0.307	0.402
	Right Tilted	0.160	0.645	0.237	0.080	0.218	0.449	0.477	0.615	0.846	0.397	0.805	0.240	0.378	0.609
	Left Cheek	0.485	0.440	0.355	0.192	0.098	0.168	1.032	0.938	1.008	0.840	0.925	0.677	0.583	0.653
	Left Tilted	0.192	0.553	0.372	0.241	0.130	0.237	0.805	0.694	0.801	0.564	0.745	0.433	0.322	0.429
FR1 n30_Ant 0	Right Cheek	0.155	0.352	0.402	0.062	0.115	0.210	0.619	0.672	0.767	0.557	0.507	0.217	0.270	0.365
	Right Tilted	0.129	0.645	0.237	0.080	0.218	0.449	0.446	0.584	0.815	0.366	0.774	0.209	0.347	0.578
	Left Cheek	0.313	0.440	0.355	0.192	0.098	0.168	0.860	0.766	0.836	0.668	0.753	0.505	0.411	0.481
	Left Tilted	0.095	0.553	0.372	0.241	0.130	0.237	0.708	0.597	0.704	0.467	0.648	0.336	0.225	0.332
FR1 n41_Ant 1	Right Cheek	0.906	0.352	0.402	0.062	0.115	0.210	1.370	1.423	1.518	1.308	1.258	0.968	1.021	1.116
	Right Tilted	0.619	0.645	0.237	0.080	0.218	0.449	0.936	1.074	1.305	0.856	1.264	0.699	0.837	1.068
	Left Cheek	0.181	0.440	0.355	0.192	0.098	0.168	0.728	0.634	0.704	0.536	0.621	0.373	0.279	0.349
	Left Tilted	0.189	0.553	0.372	0.241	0.130	0.237	0.802	0.691	0.798	0.561	0.742	0.430	0.319	0.426
FR1 n66_Ant 0	Right Cheek	0.180	0.352	0.402	0.062	0.115	0.210	0.644	0.697	0.792	0.582	0.532	0.242	0.295	0.390
	Right Tilted	0.175	0.645	0.237	0.080	0.218	0.449	0.492	0.630	0.861	0.412	0.820	0.255	0.393	0.624
	Left Cheek	0.391	0.440	0.355	0.192	0.098	0.168	0.938	0.844	0.914	0.746	0.831	0.583	0.489	0.559
	Left Tilted	0.195	0.553	0.372	0.241	0.130	0.237	0.808	0.697	0.804	0.567	0.748	0.436	0.325	0.432
FR1 n71_Ant 1	Right Cheek	0.882	0.352	0.402	0.062	0.115	0.210	1.346	1.399	1.494	1.284	1.234	0.944	0.997	1.092
	Right Tilted	0.836	0.645	0.237	0.080	0.218	0.449	1.153	1.291	1.522	1.073	1.481	0.916	1.054	1.285
	Left Cheek	0.277	0.440	0.355	0.192	0.098	0.168	0.824	0.730	0.800	0.632	0.717	0.469	0.375	0.445
	Left Tilted	0.206	0.553	0.372	0.241	0.130	0.237	0.819	0.708	0.815	0.578	0.759	0.447	0.336	0.443
FR1 n77_Ant 2	Right Cheek	0.884	0.352	0.402	0.062	0.115	0.210	1.348	1.401	1.496	1.286	1.236	0.946	0.999	1.094
	Right Tilted	0.393	0.645	0.237	0.080	0.218	0.449	0.710	0.848	1.079	0.630	1.038	0.473	0.611	0.842
	Left Cheek	0.583	0.440	0.355	0.192	0.098	0.168	1.130	1.036	1.106	0.938	1.023	0.775	0.681	0.751
	Left Tilted	0.599	0.553	0.372	0.241	0.130	0.237	1.212	1.101	1.208	0.971	1.152	0.840	0.729	0.836



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

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 4+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 0	Right Cheek	0.251	0.090	0.451	<b>0.792</b>
	Right Tilted	0.163	0.135	0.299	<b>0.597</b>
	Left Cheek	0.403	0.169	0.447	<b>1.019</b>
	Left Tilted	0.251	0.199	0.469	<b>0.919</b>
GSM1900_Ant 2	Right Cheek	0.122	0.090	0.451	<b>0.663</b>
	Right Tilted	0.073	0.135	0.299	<b>0.507</b>
	Left Cheek	0.096	0.169	0.447	<b>0.712</b>
	Left Tilted	0.076	0.199	0.469	<b>0.744</b>
WCDMA II_Ant 2	Right Cheek	0.142	0.090	0.451	<b>0.683</b>
	Right Tilted	0.001	0.135	0.299	<b>0.435</b>
	Left Cheek	0.130	0.169	0.447	<b>0.746</b>
	Left Tilted	0.044	0.199	0.469	<b>0.712</b>
WCDMA IV_Ant 2	Right Cheek	0.280	0.090	0.451	<b>0.821</b>
	Right Tilted	0.001	0.135	0.299	<b>0.435</b>
	Left Cheek	0.137	0.169	0.447	<b>0.753</b>
	Left Tilted	0.001	0.199	0.469	<b>0.669</b>
WCDMA V_Ant 0	Right Cheek	0.229	0.090	0.451	<b>0.770</b>
	Right Tilted	0.064	0.135	0.299	<b>0.498</b>
	Left Cheek	0.321	0.169	0.447	<b>0.937</b>
	Left Tilted	0.122	0.199	0.469	<b>0.790</b>
LTE Band 7_Ant 2	Right Cheek	0.450	0.090	0.451	<b>0.991</b>
	Right Tilted	0.243	0.135	0.299	<b>0.677</b>
	Left Cheek	0.312	0.169	0.447	<b>0.928</b>
	Left Tilted	0.282	0.199	0.469	<b>0.950</b>
LTE Band 12_Ant 0	Right Cheek	0.208	0.090	0.451	<b>0.749</b>
	Right Tilted	0.123	0.135	0.299	<b>0.557</b>
	Left Cheek	0.289	0.169	0.447	<b>0.905</b>
	Left Tilted	0.158	0.199	0.469	<b>0.826</b>
LTE Band 13_Ant 0	Right Cheek	0.240	0.090	0.451	<b>0.781</b>
	Right Tilted	0.152	0.135	0.299	<b>0.586</b>
	Left Cheek	0.328	0.169	0.447	<b>0.944</b>
	Left Tilted	0.220	0.199	0.469	<b>0.888</b>
LTE Band 14_Ant 0	Right Cheek	0.254	0.090	0.451	<b>0.795</b>
	Right Tilted	0.154	0.135	0.299	<b>0.588</b>
	Left Cheek	0.344	0.169	0.447	<b>0.960</b>
	Left Tilted	0.211	0.199	0.469	<b>0.879</b>
LTE Band 25_Ant 2	Right Cheek	0.128	0.090	0.451	<b>0.669</b>
	Right Tilted	0.079	0.135	0.299	<b>0.513</b>
	Left Cheek	0.109	0.169	0.447	<b>0.725</b>
	Left Tilted	0.096	0.199	0.469	<b>0.764</b>
LTE Band 26_Ant 0	Right Cheek	0.214	0.090	0.451	<b>0.755</b>
	Right Tilted	0.141	0.135	0.299	<b>0.575</b>
	Left Cheek	0.309	0.169	0.447	<b>0.925</b>
	Left Tilted	0.158	0.199	0.469	<b>0.826</b>
LTE Band 30_Ant 2	Right Cheek	0.228	0.090	0.451	<b>0.769</b>
	Right Tilted	0.096	0.135	0.299	<b>0.530</b>
	Left Cheek	0.116	0.169	0.447	<b>0.732</b>
	Left Tilted	0.101	0.199	0.469	<b>0.769</b>
LTE Band 41_Ant 2	Right Cheek	0.272	0.090	0.451	<b>0.813</b>
	Right Tilted	0.090	0.135	0.299	<b>0.524</b>
	Left Cheek	0.165	0.169	0.447	<b>0.781</b>



	Left Tilted	0.124	0.199	0.469	<b>0.792</b>
LTE Band 48_Ant 6	Right Cheek	0.280	0.090	0.451	<b>0.821</b>
	Right Tilted	0.233	0.135	0.299	<b>0.667</b>
	Left Cheek	0.450	0.169	0.447	<b>1.066</b>
	Left Tilted	0.161	0.199	0.469	<b>0.829</b>
LTE Band 66_Ant 2	Right Cheek	0.208	0.090	0.451	<b>0.749</b>
	Right Tilted	0.130	0.135	0.299	<b>0.564</b>
	Left Cheek	0.138	0.169	0.447	<b>0.754</b>
	Left Tilted	0.112	0.199	0.469	<b>0.780</b>
LTE Band 71_Ant 0	Right Cheek	0.204	0.090	0.451	<b>0.745</b>
	Right Tilted	0.113	0.135	0.299	<b>0.547</b>
	Left Cheek	0.276	0.169	0.447	<b>0.892</b>
	Left Tilted	0.149	0.199	0.469	<b>0.817</b>
FR1 n5_Ant 0	Right Cheek	0.208	0.090	0.451	<b>0.749</b>
	Right Tilted	0.127	0.135	0.299	<b>0.561</b>
	Left Cheek	0.281	0.169	0.447	<b>0.897</b>
	Left Tilted	0.168	0.199	0.469	<b>0.836</b>
FR1 n7_Ant 2	Right Cheek	0.356	0.090	0.451	<b>0.897</b>
	Right Tilted	0.164	0.135	0.299	<b>0.598</b>
	Left Cheek	0.076	0.169	0.447	<b>0.692</b>
	Left Tilted	0.067	0.199	0.469	<b>0.735</b>
FR1 n12_Ant 0	Right Cheek	0.177	0.090	0.451	<b>0.718</b>
	Right Tilted	0.113	0.135	0.299	<b>0.547</b>
	Left Cheek	0.242	0.169	0.447	<b>0.858</b>
	Left Tilted	0.153	0.199	0.469	<b>0.821</b>
FR1 n25_Ant 2	Right Cheek	0.101	0.090	0.451	<b>0.642</b>
	Right Tilted	0.067	0.135	0.299	<b>0.501</b>
	Left Cheek	0.121	0.169	0.447	<b>0.737</b>
	Left Tilted	0.098	0.199	0.469	<b>0.766</b>
FR1 n30_Ant 2	Right Cheek	0.200	0.090	0.451	<b>0.741</b>
	Right Tilted	0.084	0.135	0.299	<b>0.518</b>
	Left Cheek	0.117	0.169	0.447	<b>0.733</b>
	Left Tilted	0.119	0.199	0.469	<b>0.787</b>
FR1 n41_Ant 5	Right Cheek	0.311	0.090	0.451	<b>0.852</b>
	Right Tilted	0.150	0.135	0.299	<b>0.584</b>
	Left Cheek	0.886	0.169	0.447	<b>1.502</b>
	Left Tilted	0.244	0.199	0.469	<b>0.912</b>
FR1 n66_Ant 2	Right Cheek	0.225	0.090	0.451	<b>0.766</b>
	Right Tilted	0.157	0.135	0.299	<b>0.591</b>
	Left Cheek	0.160	0.169	0.447	<b>0.776</b>
	Left Tilted	0.118	0.199	0.469	<b>0.786</b>
FR1 n71_Ant 0	Right Cheek	0.184	0.090	0.451	<b>0.725</b>
	Right Tilted	0.106	0.135	0.299	<b>0.540</b>
	Left Cheek	0.244	0.169	0.447	<b>0.860</b>
	Left Tilted	0.146	0.199	0.469	<b>0.814</b>
FR1 n77_Ant 6	Right Cheek	0.546	0.090	0.451	<b>1.087</b>
	Right Tilted	0.395	0.135	0.299	<b>0.829</b>
	Left Cheek	0.846	0.169	0.447	<b>1.462</b>
	Left Tilted	0.300	0.199	0.469	<b>0.968</b>



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

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 4+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Right Cheek	0.641	0.090	0.451	1.182
	Right Tilted	0.771	0.135	0.299	1.205
	Left Cheek	0.319	0.169	0.447	0.935
	Left Tilted	0.311	0.199	0.469	0.979
GSM1900_Ant 0	Right Cheek	0.184	0.090	0.451	0.725
	Right Tilted	0.161	0.135	0.299	0.595
	Left Cheek	0.460	0.169	0.447	1.076
	Left Tilted	0.172	0.199	0.469	0.840
WCDMA II_Ant 0	Right Cheek	0.138	0.090	0.451	0.679
	Right Tilted	0.051	0.135	0.299	0.485
	Left Cheek	0.470	0.169	0.447	1.086
	Left Tilted	0.152	0.199	0.469	0.820
WCDMA IV_Ant 0	Right Cheek	0.180	0.090	0.451	0.721
	Right Tilted	0.144	0.135	0.299	0.578
	Left Cheek	0.359	0.169	0.447	0.975
	Left Tilted	0.168	0.199	0.469	0.836
WCDMA V_Ant 1	Right Cheek	0.739	0.090	0.451	1.280
	Right Tilted	0.826	0.135	0.299	1.260
	Left Cheek	0.423	0.169	0.447	1.039
	Left Tilted	0.381	0.199	0.469	1.049
LTE Band 7_Ant 0	Right Cheek	0.193	0.090	0.451	0.734
	Right Tilted	0.096	0.135	0.299	0.530
	Left Cheek	0.435	0.169	0.447	1.051
	Left Tilted	0.157	0.199	0.469	0.825
LTE Band 12_Ant 1	Right Cheek	0.757	0.090	0.451	1.298
	Right Tilted	0.787	0.135	0.299	1.221
	Left Cheek	0.366	0.169	0.447	0.982
	Left Tilted	0.336	0.199	0.469	1.004
LTE Band 13_Ant 1	Right Cheek	0.747	0.090	0.451	1.288
	Right Tilted	0.908	0.135	0.299	1.342
	Left Cheek	0.341	0.169	0.447	0.957
	Left Tilted	0.291	0.199	0.469	0.959
LTE Band 14_Ant 1	Right Cheek	0.887	0.090	0.451	1.428
	Right Tilted	0.829	0.135	0.299	1.263
	Left Cheek	0.433	0.169	0.447	1.049
	Left Tilted	0.386	0.199	0.469	1.054
LTE Band 25_Ant 0	Right Cheek	0.256	0.090	0.451	0.797
	Right Tilted	0.157	0.135	0.299	0.591
	Left Cheek	0.469	0.169	0.447	1.085
	Left Tilted	0.185	0.199	0.469	0.853
LTE Band 26_Ant 1	Right Cheek	0.819	0.090	0.451	1.360
	Right Tilted	0.712	0.135	0.299	1.146
	Left Cheek	0.446	0.169	0.447	1.062
	Left Tilted	0.390	0.199	0.469	1.058
LTE Band 30_Ant 0	Right Cheek	0.161	0.090	0.451	0.702
	Right Tilted	0.139	0.135	0.299	0.573
	Left Cheek	0.384	0.169	0.447	1.000
	Left Tilted	0.110	0.199	0.469	0.778
LTE Band 41_Ant 0	Right Cheek	0.073	0.090	0.451	0.614
	Right Tilted	0.064	0.135	0.299	0.498
	Left Cheek	0.242	0.169	0.447	0.858



	Left Tilted	0.046	0.199	0.469	<b>0.714</b>
LTE Band 48_Ant 2	Right Cheek	0.410	0.090	0.451	<b>0.951</b>
	Right Tilted	0.139	0.135	0.299	<b>0.573</b>
	Left Cheek	0.177	0.169	0.447	<b>0.793</b>
	Left Tilted	0.086	0.199	0.469	<b>0.754</b>
LTE Band 66_Ant 0	Right Cheek	0.241	0.090	0.451	<b>0.782</b>
	Right Tilted	0.201	0.135	0.299	<b>0.635</b>
	Left Cheek	0.467	0.169	0.447	<b>1.083</b>
	Left Tilted	0.191	0.199	0.469	<b>0.859</b>
LTE Band 71_Ant 1	Right Cheek	0.771	0.090	0.451	<b>1.312</b>
	Right Tilted	0.867	0.135	0.299	<b>1.301</b>
	Left Cheek	0.323	0.169	0.447	<b>0.939</b>
	Left Tilted	0.333	0.199	0.469	<b>1.001</b>
FR1 n5_Ant 1	Right Cheek	0.694	0.090	0.451	<b>1.235</b>
	Right Tilted	0.716	0.135	0.299	<b>1.150</b>
	Left Cheek	0.401	0.169	0.447	<b>1.017</b>
	Left Tilted	0.342	0.199	0.469	<b>1.010</b>
FR1 n7_Ant 0	Right Cheek	0.134	0.090	0.451	<b>0.675</b>
	Right Tilted	0.085	0.135	0.299	<b>0.519</b>
	Left Cheek	0.363	0.169	0.447	<b>0.979</b>
	Left Tilted	0.150	0.199	0.469	<b>0.818</b>
FR1 n12_Ant 1	Right Cheek	0.801	0.090	0.451	<b>1.342</b>
	Right Tilted	0.677	0.135	0.299	<b>1.111</b>
	Left Cheek	0.346	0.169	0.447	<b>0.962</b>
	Left Tilted	0.308	0.199	0.469	<b>0.976</b>
FR1 n25_Ant 0	Right Cheek	0.192	0.090	0.451	<b>0.733</b>
	Right Tilted	0.160	0.135	0.299	<b>0.594</b>
	Left Cheek	0.485	0.169	0.447	<b>1.101</b>
	Left Tilted	0.192	0.199	0.469	<b>0.860</b>
FR1 n30_Ant 0	Right Cheek	0.155	0.090	0.451	<b>0.696</b>
	Right Tilted	0.129	0.135	0.299	<b>0.563</b>
	Left Cheek	0.313	0.169	0.447	<b>0.929</b>
	Left Tilted	0.095	0.199	0.469	<b>0.763</b>
FR1 n41_Ant 1	Right Cheek	0.906	0.090	0.451	<b>1.447</b>
	Right Tilted	0.619	0.135	0.299	<b>1.053</b>
	Left Cheek	0.181	0.169	0.447	<b>0.797</b>
	Left Tilted	0.189	0.199	0.469	<b>0.857</b>
FR1 n66_Ant 0	Right Cheek	0.180	0.090	0.451	<b>0.721</b>
	Right Tilted	0.175	0.135	0.299	<b>0.609</b>
	Left Cheek	0.391	0.169	0.447	<b>1.007</b>
	Left Tilted	0.195	0.199	0.469	<b>0.863</b>
FR1 n71_Ant 1	Right Cheek	0.882	0.090	0.451	<b>1.423</b>
	Right Tilted	0.836	0.135	0.299	<b>1.270</b>
	Left Cheek	0.277	0.169	0.447	<b>0.893</b>
	Left Tilted	0.206	0.199	0.469	<b>0.874</b>
FR1 n77_Ant 2	Right Cheek	0.884	0.090	0.451	<b>1.425</b>
	Right Tilted	0.393	0.135	0.299	<b>0.827</b>
	Left Cheek	0.583	0.169	0.447	<b>1.199</b>
	Left Tilted	0.599	0.199	0.469	<b>1.267</b>



**16.3 Hotspot Exposure Conditions**

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

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)	
GSM850_Ant 0	Front	0.550	0.143	0.236	0.929
	Back	0.429	0.214	0.352	0.995
	Left side	0.770	0.109	0.306	1.185
	Right side	0.376	0.032	0.121	0.529
	Top side		0.430	0.199	0.629
	Bottom side	0.604			0.604
GSM1900_Ant 2	Front	0.661	0.143	0.236	1.040
	Back	0.729	0.214	0.352	1.295
	Left side	0.081	0.109	0.306	0.496
	Right side	0.549	0.032	0.121	0.702
	Top side		0.430	0.199	0.629
	Bottom side	0.904			0.904
WCDMA II_Ant 2	Front	0.758	0.143	0.236	1.137
	Back	0.682	0.214	0.352	1.248
	Left side	0.079	0.109	0.306	0.494
	Right side	0.458	0.032	0.121	0.611
	Top side		0.430	0.199	0.629
	Bottom side	0.903			0.903
WCDMA IV_Ant 2	Front	0.739	0.143	0.236	1.118
	Back	0.667	0.214	0.352	1.233
	Left side	0.294	0.109	0.306	0.709
	Right side	0.555	0.032	0.121	0.708
	Top side		0.430	0.199	0.629
	Bottom side	0.894			0.894
WCDMA V_Ant 0	Front	0.281	0.143	0.236	0.660
	Back	0.190	0.214	0.352	0.756
	Left side	0.298	0.109	0.306	0.713
	Right side	0.138	0.032	0.121	0.291
	Top side		0.430	0.199	0.629
	Bottom side	0.111			0.111
LTE Band 7_Ant 2	Front	0.577	0.143	0.236	0.956
	Back	0.587	0.214	0.352	1.153
	Left side	0.038	0.109	0.306	0.453
	Right side	0.421	0.032	0.121	0.574
	Top side		0.430	0.199	0.629
	Bottom side	0.866			0.866
LTE Band 12_Ant 0	Front	0.294	0.143	0.236	0.673
	Back	0.312	0.214	0.352	0.878
	Left side	0.506	0.109	0.306	0.921
	Right side	0.309	0.032	0.121	0.462
	Top side		0.430	0.199	0.629
	Bottom side	0.111			0.111
LTE Band 13_Ant 0	Front	0.386	0.143	0.236	0.765
	Back	0.382	0.214	0.352	0.948
	Left side	0.458	0.109	0.306	0.873
	Right side	0.318	0.032	0.121	0.471
	Top side		0.430	0.199	0.629
	Bottom side	0.137			0.137
LTE Band 14_Ant 0	Front	0.385	0.143	0.236	0.764





	Back	0.367	0.214	0.352	<b>0.933</b>
	Left side	0.446	0.109	0.306	<b>0.861</b>
	Right side	0.303	0.032	0.121	<b>0.456</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.152			<b>0.152</b>
LTE Band 25_Ant 2	Front	0.599	0.143	0.236	<b>0.978</b>
	Back	0.593	0.214	0.352	<b>1.159</b>
	Left side	0.065	0.109	0.306	<b>0.480</b>
	Right side	0.356	0.032	0.121	<b>0.509</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.894			<b>0.894</b>
LTE Band 26_Ant 0	Front	0.311	0.143	0.236	<b>0.690</b>
	Back	0.329	0.214	0.352	<b>0.895</b>
	Left side	0.473	0.109	0.306	<b>0.888</b>
	Right side	0.231	0.032	0.121	<b>0.384</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.270			<b>0.270</b>
LTE Band 30_Ant 2	Front	0.531	0.143	0.236	<b>0.910</b>
	Back	0.610	0.214	0.352	<b>1.176</b>
	Left side	0.038	0.109	0.306	<b>0.453</b>
	Right side	0.483	0.032	0.121	<b>0.636</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.897			<b>0.897</b>
LTE Band 41_Ant 2	Front	0.718	0.143	0.236	<b>1.097</b>
	Back	0.761	0.214	0.352	<b>1.327</b>
	Left side	0.034	0.109	0.306	<b>0.449</b>
	Right side	0.551	0.032	0.121	<b>0.704</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.891			<b>0.891</b>
LTE Band 48_Ant 6	Front	0.506	0.143	0.236	<b>0.885</b>
	Back	0.517	0.214	0.352	<b>1.083</b>
	Left side	0.891	0.109	0.306	<b>1.306</b>
	Right side	0.032	0.032	0.121	<b>0.185</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.147			<b>0.147</b>
LTE Band 66_Ant 2	Front	0.561	0.143	0.236	<b>0.940</b>
	Back	0.540	0.214	0.352	<b>1.106</b>
	Left side	0.158	0.109	0.306	<b>0.573</b>
	Right side	0.433	0.032	0.121	<b>0.586</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.910			<b>0.910</b>
LTE Band 71_Ant 0	Front	0.341	0.143	0.236	<b>0.720</b>
	Back	0.333	0.214	0.352	<b>0.899</b>
	Left side	0.468	0.109	0.306	<b>0.883</b>
	Right side	0.326	0.032	0.121	<b>0.479</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.066			<b>0.066</b>
FR1 n5_Ant 0	Front	0.258	0.143	0.236	<b>0.637</b>
	Back	0.230	0.214	0.352	<b>0.796</b>
	Left side	0.425	0.109	0.306	<b>0.840</b>
	Right side	0.175	0.032	0.121	<b>0.328</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.160			<b>0.160</b>
FR1 n7_Ant 2	Front	0.547	0.143	0.236	<b>0.926</b>
	Back	0.535	0.214	0.352	<b>1.101</b>
	Left side	0.029	0.109	0.306	<b>0.444</b>



	Right side	0.495	0.032	0.121	<b>0.648</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.910			<b>0.910</b>
FR1 n12_Ant 0	Front	0.316	0.143	0.236	<b>0.695</b>
	Back	0.293	0.214	0.352	<b>0.859</b>
	Left side	0.404	0.109	0.306	<b>0.819</b>
	Right side	0.244	0.032	0.121	<b>0.397</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.064			<b>0.064</b>
FR1 n25_Ant 2	Front	0.616	0.143	0.236	<b>0.995</b>
	Back	0.550	0.214	0.352	<b>1.116</b>
	Left side	0.055	0.109	0.306	<b>0.470</b>
	Right side	0.350	0.032	0.121	<b>0.503</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.897			<b>0.897</b>
FR1 n30_Ant 2	Front	0.633	0.143	0.236	<b>1.012</b>
	Back	0.659	0.214	0.352	<b>1.225</b>
	Left side	0.025	0.109	0.306	<b>0.440</b>
	Right side	0.530	0.032	0.121	<b>0.683</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.898			<b>0.898</b>
FR1 n41_Ant 5	Front	0.449	0.143	0.236	<b>0.828</b>
	Back	0.542	0.214	0.352	<b>1.108</b>
	Left side	0.028	0.109	0.306	<b>0.443</b>
	Right side	0.910	0.032	0.121	<b>1.063</b>
	Top side	0.157	0.430	0.199	<b>0.786</b>
	Bottom side				<b>0.000</b>
FR1 n66_Ant 2	Front	0.653	0.143	0.236	<b>1.032</b>
	Back	0.697	0.214	0.352	<b>1.263</b>
	Left side	0.206	0.109	0.306	<b>0.621</b>
	Right side	0.514	0.032	0.121	<b>0.667</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.817			<b>0.817</b>
FR1 n71_Ant 0	Front	0.225	0.143	0.236	<b>0.604</b>
	Back	0.215	0.214	0.352	<b>0.781</b>
	Left side	0.232	0.109	0.306	<b>0.647</b>
	Right side	0.171	0.032	0.121	<b>0.324</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.031			<b>0.031</b>
FR1 n77_Ant 6	Front	0.552	0.143	0.236	<b>0.931</b>
	Back	0.562	0.214	0.352	<b>1.128</b>
	Left side	0.788	0.109	0.306	<b>1.203</b>
	Right side	0.026	0.032	0.121	<b>0.179</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.151			<b>0.151</b>



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

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5GHz WLAN Ant 4+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Front	0.545	0.143	0.236	<b>0.924</b>
	Back	0.824	0.214	0.352	<b>1.390</b>
	Left side	0.281	0.109	0.306	<b>0.696</b>
	Right side	0.221	0.032	0.121	<b>0.374</b>
	Top side	0.462	0.430	0.199	<b>1.091</b>
	Bottom side				<b>0.000</b>
GSM1900_Ant 0	Front	0.738	0.143	0.236	<b>1.117</b>
	Back	0.654	0.214	0.352	<b>1.220</b>
	Left side	0.077	0.109	0.306	<b>0.492</b>
	Right side	0.633	0.032	0.121	<b>0.786</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.887			<b>0.887</b>
WCDMA II_Ant 0	Front	0.552	0.143	0.236	<b>0.931</b>
	Back	0.715	0.214	0.352	<b>1.281</b>
	Left side	0.665	0.109	0.306	<b>1.080</b>
	Right side	0.039	0.032	0.121	<b>0.192</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.907			<b>0.907</b>
WCDMA IV_Ant 0	Front	0.504	0.143	0.236	<b>0.883</b>
	Back	0.585	0.214	0.352	<b>1.151</b>
	Left side	0.807	0.109	0.306	<b>1.222</b>
	Right side	0.094	0.032	0.121	<b>0.247</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.400			<b>0.400</b>
WCDMA V_Ant 1	Front	0.349	0.143	0.236	<b>0.728</b>
	Back	0.493	0.214	0.352	<b>1.059</b>
	Left side	0.205	0.109	0.306	<b>0.620</b>
	Right side	0.106	0.032	0.121	<b>0.259</b>
	Top side	0.297	0.430	0.199	<b>0.926</b>
	Bottom side				<b>0.000</b>
LTE Band 7_Ant 0	Front	0.426	0.143	0.236	<b>0.805</b>
	Back	0.500	0.214	0.352	<b>1.066</b>
	Left side	0.787	0.109	0.306	<b>1.202</b>
	Right side	0.069	0.032	0.121	<b>0.222</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.309			<b>0.309</b>
LTE Band 12_Ant 1	Front	0.215	0.143	0.236	<b>0.594</b>
	Back	0.284	0.214	0.352	<b>0.850</b>
	Left side	0.168	0.109	0.306	<b>0.583</b>
	Right side	0.055	0.032	0.121	<b>0.208</b>
	Top side	0.164	0.430	0.199	<b>0.793</b>
	Bottom side				<b>0.000</b>
LTE Band 13_Ant 1	Front	0.331	0.143	0.236	<b>0.710</b>
	Back	0.444	0.214	0.352	<b>1.010</b>
	Left side	0.358	0.109	0.306	<b>0.773</b>
	Right side	0.176	0.032	0.121	<b>0.329</b>
	Top side	0.250	0.430	0.199	<b>0.879</b>
	Bottom side				<b>0.000</b>
LTE Band 14_Ant 1	Front	0.331	0.143	0.236	<b>0.710</b>
	Back	0.498	0.214	0.352	<b>1.064</b>
	Left side	0.362	0.109	0.306	<b>0.777</b>



	Right side	0.185	0.032	0.121	<b>0.338</b>
	Top side	0.275	0.430	0.199	<b>0.904</b>
	Bottom side				<b>0.000</b>
LTE Band 25_Ant 0	Front	0.474	0.143	0.236	<b>0.853</b>
	Back	0.634	0.214	0.352	<b>1.200</b>
	Left side	0.640	0.109	0.306	<b>1.055</b>
	Right side	0.028	0.032	0.121	<b>0.181</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.904			<b>0.904</b>
LTE Band 26_Ant 1	Front	0.332	0.143	0.236	<b>0.711</b>
	Back	0.497	0.214	0.352	<b>1.063</b>
	Left side	0.177	0.109	0.306	<b>0.592</b>
	Right side	0.146	0.032	0.121	<b>0.299</b>
	Top side	0.329	0.430	0.199	<b>0.958</b>
	Bottom side				<b>0.000</b>
LTE Band 30_Ant 0	Front	0.430	0.143	0.236	<b>0.809</b>
	Back	0.506	0.214	0.352	<b>1.072</b>
	Left side	0.889	0.109	0.306	<b>1.304</b>
	Right side	0.048	0.032	0.121	<b>0.201</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.287			<b>0.287</b>
LTE Band 41_Ant 0	Front	0.230	0.143	0.236	<b>0.609</b>
	Back	0.327	0.214	0.352	<b>0.893</b>
	Left side	0.600	0.109	0.306	<b>1.015</b>
	Right side	0.056	0.032	0.121	<b>0.209</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.244			<b>0.244</b>
LTE Band 48_Ant 2	Front	0.410	0.143	0.236	<b>0.789</b>
	Back	0.418	0.214	0.352	<b>0.984</b>
	Left side	0.049	0.109	0.306	<b>0.464</b>
	Right side	0.905	0.032	0.121	<b>1.058</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.178			<b>0.178</b>
LTE Band 66_Ant 0	Front	0.367	0.143	0.236	<b>0.746</b>
	Back	0.529	0.214	0.352	<b>1.095</b>
	Left side	0.755	0.109	0.306	<b>1.170</b>
	Right side	0.082	0.032	0.121	<b>0.235</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.256			<b>0.256</b>
LTE Band 71_Ant 1	Front	0.181	0.143	0.236	<b>0.560</b>
	Back	0.220	0.214	0.352	<b>0.786</b>
	Left side	0.195	0.109	0.306	<b>0.610</b>
	Right side	0.070	0.032	0.121	<b>0.223</b>
	Top side	0.105	0.430	0.199	<b>0.734</b>
	Bottom side				<b>0.000</b>
FR1 n5_Ant 1	Front	0.266	0.143	0.236	<b>0.645</b>
	Back	0.396	0.214	0.352	<b>0.962</b>
	Left side	0.123	0.109	0.306	<b>0.538</b>
	Right side	0.133	0.032	0.121	<b>0.286</b>
	Top side	0.236	0.430	0.199	<b>0.865</b>
	Bottom side				<b>0.000</b>
FR1 n7_Ant 0	Front	0.407	0.143	0.236	<b>0.786</b>
	Back	0.266	0.214	0.352	<b>0.832</b>
	Left side	0.653	0.109	0.306	<b>1.068</b>
	Right side	0.068	0.032	0.121	<b>0.221</b>
	Top side		0.430	0.199	<b>0.629</b>



	Bottom side	0.168			<b>0.168</b>
FR1 n12_Ant 1	Front	0.187	0.143	0.236	<b>0.566</b>
	Back	0.251	0.214	0.352	<b>0.817</b>
	Left side	0.141	0.109	0.306	<b>0.556</b>
	Right side	0.001	0.032	0.121	<b>0.154</b>
	Top side	0.102	0.430	0.199	<b>0.731</b>
	Bottom side				<b>0.000</b>
FR1 n25_Ant 0	Front	0.533	0.143	0.236	<b>0.912</b>
	Back	0.628	0.214	0.352	<b>1.194</b>
	Left side	0.624	0.109	0.306	<b>1.039</b>
	Right side	0.026	0.032	0.121	<b>0.179</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.838			<b>0.838</b>
FR1 n30_Ant 0	Front	0.403	0.143	0.236	<b>0.782</b>
	Back	0.456	0.214	0.352	<b>1.022</b>
	Left side	0.756	0.109	0.306	<b>1.171</b>
	Right side	0.051	0.032	0.121	<b>0.204</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.248			<b>0.248</b>
FR1 n41_Ant 1	Front	0.500	0.143	0.236	<b>0.879</b>
	Back	0.446	0.214	0.352	<b>1.012</b>
	Left side	0.613	0.109	0.306	<b>1.028</b>
	Right side	0.013	0.032	0.121	<b>0.166</b>
	Top side	0.345	0.430	0.199	<b>0.974</b>
	Bottom side				<b>0.000</b>
FR1 n66_Ant 0	Front	0.429	0.143	0.236	<b>0.808</b>
	Back	0.553	0.214	0.352	<b>1.119</b>
	Left side	0.798	0.109	0.306	<b>1.213</b>
	Right side	0.106	0.032	0.121	<b>0.259</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.390			<b>0.390</b>
FR1 n71_Ant 1	Front	0.155	0.143	0.236	<b>0.534</b>
	Back	0.193	0.214	0.352	<b>0.759</b>
	Left side	0.182	0.109	0.306	<b>0.597</b>
	Right side	0.074	0.032	0.121	<b>0.227</b>
	Top side	0.192	0.430	0.199	<b>0.821</b>
	Bottom side				<b>0.000</b>
FR1 n77_Ant 2	Front	0.519	0.143	0.236	<b>0.898</b>
	Back	0.366	0.214	0.352	<b>0.932</b>
	Left side	0.073	0.109	0.306	<b>0.488</b>
	Right side	0.843	0.032	0.121	<b>0.996</b>
	Top side		0.430	0.199	<b>0.629</b>
	Bottom side	0.209			<b>0.209</b>



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

WWAN Band	Exposure Position	1	2	3	1+3 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)		
GSM850_Ant 0	Front	0.550	0.343	0.484	1.034	0.893
	Back	0.429	0.449	0.612	1.041	0.878
	Left side	0.770	0.128	0.670	1.440	0.898
	Right side	0.376	0.126	0.253	0.629	0.502
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.604			0.604	0.604
GSM1900_Ant 2	Front	0.661	0.343	0.484	1.145	1.004
	Back	0.729	0.449	0.612	1.341	1.178
	Left side	0.081	0.128	0.670	0.751	0.209
	Right side	0.549	0.126	0.253	0.802	0.675
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.904			0.904	0.904
WCDMA II_Ant 2	Front	0.758	0.343	0.484	1.242	1.101
	Back	0.682	0.449	0.612	1.294	1.131
	Left side	0.079	0.128	0.670	0.749	0.207
	Right side	0.458	0.126	0.253	0.711	0.584
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.903			0.903	0.903
WCDMA IV_Ant 2	Front	0.739	0.343	0.484	1.223	1.082
	Back	0.667	0.449	0.612	1.279	1.116
	Left side	0.294	0.128	0.670	0.964	0.422
	Right side	0.555	0.126	0.253	0.808	0.681
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.894			0.894	0.894
WCDMA V_Ant 0	Front	0.281	0.343	0.484	0.765	0.624
	Back	0.190	0.449	0.612	0.802	0.639
	Left side	0.298	0.128	0.670	0.968	0.426
	Right side	0.138	0.126	0.253	0.391	0.264
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.111			0.111	0.111
LTE Band 7_Ant 2	Front	0.577	0.343	0.484	1.061	0.920
	Back	0.587	0.449	0.612	1.199	1.036
	Left side	0.038	0.128	0.670	0.708	0.166
	Right side	0.421	0.126	0.253	0.674	0.547
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.866			0.866	0.866
LTE Band 12_Ant 0	Front	0.294	0.343	0.484	0.778	0.637
	Back	0.312	0.449	0.612	0.924	0.761
	Left side	0.506	0.128	0.670	1.176	0.634
	Right side	0.309	0.126	0.253	0.562	0.435
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.111			0.111	0.111
LTE Band 13_Ant 0	Front	0.386	0.343	0.484	0.870	0.729
	Back	0.382	0.449	0.612	0.994	0.831
	Left side	0.458	0.128	0.670	1.128	0.586
	Right side	0.318	0.126	0.253	0.571	0.444
	Top side		0.881	0.433	0.433	0.881
	Bottom side	0.137			0.137	0.137
LTE Band 14_Ant 0	Front	0.385	0.343	0.484	0.869	0.728
	Back	0.367	0.449	0.612	0.979	0.816
	Left side	0.446	0.128	0.670	1.116	0.574



	Right side	0.303	0.126	0.253	<b>0.556</b>	<b>0.429</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.152			<b>0.152</b>	<b>0.152</b>
LTE Band 25_Ant 2	Front	0.599	0.343	0.484	<b>1.083</b>	<b>0.942</b>
	Back	0.593	0.449	0.612	<b>1.205</b>	<b>1.042</b>
	Left side	0.065	0.128	0.670	<b>0.735</b>	<b>0.193</b>
	Right side	0.356	0.126	0.253	<b>0.609</b>	<b>0.482</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.894			<b>0.894</b>	<b>0.894</b>
LTE Band 26_Ant 0	Front	0.311	0.343	0.484	<b>0.795</b>	<b>0.654</b>
	Back	0.329	0.449	0.612	<b>0.941</b>	<b>0.778</b>
	Left side	0.473	0.128	0.670	<b>1.143</b>	<b>0.601</b>
	Right side	0.231	0.126	0.253	<b>0.484</b>	<b>0.357</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.270			<b>0.270</b>	<b>0.270</b>
LTE Band 30_Ant 2	Front	0.531	0.343	0.484	<b>1.015</b>	<b>0.874</b>
	Back	0.610	0.449	0.612	<b>1.222</b>	<b>1.059</b>
	Left side	0.038	0.128	0.670	<b>0.708</b>	<b>0.166</b>
	Right side	0.483	0.126	0.253	<b>0.736</b>	<b>0.609</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.897			<b>0.897</b>	<b>0.897</b>
LTE Band 41_Ant 2	Front	0.718	0.343	0.484	<b>1.202</b>	<b>1.061</b>
	Back	0.761	0.449	0.612	<b>1.373</b>	<b>1.210</b>
	Left side	0.034	0.128	0.670	<b>0.704</b>	<b>0.162</b>
	Right side	0.551	0.126	0.253	<b>0.804</b>	<b>0.677</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.891			<b>0.891</b>	<b>0.891</b>
LTE Band 48_Ant 6	Front	0.506	0.343	0.484	<b>0.990</b>	<b>0.849</b>
	Back	0.517	0.449	0.612	<b>1.129</b>	<b>0.966</b>
	Left side	0.891	0.128	0.670	<b>1.561</b>	<b>1.019</b>
	Right side	0.032	0.126	0.253	<b>0.285</b>	<b>0.158</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.147			<b>0.147</b>	<b>0.147</b>
LTE Band 66_Ant 2	Front	0.561	0.343	0.484	<b>1.045</b>	<b>0.904</b>
	Back	0.540	0.449	0.612	<b>1.152</b>	<b>0.989</b>
	Left side	0.158	0.128	0.670	<b>0.828</b>	<b>0.286</b>
	Right side	0.433	0.126	0.253	<b>0.686</b>	<b>0.559</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.910			<b>0.910</b>	<b>0.910</b>
LTE Band 71_Ant 0	Front	0.341	0.343	0.484	<b>0.825</b>	<b>0.684</b>
	Back	0.333	0.449	0.612	<b>0.945</b>	<b>0.782</b>
	Left side	0.468	0.128	0.670	<b>1.138</b>	<b>0.596</b>
	Right side	0.326	0.126	0.253	<b>0.579</b>	<b>0.452</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.066			<b>0.066</b>	<b>0.066</b>
FR1 n5_Ant 0	Front	0.258	0.343	0.484	<b>0.742</b>	<b>0.601</b>
	Back	0.230	0.449	0.612	<b>0.842</b>	<b>0.679</b>
	Left side	0.425	0.128	0.670	<b>1.095</b>	<b>0.553</b>
	Right side	0.175	0.126	0.253	<b>0.428</b>	<b>0.301</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.160			<b>0.160</b>	<b>0.160</b>
FR1 n7_Ant 2	Front	0.547	0.343	0.484	<b>1.031</b>	<b>0.890</b>
	Back	0.535	0.449	0.612	<b>1.147</b>	<b>0.984</b>
	Left side	0.029	0.128	0.670	<b>0.699</b>	<b>0.157</b>
	Right side	0.495	0.126	0.253	<b>0.748</b>	<b>0.621</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>



	Bottom side	0.910			<b>0.910</b>	<b>0.910</b>
FR1 n12_Ant 0	Front	0.316	0.343	0.484	<b>0.800</b>	<b>0.659</b>
	Back	0.293	0.449	0.612	<b>0.905</b>	<b>0.742</b>
	Left side	0.404	0.128	0.670	<b>1.074</b>	<b>0.532</b>
	Right side	0.244	0.126	0.253	<b>0.497</b>	<b>0.370</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.064			<b>0.064</b>	<b>0.064</b>
FR1 n25_Ant 2	Front	0.616	0.343	0.484	<b>1.100</b>	<b>0.959</b>
	Back	0.550	0.449	0.612	<b>1.162</b>	<b>0.999</b>
	Left side	0.055	0.128	0.670	<b>0.725</b>	<b>0.183</b>
	Right side	0.350	0.126	0.253	<b>0.603</b>	<b>0.476</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.897			<b>0.897</b>	<b>0.897</b>
FR1 n30_Ant 2	Front	0.633	0.343	0.484	<b>1.117</b>	<b>0.976</b>
	Back	0.659	0.449	0.612	<b>1.271</b>	<b>1.108</b>
	Left side	0.025	0.128	0.670	<b>0.695</b>	<b>0.153</b>
	Right side	0.530	0.126	0.253	<b>0.783</b>	<b>0.656</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.898			<b>0.898</b>	<b>0.898</b>
FR1 n41_Ant 5	Front	0.449	0.343	0.484	<b>0.933</b>	<b>0.792</b>
	Back	0.542	0.449	0.612	<b>1.154</b>	<b>0.991</b>
	Left side	0.028	0.128	0.670	<b>0.698</b>	<b>0.156</b>
	Right side	0.910	0.126	0.253	<b>1.163</b>	<b>1.036</b>
	Top side	0.157	0.881	0.433	<b>0.590</b>	<b>1.038</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 2	Front	0.653	0.343	0.484	<b>1.137</b>	<b>0.996</b>
	Back	0.697	0.449	0.612	<b>1.309</b>	<b>1.146</b>
	Left side	0.206	0.128	0.670	<b>0.876</b>	<b>0.334</b>
	Right side	0.514	0.126	0.253	<b>0.767</b>	<b>0.640</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.817			<b>0.817</b>	<b>0.817</b>
FR1 n71_Ant 0	Front	0.225	0.343	0.484	<b>0.709</b>	<b>0.568</b>
	Back	0.215	0.449	0.612	<b>0.827</b>	<b>0.664</b>
	Left side	0.232	0.128	0.670	<b>0.902</b>	<b>0.360</b>
	Right side	0.171	0.126	0.253	<b>0.424</b>	<b>0.297</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.031			<b>0.031</b>	<b>0.031</b>
FR1 n77_Ant 6	Front	0.552	0.343	0.484	<b>1.036</b>	<b>0.895</b>
	Back	0.562	0.449	0.612	<b>1.174</b>	<b>1.011</b>
	Left side	0.788	0.128	0.670	<b>1.458</b>	<b>0.916</b>
	Right side	0.026	0.126	0.253	<b>0.279</b>	<b>0.152</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.151			<b>0.151</b>	<b>0.151</b>





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

WWAN Band	Exposure Position	1	2	3	1+3 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5GHz WLAN Ant 4+3 1g SAR (W/kg)		
GSM850_Ant 1	Front	0.545	0.343	0.484	<b>1.029</b>	<b>0.888</b>
	Back	0.824	0.449	0.612	<b>1.436</b>	<b>1.273</b>
	Left side	0.281	0.128	0.670	<b>0.951</b>	<b>0.409</b>
	Right side	0.221	0.126	0.253	<b>0.474</b>	<b>0.347</b>
	Top side	0.462	0.881	0.433	<b>0.895</b>	<b>1.343</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
GSM1900_Ant 0	Front	0.738	0.343	0.484	<b>1.222</b>	<b>1.081</b>
	Back	0.654	0.449	0.612	<b>1.266</b>	<b>1.103</b>
	Left side	0.077	0.128	0.670	<b>0.747</b>	<b>0.205</b>
	Right side	0.633	0.126	0.253	<b>0.886</b>	<b>0.759</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.887			<b>0.887</b>	<b>0.887</b>
WCDMA II_Ant 0	Front	0.552	0.343	0.484	<b>1.036</b>	<b>0.895</b>
	Back	0.715	0.449	0.612	<b>1.327</b>	<b>1.164</b>
	Left side	0.665	0.128	0.670	<b>1.335</b>	<b>0.793</b>
	Right side	0.039	0.126	0.253	<b>0.292</b>	<b>0.165</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.907			<b>0.907</b>	<b>0.907</b>
WCDMA IV_Ant 0	Front	0.504	0.343	0.484	<b>0.988</b>	<b>0.847</b>
	Back	0.585	0.449	0.612	<b>1.197</b>	<b>1.034</b>
	Left side	0.807	0.128	0.670	<b>1.477</b>	<b>0.935</b>
	Right side	0.094	0.126	0.253	<b>0.347</b>	<b>0.220</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.400			<b>0.400</b>	<b>0.400</b>
WCDMA V_Ant 1	Front	0.349	0.343	0.484	<b>0.833</b>	<b>0.692</b>
	Back	0.493	0.449	0.612	<b>1.105</b>	<b>0.942</b>
	Left side	0.205	0.128	0.670	<b>0.875</b>	<b>0.333</b>
	Right side	0.106	0.126	0.253	<b>0.359</b>	<b>0.232</b>
	Top side	0.297	0.881	0.433	<b>0.730</b>	<b>1.178</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 7_Ant 0	Front	0.426	0.343	0.484	<b>0.910</b>	<b>0.769</b>
	Back	0.500	0.449	0.612	<b>1.112</b>	<b>0.949</b>
	Left side	0.787	0.128	0.670	<b>1.457</b>	<b>0.915</b>
	Right side	0.069	0.126	0.253	<b>0.322</b>	<b>0.195</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.309			<b>0.309</b>	<b>0.309</b>
LTE Band 12_Ant 1	Front	0.215	0.343	0.484	<b>0.699</b>	<b>0.558</b>
	Back	0.284	0.449	0.612	<b>0.896</b>	<b>0.733</b>
	Left side	0.168	0.128	0.670	<b>0.838</b>	<b>0.296</b>
	Right side	0.055	0.126	0.253	<b>0.308</b>	<b>0.181</b>
	Top side	0.164	0.881	0.433	<b>0.597</b>	<b>1.045</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 13_Ant 1	Front	0.331	0.343	0.484	<b>0.815</b>	<b>0.674</b>
	Back	0.444	0.449	0.612	<b>1.056</b>	<b>0.893</b>
	Left side	0.358	0.128	0.670	<b>1.028</b>	<b>0.486</b>
	Right side	0.176	0.126	0.253	<b>0.429</b>	<b>0.302</b>
	Top side	0.250	0.881	0.433	<b>0.683</b>	<b>1.131</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 14_Ant 1	Front	0.331	0.343	0.484	<b>0.815</b>	<b>0.674</b>
	Back	0.498	0.449	0.612	<b>1.110</b>	<b>0.947</b>
	Left side	0.362	0.128	0.670	<b>1.032</b>	<b>0.490</b>



	Right side	0.185	0.126	0.253	<b>0.438</b>	<b>0.311</b>
	Top side	0.275	0.881	0.433	<b>0.708</b>	<b>1.156</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 25_Ant 0	Front	0.474	0.343	0.484	<b>0.958</b>	<b>0.817</b>
	Back	0.634	0.449	0.612	<b>1.246</b>	<b>1.083</b>
	Left side	0.640	0.128	0.670	<b>1.310</b>	<b>0.768</b>
	Right side	0.028	0.126	0.253	<b>0.281</b>	<b>0.154</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.904			<b>0.904</b>	<b>0.904</b>
LTE Band 26_Ant 1	Front	0.332	0.343	0.484	<b>0.816</b>	<b>0.675</b>
	Back	0.497	0.449	0.612	<b>1.109</b>	<b>0.946</b>
	Left side	0.177	0.128	0.670	<b>0.847</b>	<b>0.305</b>
	Right side	0.146	0.126	0.253	<b>0.399</b>	<b>0.272</b>
	Top side	0.329	0.881	0.433	<b>0.762</b>	<b>1.210</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
LTE Band 30_Ant 0	Front	0.430	0.343	0.484	<b>0.914</b>	<b>0.773</b>
	Back	0.506	0.449	0.612	<b>1.118</b>	<b>0.955</b>
	Left side	0.889	0.128	0.670	<b>1.559</b>	<b>1.017</b>
	Right side	0.048	0.126	0.253	<b>0.301</b>	<b>0.174</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.287			<b>0.287</b>	<b>0.287</b>
LTE Band 41_Ant 0	Front	0.230	0.343	0.484	<b>0.714</b>	<b>0.573</b>
	Back	0.327	0.449	0.612	<b>0.939</b>	<b>0.776</b>
	Left side	0.600	0.128	0.670	<b>1.270</b>	<b>0.728</b>
	Right side	0.056	0.126	0.253	<b>0.309</b>	<b>0.182</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.244			<b>0.244</b>	<b>0.244</b>
LTE Band 48_Ant 2	Front	0.410	0.343	0.484	<b>0.894</b>	<b>0.753</b>
	Back	0.418	0.449	0.612	<b>1.030</b>	<b>0.867</b>
	Left side	0.049	0.128	0.670	<b>0.719</b>	<b>0.177</b>
	Right side	0.905	0.126	0.253	<b>1.158</b>	<b>1.031</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.178			<b>0.178</b>	<b>0.178</b>
LTE Band 66_Ant 0	Front	0.367	0.343	0.484	<b>0.851</b>	<b>0.710</b>
	Back	0.529	0.449	0.612	<b>1.141</b>	<b>0.978</b>
	Left side	0.755	0.128	0.670	<b>1.425</b>	<b>0.883</b>
	Right side	0.082	0.126	0.253	<b>0.335</b>	<b>0.208</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.256			<b>0.256</b>	<b>0.256</b>
LTE Band 71_Ant 1	Front	0.181	0.343	0.484	<b>0.665</b>	<b>0.524</b>
	Back	0.220	0.449	0.612	<b>0.832</b>	<b>0.669</b>
	Left side	0.195	0.128	0.670	<b>0.865</b>	<b>0.323</b>
	Right side	0.070	0.126	0.253	<b>0.323</b>	<b>0.196</b>
	Top side	0.105	0.881	0.433	<b>0.538</b>	<b>0.986</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n5_Ant 1	Front	0.266	0.343	0.484	<b>0.750</b>	<b>0.609</b>
	Back	0.396	0.449	0.612	<b>1.008</b>	<b>0.845</b>
	Left side	0.123	0.128	0.670	<b>0.793</b>	<b>0.251</b>
	Right side	0.133	0.126	0.253	<b>0.386</b>	<b>0.259</b>
	Top side	0.236	0.881	0.433	<b>0.669</b>	<b>1.117</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n7_Ant 0	Front	0.407	0.343	0.484	<b>0.891</b>	<b>0.750</b>
	Back	0.266	0.449	0.612	<b>0.878</b>	<b>0.715</b>
	Left side	0.653	0.128	0.670	<b>1.323</b>	<b>0.781</b>
	Right side	0.068	0.126	0.253	<b>0.321</b>	<b>0.194</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>



	Bottom side	0.168			<b>0.168</b>	<b>0.168</b>
FR1 n12_Ant 1	Front	0.187	0.343	0.484	<b>0.671</b>	<b>0.530</b>
	Back	0.251	0.449	0.612	<b>0.863</b>	<b>0.700</b>
	Left side	0.141	0.128	0.670	<b>0.811</b>	<b>0.269</b>
	Right side	0.001	0.126	0.253	<b>0.254</b>	<b>0.127</b>
	Top side	0.102	0.881	0.433	<b>0.535</b>	<b>0.983</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n25_Ant 0	Front	0.533	0.343	0.484	<b>1.017</b>	<b>0.876</b>
	Back	0.628	0.449	0.612	<b>1.240</b>	<b>1.077</b>
	Left side	0.624	0.128	0.670	<b>1.294</b>	<b>0.752</b>
	Right side	0.026	0.126	0.253	<b>0.279</b>	<b>0.152</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.838			<b>0.838</b>	<b>0.838</b>
FR1 n30_Ant 0	Front	0.403	0.343	0.484	<b>0.887</b>	<b>0.746</b>
	Back	0.456	0.449	0.612	<b>1.068</b>	<b>0.905</b>
	Left side	0.756	0.128	0.670	<b>1.426</b>	<b>0.884</b>
	Right side	0.051	0.126	0.253	<b>0.304</b>	<b>0.177</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.248			<b>0.248</b>	<b>0.248</b>
FR1 n41_Ant 1	Front	0.500	0.343	0.484	<b>0.984</b>	<b>0.843</b>
	Back	0.446	0.449	0.612	<b>1.058</b>	<b>0.895</b>
	Left side	0.613	0.128	0.670	<b>1.283</b>	<b>0.741</b>
	Right side	0.013	0.126	0.253	<b>0.266</b>	<b>0.139</b>
	Top side	0.345	0.881	0.433	<b>0.778</b>	<b>1.226</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 0	Front	0.429	0.343	0.484	<b>0.913</b>	<b>0.772</b>
	Back	0.553	0.449	0.612	<b>1.165</b>	<b>1.002</b>
	Left side	0.798	0.128	0.670	<b>1.468</b>	<b>0.926</b>
	Right side	0.106	0.126	0.253	<b>0.359</b>	<b>0.232</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.390			<b>0.390</b>	<b>0.390</b>
FR1 n71_Ant 1	Front	0.155	0.343	0.484	<b>0.639</b>	<b>0.498</b>
	Back	0.193	0.449	0.612	<b>0.805</b>	<b>0.642</b>
	Left side	0.182	0.128	0.670	<b>0.852</b>	<b>0.310</b>
	Right side	0.074	0.126	0.253	<b>0.327</b>	<b>0.200</b>
	Top side	0.192	0.881	0.433	<b>0.625</b>	<b>1.073</b>
	Bottom side				<b>0.000</b>	<b>0.000</b>
FR1 n77_Ant 2	Front	0.519	0.343	0.484	<b>1.003</b>	<b>0.862</b>
	Back	0.366	0.449	0.612	<b>0.978</b>	<b>0.815</b>
	Left side	0.073	0.128	0.670	<b>0.743</b>	<b>0.201</b>
	Right side	0.843	0.126	0.253	<b>1.096</b>	<b>0.969</b>
	Top side		0.881	0.433	<b>0.433</b>	<b>0.881</b>
	Bottom side	0.209			<b>0.209</b>	<b>0.209</b>



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

WWAN Band	Exposure Position	1	3	4	5	6	1+3+4	1+3+5	1+3+6	1+3	1+4	1+5	1+6
		WWAN	5GHz WLAN Ant 4+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)	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)							
GSM850_Ant 0	Front	0.550	0.297	0.105	0.094	0.142	0.952	0.941	0.989	0.847	0.655	0.644	0.692
	Back	0.429	0.444	0.130	0.125	0.147	1.003	0.998	1.020	0.873	0.559	0.554	0.576
	Left side	0.770	0.385	0.015	0.055	0.076	1.170	1.210	1.231	1.155	0.785	0.825	0.846
	Right side	0.376	0.152	0.085	0.015	0.100	0.613	0.543	0.628	0.528	0.461	0.391	0.476
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.604					0.604	0.604	0.604	0.604	0.604	0.604	0.604
GSM1900_Ant 2	Front	0.661	0.297	0.105	0.094	0.142	1.063	1.052	1.100	0.958	0.766	0.755	0.803
	Back	0.729	0.444	0.130	0.125	0.147	1.303	1.298	1.320	1.173	0.859	0.854	0.876
	Left side	0.081	0.385	0.015	0.055	0.076	0.481	0.521	0.542	0.466	0.096	0.136	0.157
	Right side	0.549	0.152	0.085	0.015	0.100	0.786	0.716	0.801	0.701	0.634	0.564	0.649
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.904					0.904	0.904	0.904	0.904	0.904	0.904	0.904
WCDMA II_Ant 2	Front	0.758	0.297	0.105	0.094	0.142	1.160	1.149	1.197	1.055	0.863	0.852	0.900
	Back	0.682	0.444	0.130	0.125	0.147	1.256	1.251	1.273	1.126	0.812	0.807	0.829
	Left side	0.079	0.385	0.015	0.055	0.076	0.479	0.519	0.540	0.464	0.094	0.134	0.155
	Right side	0.458	0.152	0.085	0.015	0.100	0.695	0.625	0.710	0.610	0.543	0.473	0.558
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.903					0.903	0.903	0.903	0.903	0.903	0.903	0.903
WCDMA IV_Ant 2	Front	0.739	0.297	0.105	0.094	0.142	1.141	1.130	1.178	1.036	0.844	0.833	0.881
	Back	0.667	0.444	0.130	0.125	0.147	1.241	1.236	1.258	1.111	0.797	0.792	0.814
	Left side	0.294	0.385	0.015	0.055	0.076	0.694	0.734	0.755	0.679	0.309	0.349	0.370
	Right side	0.555	0.152	0.085	0.015	0.100	0.792	0.722	0.807	0.707	0.640	0.570	0.655
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.894					0.894	0.894	0.894	0.894	0.894	0.894	0.894
WCDMA V_Ant 0	Front	0.281	0.297	0.105	0.094	0.142	0.683	0.672	0.720	0.578	0.386	0.375	0.423
	Back	0.190	0.444	0.130	0.125	0.147	0.764	0.759	0.781	0.634	0.320	0.315	0.337
	Left side	0.298	0.385	0.015	0.055	0.076	0.698	0.738	0.759	0.683	0.313	0.353	0.374
	Right side	0.138	0.152	0.085	0.015	0.100	0.375	0.305	0.390	0.290	0.223	0.153	0.238
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.111					0.111	0.111	0.111	0.111	0.111	0.111	0.111
LTE Band 7_Ant 2	Front	0.577	0.297	0.105	0.094	0.142	0.979	0.968	1.016	0.874	0.682	0.671	0.719
	Back	0.587	0.444	0.130	0.125	0.147	1.161	1.156	1.178	1.031	0.717	0.712	0.734
	Left side	0.038	0.385	0.015	0.055	0.076	0.438	0.478	0.499	0.423	0.053	0.093	0.114
	Right side	0.421	0.152	0.085	0.015	0.100	0.658	0.588	0.673	0.573	0.506	0.436	0.521
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.866					0.866	0.866	0.866	0.866	0.866	0.866	0.866
LTE Band 12_Ant 0	Front	0.294	0.297	0.105	0.094	0.142	0.696	0.685	0.733	0.591	0.399	0.388	0.436
	Back	0.312	0.444	0.130	0.125	0.147	0.886	0.881	0.903	0.756	0.442	0.437	0.459
	Left side	0.506	0.385	0.015	0.055	0.076	0.906	0.946	0.967	0.891	0.521	0.561	0.582
	Right side	0.309	0.152	0.085	0.015	0.100	0.546	0.476	0.561	0.461	0.394	0.324	0.409
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.111					0.111	0.111	0.111	0.111	0.111	0.111	0.111
LTE Band 13_Ant 0	Front	0.386	0.297	0.105	0.094	0.142	0.788	0.777	0.825	0.683	0.491	0.480	0.528
	Back	0.382	0.444	0.130	0.125	0.147	0.956	0.951	0.973	0.826	0.512	0.507	0.529
	Left side	0.458	0.385	0.015	0.055	0.076	0.858	0.898	0.919	0.843	0.473	0.513	0.534
	Right side	0.318	0.152	0.085	0.015	0.100	0.555	0.485	0.570	0.470	0.403	0.333	0.418
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.137					0.137	0.137	0.137	0.137	0.137	0.137	0.137
LTE Band 14_Ant 0	Front	0.385	0.297	0.105	0.094	0.142	0.787	0.776	0.824	0.682	0.490	0.479	0.527
	Back	0.367	0.444	0.130	0.125	0.147	0.941	0.936	0.958	0.811	0.497	0.492	0.514
	Left side	0.446	0.385	0.015	0.055	0.076	0.846	0.886	0.907	0.831	0.461	0.501	0.522



**FCC SAR TEST REPORT**

Report No. : FA0D2942-05C

	Right side	0.303	0.152	0.085	0.015	0.100	0.540	0.470	0.555	0.455	0.388	0.318	0.403
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.152					0.152	0.152	0.152	0.152	0.152	0.152	0.152
LTE Band 25_Ant 2	Front	0.599	0.297	0.105	0.094	0.142	1.001	0.990	1.038	0.896	0.704	0.693	0.741
	Back	0.593	0.444	0.130	0.125	0.147	1.167	1.162	1.184	1.037	0.723	0.718	0.740
	Left side	0.065	0.385	0.015	0.055	0.076	0.465	0.505	0.526	0.450	0.080	0.120	0.141
	Right side	0.356	0.152	0.085	0.015	0.100	0.593	0.523	0.608	0.508	0.441	0.371	0.456
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.894					0.894	0.894	0.894	0.894	0.894	0.894	0.894
LTE Band 26_Ant 0	Front	0.311	0.297	0.105	0.094	0.142	0.713	0.702	0.750	0.608	0.416	0.405	0.453
	Back	0.329	0.444	0.130	0.125	0.147	0.903	0.898	0.920	0.773	0.459	0.454	0.476
	Left side	0.473	0.385	0.015	0.055	0.076	0.873	0.913	0.934	0.858	0.488	0.528	0.549
	Right side	0.231	0.152	0.085	0.015	0.100	0.468	0.398	0.483	0.383	0.316	0.246	0.331
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.270					0.270	0.270	0.270	0.270	0.270	0.270	0.270
LTE Band 30_Ant 2	Front	0.531	0.297	0.105	0.094	0.142	0.933	0.922	0.970	0.828	0.636	0.625	0.673
	Back	0.610	0.444	0.130	0.125	0.147	1.184	1.179	1.201	1.054	0.740	0.735	0.757
	Left side	0.038	0.385	0.015	0.055	0.076	0.438	0.478	0.499	0.423	0.053	0.093	0.114
	Right side	0.483	0.152	0.085	0.015	0.100	0.720	0.650	0.735	0.635	0.568	0.498	0.583
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.897					0.897	0.897	0.897	0.897	0.897	0.897	0.897
LTE Band 41_Ant 2	Front	0.718	0.297	0.105	0.094	0.142	1.120	1.109	1.157	1.015	0.823	0.812	0.860
	Back	0.761	0.444	0.130	0.125	0.147	1.335	1.330	1.352	1.205	0.891	0.886	0.908
	Left side	0.034	0.385	0.015	0.055	0.076	0.434	0.474	0.495	0.419	0.049	0.089	0.110
	Right side	0.551	0.152	0.085	0.015	0.100	0.788	0.718	0.803	0.703	0.636	0.566	0.651
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.891					0.891	0.891	0.891	0.891	0.891	0.891	0.891
LTE Band 48_Ant 6	Front	0.506	0.297	0.105	0.094	0.142	0.908	0.897	0.945	0.803	0.611	0.600	0.648
	Back	0.517	0.444	0.130	0.125	0.147	1.091	1.086	1.108	0.961	0.647	0.642	0.664
	Left side	0.891	0.385	0.015	0.055	0.076	1.291	1.331	1.352	1.276	0.906	0.946	0.967
	Right side	0.032	0.152	0.085	0.015	0.100	0.269	0.199	0.284	0.184	0.117	0.047	0.132
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.147					0.147	0.147	0.147	0.147	0.147	0.147	0.147
LTE Band 66_Ant 2	Front	0.561	0.297	0.105	0.094	0.142	0.963	0.952	1.000	0.858	0.666	0.655	0.703
	Back	0.540	0.444	0.130	0.125	0.147	1.114	1.109	1.131	0.984	0.670	0.665	0.687
	Left side	0.158	0.385	0.015	0.055	0.076	0.558	0.598	0.619	0.543	0.173	0.213	0.234
	Right side	0.433	0.152	0.085	0.015	0.100	0.670	0.600	0.685	0.585	0.518	0.448	0.533
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.910					0.910	0.910	0.910	0.910	0.910	0.910	0.910
LTE Band 71_Ant 0	Front	0.341	0.297	0.105	0.094	0.142	0.743	0.732	0.780	0.638	0.446	0.435	0.483
	Back	0.333	0.444	0.130	0.125	0.147	0.907	0.902	0.924	0.777	0.463	0.458	0.480
	Left side	0.468	0.385	0.015	0.055	0.076	0.868	0.908	0.929	0.853	0.483	0.523	0.544
	Right side	0.326	0.152	0.085	0.015	0.100	0.563	0.493	0.578	0.478	0.411	0.341	0.426
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.066					0.066	0.066	0.066	0.066	0.066	0.066	0.066
FR1 n5_Ant 0	Front	0.258	0.297	0.105	0.094	0.142	0.660	0.649	0.697	0.555	0.363	0.352	0.400
	Back	0.230	0.444	0.130	0.125	0.147	0.804	0.799	0.821	0.674	0.360	0.355	0.377
	Left side	0.425	0.385	0.015	0.055	0.076	0.825	0.865	0.886	0.810	0.440	0.480	0.501
	Right side	0.175	0.152	0.085	0.015	0.100	0.412	0.342	0.427	0.327	0.260	0.190	0.275
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.160					0.160	0.160	0.160	0.160	0.160	0.160	0.160
FR1 n7_Ant 2	Front	0.547	0.297	0.105	0.094	0.142	0.949	0.938	0.986	0.844	0.652	0.641	0.689
	Back	0.535	0.444	0.130	0.125	0.147	1.109	1.104	1.126	0.979	0.665	0.660	0.682
	Left side	0.029	0.385	0.015	0.055	0.076	0.429	0.469	0.490	0.414	0.044	0.084	0.105
	Right side	0.495	0.152	0.085	0.015	0.100	0.732	0.662	0.747	0.647	0.580	0.510	0.595
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302



**FCC SAR TEST REPORT**

**Report No. : FA0D2942-05C**

	Bottom side	0.910					<b>0.910</b>	<b>0.910</b>	<b>0.910</b>	<b>0.910</b>	<b>0.910</b>	<b>0.910</b>	<b>0.910</b>
FR1 n12_Ant 0	Front	0.316	0.297	0.105	0.094	0.142	<b>0.718</b>	<b>0.707</b>	<b>0.755</b>	<b>0.613</b>	<b>0.421</b>	<b>0.410</b>	<b>0.458</b>
	Back	0.293	0.444	0.130	0.125	0.147	<b>0.867</b>	<b>0.862</b>	<b>0.884</b>	<b>0.737</b>	<b>0.423</b>	<b>0.418</b>	<b>0.440</b>
	Left side	0.404	0.385	0.015	0.055	0.076	<b>0.804</b>	<b>0.844</b>	<b>0.865</b>	<b>0.789</b>	<b>0.419</b>	<b>0.459</b>	<b>0.480</b>
	Right side	0.244	0.152	0.085	0.015	0.100	<b>0.481</b>	<b>0.411</b>	<b>0.496</b>	<b>0.396</b>	<b>0.329</b>	<b>0.259</b>	<b>0.344</b>
	Top side		0.223	0.182	0.214	0.302	<b>0.405</b>	<b>0.437</b>	<b>0.525</b>	<b>0.223</b>	<b>0.182</b>	<b>0.214</b>	<b>0.302</b>
	Bottom side	0.064					<b>0.064</b>	<b>0.064</b>	<b>0.064</b>	<b>0.064</b>	<b>0.064</b>	<b>0.064</b>	<b>0.064</b>
FR1 n25_Ant 2	Front	0.616	0.297	0.105	0.094	0.142	<b>1.018</b>	<b>1.007</b>	<b>1.055</b>	<b>0.913</b>	<b>0.721</b>	<b>0.710</b>	<b>0.758</b>
	Back	0.550	0.444	0.130	0.125	0.147	<b>1.124</b>	<b>1.119</b>	<b>1.141</b>	<b>0.994</b>	<b>0.680</b>	<b>0.675</b>	<b>0.697</b>
	Left side	0.055	0.385	0.015	0.055	0.076	<b>0.455</b>	<b>0.495</b>	<b>0.516</b>	<b>0.440</b>	<b>0.070</b>	<b>0.110</b>	<b>0.131</b>
	Right side	0.350	0.152	0.085	0.015	0.100	<b>0.587</b>	<b>0.517</b>	<b>0.602</b>	<b>0.502</b>	<b>0.435</b>	<b>0.365</b>	<b>0.450</b>
	Top side		0.223	0.182	0.214	0.302	<b>0.405</b>	<b>0.437</b>	<b>0.525</b>	<b>0.223</b>	<b>0.182</b>	<b>0.214</b>	<b>0.302</b>
	Bottom side	0.897					<b>0.897</b>	<b>0.897</b>	<b>0.897</b>	<b>0.897</b>	<b>0.897</b>	<b>0.897</b>	<b>0.897</b>
FR1 n30_Ant 2	Front	0.633	0.297	0.105	0.094	0.142	<b>1.035</b>	<b>1.024</b>	<b>1.072</b>	<b>0.930</b>	<b>0.738</b>	<b>0.727</b>	<b>0.775</b>
	Back	0.659	0.444	0.130	0.125	0.147	<b>1.233</b>	<b>1.228</b>	<b>1.250</b>	<b>1.103</b>	<b>0.789</b>	<b>0.784</b>	<b>0.806</b>
	Left side	0.025	0.385	0.015	0.055	0.076	<b>0.425</b>	<b>0.465</b>	<b>0.486</b>	<b>0.410</b>	<b>0.040</b>	<b>0.080</b>	<b>0.101</b>
	Right side	0.530	0.152	0.085	0.015	0.100	<b>0.767</b>	<b>0.697</b>	<b>0.782</b>	<b>0.682</b>	<b>0.615</b>	<b>0.545</b>	<b>0.630</b>
	Top side		0.223	0.182	0.214	0.302	<b>0.405</b>	<b>0.437</b>	<b>0.525</b>	<b>0.223</b>	<b>0.182</b>	<b>0.214</b>	<b>0.302</b>
	Bottom side	0.898					<b>0.898</b>	<b>0.898</b>	<b>0.898</b>	<b>0.898</b>	<b>0.898</b>	<b>0.898</b>	<b>0.898</b>
FR1 n41_Ant 5	Front	0.449	0.297	0.105	0.094	0.142	<b>0.851</b>	<b>0.840</b>	<b>0.888</b>	<b>0.746</b>	<b>0.554</b>	<b>0.543</b>	<b>0.591</b>
	Back	0.542	0.444	0.130	0.125	0.147	<b>1.116</b>	<b>1.111</b>	<b>1.133</b>	<b>0.986</b>	<b>0.672</b>	<b>0.667</b>	<b>0.689</b>
	Left side	0.028	0.385	0.015	0.055	0.076	<b>0.428</b>	<b>0.468</b>	<b>0.489</b>	<b>0.413</b>	<b>0.043</b>	<b>0.083</b>	<b>0.104</b>
	Right side	0.910	0.152	0.085	0.015	0.100	<b>1.147</b>	<b>1.077</b>	<b>1.162</b>	<b>1.062</b>	<b>0.995</b>	<b>0.925</b>	<b>1.010</b>
	Top side	0.157	0.223	0.182	0.214	0.302	<b>0.562</b>	<b>0.594</b>	<b>0.682</b>	<b>0.380</b>	<b>0.339</b>	<b>0.371</b>	<b>0.459</b>
	Bottom side						<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 2	Front	0.653	0.297	0.105	0.094	0.142	<b>1.055</b>	<b>1.044</b>	<b>1.092</b>	<b>0.950</b>	<b>0.758</b>	<b>0.747</b>	<b>0.795</b>
	Back	0.697	0.444	0.130	0.125	0.147	<b>1.271</b>	<b>1.266</b>	<b>1.288</b>	<b>1.141</b>	<b>0.827</b>	<b>0.822</b>	<b>0.844</b>
	Left side	0.206	0.385	0.015	0.055	0.076	<b>0.606</b>	<b>0.646</b>	<b>0.667</b>	<b>0.591</b>	<b>0.221</b>	<b>0.261</b>	<b>0.282</b>
	Right side	0.514	0.152	0.085	0.015	0.100	<b>0.751</b>	<b>0.681</b>	<b>0.766</b>	<b>0.666</b>	<b>0.599</b>	<b>0.529</b>	<b>0.614</b>
	Top side		0.223	0.182	0.214	0.302	<b>0.405</b>	<b>0.437</b>	<b>0.525</b>	<b>0.223</b>	<b>0.182</b>	<b>0.214</b>	<b>0.302</b>
	Bottom side	0.817					<b>0.817</b>	<b>0.817</b>	<b>0.817</b>	<b>0.817</b>	<b>0.817</b>	<b>0.817</b>	<b>0.817</b>
FR1 n71_Ant 0	Front	0.225	0.297	0.105	0.094	0.142	<b>0.627</b>	<b>0.616</b>	<b>0.664</b>	<b>0.522</b>	<b>0.330</b>	<b>0.319</b>	<b>0.367</b>
	Back	0.215	0.444	0.130	0.125	0.147	<b>0.789</b>	<b>0.784</b>	<b>0.806</b>	<b>0.659</b>	<b>0.345</b>	<b>0.340</b>	<b>0.362</b>
	Left side	0.232	0.385	0.015	0.055	0.076	<b>0.632</b>	<b>0.672</b>	<b>0.693</b>	<b>0.617</b>	<b>0.247</b>	<b>0.287</b>	<b>0.308</b>
	Right side	0.171	0.152	0.085	0.015	0.100	<b>0.408</b>	<b>0.338</b>	<b>0.423</b>	<b>0.323</b>	<b>0.256</b>	<b>0.186</b>	<b>0.271</b>
	Top side		0.223	0.182	0.214	0.302	<b>0.405</b>	<b>0.437</b>	<b>0.525</b>	<b>0.223</b>	<b>0.182</b>	<b>0.214</b>	<b>0.302</b>
	Bottom side	0.031					<b>0.031</b>	<b>0.031</b>	<b>0.031</b>	<b>0.031</b>	<b>0.031</b>	<b>0.031</b>	<b>0.031</b>
FR1 n77_Ant 6	Front	0.552	0.297	0.105	0.094	0.142	<b>0.954</b>	<b>0.943</b>	<b>0.991</b>	<b>0.849</b>	<b>0.657</b>	<b>0.646</b>	<b>0.694</b>
	Back	0.562	0.444	0.130	0.125	0.147	<b>1.136</b>	<b>1.131</b>	<b>1.153</b>	<b>1.006</b>	<b>0.692</b>	<b>0.687</b>	<b>0.709</b>
	Left side	0.788	0.385	0.015	0.055	0.076	<b>1.188</b>	<b>1.228</b>	<b>1.249</b>	<b>1.173</b>	<b>0.803</b>	<b>0.843</b>	<b>0.864</b>
	Right side	0.026	0.152	0.085	0.015	0.100	<b>0.263</b>	<b>0.193</b>	<b>0.278</b>	<b>0.178</b>	<b>0.111</b>	<b>0.041</b>	<b>0.126</b>
	Top side		0.223	0.182	0.214	0.302	<b>0.405</b>	<b>0.437</b>	<b>0.525</b>	<b>0.223</b>	<b>0.182</b>	<b>0.214</b>	<b>0.302</b>
	Bottom side	0.151					<b>0.151</b>	<b>0.151</b>	<b>0.151</b>	<b>0.151</b>	<b>0.151</b>	<b>0.151</b>	<b>0.151</b>



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

WWAN Band	Exposure Position	1	3	4	5	6	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+3+6 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	5GHz WLAN Ant 4+3 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 1	Front	0.545	0.297	0.105	0.094	0.142	0.947	0.936	0.984	0.842	0.650	0.639	0.687
	Back	0.824	0.444	0.130	0.125	0.147	1.398	1.393	1.415	1.268	0.954	0.949	0.971
	Left side	0.281	0.385	0.015	0.055	0.076	0.681	0.721	0.742	0.666	0.296	0.336	0.357
	Right side	0.221	0.152	0.085	0.015	0.100	0.458	0.388	0.473	0.373	0.306	0.236	0.321
	Top side	0.462	0.223	0.182	0.214	0.302	0.867	0.899	0.987	0.685	0.644	0.676	0.764
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
GSM1900_Ant 0	Front	0.738	0.297	0.105	0.094	0.142	1.140	1.129	1.177	1.035	0.843	0.832	0.880
	Back	0.654	0.444	0.130	0.125	0.147	1.228	1.223	1.245	1.098	0.784	0.779	0.801
	Left side	0.077	0.385	0.015	0.055	0.076	0.477	0.517	0.538	0.462	0.092	0.132	0.153
	Right side	0.633	0.152	0.085	0.015	0.100	0.870	0.800	0.885	0.785	0.718	0.648	0.733
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.887					0.887	0.887	0.887	0.887	0.887	0.887	0.887
WCDMA II_Ant 0	Front	0.552	0.297	0.105	0.094	0.142	0.954	0.943	0.991	0.849	0.657	0.646	0.694
	Back	0.715	0.444	0.130	0.125	0.147	1.289	1.284	1.306	1.159	0.845	0.840	0.862
	Left side	0.665	0.385	0.015	0.055	0.076	1.065	1.105	1.126	1.050	0.680	0.720	0.741
	Right side	0.039	0.152	0.085	0.015	0.100	0.276	0.206	0.291	0.191	0.124	0.054	0.139
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.907					0.907	0.907	0.907	0.907	0.907	0.907	0.907
WCDMA IV_Ant 0	Front	0.504	0.297	0.105	0.094	0.142	0.906	0.895	0.943	0.801	0.609	0.598	0.646
	Back	0.585	0.444	0.130	0.125	0.147	1.159	1.154	1.176	1.029	0.715	0.710	0.732
	Left side	0.807	0.385	0.015	0.055	0.076	1.207	1.247	1.268	1.192	0.822	0.862	0.883
	Right side	0.094	0.152	0.085	0.015	0.100	0.331	0.261	0.346	0.246	0.179	0.109	0.194
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.400					0.400	0.400	0.400	0.400	0.400	0.400	0.400
WCDMA V_Ant 1	Front	0.349	0.297	0.105	0.094	0.142	0.751	0.740	0.788	0.646	0.454	0.443	0.491
	Back	0.493	0.444	0.130	0.125	0.147	1.067	1.062	1.084	0.937	0.623	0.618	0.640
	Left side	0.205	0.385	0.015	0.055	0.076	0.605	0.645	0.666	0.590	0.220	0.260	0.281
	Right side	0.106	0.152	0.085	0.015	0.100	0.343	0.273	0.358	0.258	0.191	0.121	0.206
	Top side	0.297	0.223	0.182	0.214	0.302	0.702	0.734	0.822	0.520	0.479	0.511	0.599
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.426	0.297	0.105	0.094	0.142	0.828	0.817	0.865	0.723	0.531	0.520	0.568
	Back	0.500	0.444	0.130	0.125	0.147	1.074	1.069	1.091	0.944	0.630	0.625	0.647
	Left side	0.787	0.385	0.015	0.055	0.076	1.187	1.227	1.248	1.172	0.802	0.842	0.863
	Right side	0.069	0.152	0.085	0.015	0.100	0.306	0.236	0.321	0.221	0.154	0.084	0.169
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.309					0.309	0.309	0.309	0.309	0.309	0.309	0.309
LTE Band 12_Ant 1	Front	0.215	0.297	0.105	0.094	0.142	0.617	0.606	0.654	0.512	0.320	0.309	0.357
	Back	0.284	0.444	0.130	0.125	0.147	0.858	0.853	0.875	0.728	0.414	0.409	0.431
	Left side	0.168	0.385	0.015	0.055	0.076	0.568	0.608	0.629	0.553	0.183	0.223	0.244
	Right side	0.055	0.152	0.085	0.015	0.100	0.292	0.222	0.307	0.207	0.140	0.070	0.155
	Top side	0.164	0.223	0.182	0.214	0.302	0.569	0.601	0.689	0.387	0.346	0.378	0.466
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.331	0.297	0.105	0.094	0.142	0.733	0.722	0.770	0.628	0.436	0.425	0.473
	Back	0.444	0.444	0.130	0.125	0.147	1.018	1.013	1.035	0.888	0.574	0.569	0.591
	Left side	0.358	0.385	0.015	0.055	0.076	0.758	0.798	0.819	0.743	0.373	0.413	0.434
	Right side	0.176	0.152	0.085	0.015	0.100	0.413	0.343	0.428	0.328	0.261	0.191	0.276
	Top side	0.250	0.223	0.182	0.214	0.302	0.655	0.687	0.775	0.473	0.432	0.464	0.552
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.331	0.297	0.105	0.094	0.142	0.733	0.722	0.770	0.628	0.436	0.425	0.473
	Back	0.498	0.444	0.130	0.125	0.147	1.072	1.067	1.089	0.942	0.628	0.623	0.645
	Left side	0.362	0.385	0.015	0.055	0.076	0.762	0.802	0.823	0.747	0.377	0.417	0.438



**FCC SAR TEST REPORT**

Report No. : FA0D2942-05C

	Right side	0.185	0.152	0.085	0.015	0.100	0.422	0.352	0.437	0.337	0.270	0.200	0.285
	Top side	0.275	0.223	0.182	0.214	0.302	0.680	0.712	0.800	0.498	0.457	0.489	0.577
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 25_Ant 0	Front	0.474	0.297	0.105	0.094	0.142	0.876	0.865	0.913	0.771	0.579	0.568	0.616
	Back	0.634	0.444	0.130	0.125	0.147	1.208	1.203	1.225	1.078	0.764	0.759	0.781
	Left side	0.640	0.385	0.015	0.055	0.076	1.040	1.080	1.101	1.025	0.655	0.695	0.716
	Right side	0.028	0.152	0.085	0.015	0.100	0.265	0.195	0.280	0.180	0.113	0.043	0.128
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.904					0.904	0.904	0.904	0.904	0.904	0.904	0.904
LTE Band 26_Ant 1	Front	0.332	0.297	0.105	0.094	0.142	0.734	0.723	0.771	0.629	0.437	0.426	0.474
	Back	0.497	0.444	0.130	0.125	0.147	1.071	1.066	1.088	0.941	0.627	0.622	0.644
	Left side	0.177	0.385	0.015	0.055	0.076	0.577	0.617	0.638	0.562	0.192	0.232	0.253
	Right side	0.146	0.152	0.085	0.015	0.100	0.383	0.313	0.398	0.298	0.231	0.161	0.246
	Top side	0.329	0.223	0.182	0.214	0.302	0.734	0.766	0.854	0.552	0.511	0.543	0.631
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 30_Ant 0	Front	0.430	0.297	0.105	0.094	0.142	0.832	0.821	0.869	0.727	0.535	0.524	0.572
	Back	0.506	0.444	0.130	0.125	0.147	1.080	1.075	1.097	0.950	0.636	0.631	0.653
	Left side	0.889	0.385	0.015	0.055	0.076	1.289	1.329	1.350	1.274	0.904	0.944	0.965
	Right side	0.048	0.152	0.085	0.015	0.100	0.285	0.215	0.300	0.200	0.133	0.063	0.148
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.287					0.287	0.287	0.287	0.287	0.287	0.287	0.287
LTE Band 41_Ant 0	Front	0.230	0.297	0.105	0.094	0.142	0.632	0.621	0.669	0.527	0.335	0.324	0.372
	Back	0.327	0.444	0.130	0.125	0.147	0.901	0.896	0.918	0.771	0.457	0.452	0.474
	Left side	0.600	0.385	0.015	0.055	0.076	1.000	1.040	1.061	0.985	0.615	0.655	0.676
	Right side	0.056	0.152	0.085	0.015	0.100	0.293	0.223	0.308	0.208	0.141	0.071	0.156
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.244					0.244	0.244	0.244	0.244	0.244	0.244	0.244
LTE Band 48_Ant 2	Front	0.410	0.297	0.105	0.094	0.142	0.812	0.801	0.849	0.707	0.515	0.504	0.552
	Back	0.418	0.444	0.130	0.125	0.147	0.992	0.987	1.009	0.862	0.548	0.543	0.565
	Left side	0.049	0.385	0.015	0.055	0.076	0.449	0.489	0.510	0.434	0.064	0.104	0.125
	Right side	0.905	0.152	0.085	0.015	0.100	1.142	1.072	1.157	1.057	0.990	0.920	1.005
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.178					0.178	0.178	0.178	0.178	0.178	0.178	0.178
LTE Band 66_Ant 0	Front	0.367	0.297	0.105	0.094	0.142	0.769	0.758	0.806	0.664	0.472	0.461	0.509
	Back	0.529	0.444	0.130	0.125	0.147	1.103	1.098	1.120	0.973	0.659	0.654	0.676
	Left side	0.755	0.385	0.015	0.055	0.076	1.155	1.195	1.216	1.140	0.770	0.810	0.831
	Right side	0.082	0.152	0.085	0.015	0.100	0.319	0.249	0.334	0.234	0.167	0.097	0.182
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.256					0.256	0.256	0.256	0.256	0.256	0.256	0.256
LTE Band 71_Ant 1	Front	0.181	0.297	0.105	0.094	0.142	0.583	0.572	0.620	0.478	0.286	0.275	0.323
	Back	0.220	0.444	0.130	0.125	0.147	0.794	0.789	0.811	0.664	0.350	0.345	0.367
	Left side	0.195	0.385	0.015	0.055	0.076	0.595	0.635	0.656	0.580	0.210	0.250	0.271
	Right side	0.070	0.152	0.085	0.015	0.100	0.307	0.237	0.322	0.222	0.155	0.085	0.170
	Top side	0.105	0.223	0.182	0.214	0.302	0.510	0.542	0.630	0.328	0.287	0.319	0.407
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n5_Ant 1	Front	0.266	0.297	0.105	0.094	0.142	0.668	0.657	0.705	0.563	0.371	0.360	0.408
	Back	0.396	0.444	0.130	0.125	0.147	0.970	0.965	0.987	0.840	0.526	0.521	0.543
	Left side	0.123	0.385	0.015	0.055	0.076	0.523	0.563	0.584	0.508	0.138	0.178	0.199
	Right side	0.133	0.152	0.085	0.015	0.100	0.370	0.300	0.385	0.285	0.218	0.148	0.233
	Top side	0.236	0.223	0.182	0.214	0.302	0.641	0.673	0.761	0.459	0.418	0.450	0.538
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n7_Ant 0	Front	0.407	0.297	0.105	0.094	0.142	0.809	0.798	0.846	0.704	0.512	0.501	0.549
	Back	0.266	0.444	0.130	0.125	0.147	0.840	0.835	0.857	0.710	0.396	0.391	0.413
	Left side	0.653	0.385	0.015	0.055	0.076	1.053	1.093	1.114	1.038	0.668	0.708	0.729
	Right side	0.068	0.152	0.085	0.015	0.100	0.305	0.235	0.320	0.220	0.153	0.083	0.168
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302





**FCC SAR TEST REPORT**

Report No. : FA0D2942-05C

	Bottom side	0.168					0.168	0.168	0.168	0.168	0.168	0.168	0.168
FR1 n25_Ant 0	Front	0.533	0.297	0.105	0.094	0.142	0.935	0.924	0.972	0.830	0.638	0.627	0.675
	Back	0.628	0.444	0.130	0.125	0.147	1.202	1.197	1.219	1.072	0.758	0.753	0.775
	Left side	0.624	0.385	0.015	0.055	0.076	1.024	1.064	1.085	1.009	0.639	0.679	0.700
	Right side	0.026	0.152	0.085	0.015	0.100	0.263	0.193	0.278	0.178	0.111	0.041	0.126
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.838					0.838	0.838	0.838	0.838	0.838	0.838	0.838
FR1 n30_Ant 0	Front	0.403	0.297	0.105	0.094	0.142	0.805	0.794	0.842	0.700	0.508	0.497	0.545
	Back	0.456	0.444	0.130	0.125	0.147	1.030	1.025	1.047	0.900	0.586	0.581	0.603
	Left side	0.756	0.385	0.015	0.055	0.076	1.156	1.196	1.217	1.141	0.771	0.811	0.832
	Right side	0.051	0.152	0.085	0.015	0.100	0.288	0.218	0.303	0.203	0.136	0.066	0.151
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.248					0.248	0.248	0.248	0.248	0.248	0.248	0.248
FR1 n41_Ant 1	Front	0.500	0.297	0.105	0.094	0.142	0.902	0.891	0.939	0.797	0.605	0.594	0.642
	Back	0.446	0.444	0.130	0.125	0.147	1.020	1.015	1.037	0.890	0.576	0.571	0.593
	Left side	0.613	0.385	0.015	0.055	0.076	1.013	1.053	1.074	0.998	0.628	0.668	0.689
	Right side	0.013	0.152	0.085	0.015	0.100	0.250	0.180	0.265	0.165	0.098	0.028	0.113
	Top side	0.345	0.223	0.182	0.214	0.302	0.750	0.782	0.870	0.568	0.527	0.559	0.647
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n66_Ant 0	Front	0.429	0.297	0.105	0.094	0.142	0.831	0.820	0.868	0.726	0.534	0.523	0.571
	Back	0.553	0.444	0.130	0.125	0.147	1.127	1.122	1.144	0.997	0.683	0.678	0.700
	Left side	0.798	0.385	0.015	0.055	0.076	1.198	1.238	1.259	1.183	0.813	0.853	0.874
	Right side	0.106	0.152	0.085	0.015	0.100	0.343	0.273	0.358	0.258	0.191	0.121	0.206
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.390					0.390	0.390	0.390	0.390	0.390	0.390	0.390
FR1 n71_Ant 1	Front	0.155	0.297	0.105	0.094	0.142	0.557	0.546	0.594	0.452	0.260	0.249	0.297
	Back	0.193	0.444	0.130	0.125	0.147	0.767	0.762	0.784	0.637	0.323	0.318	0.340
	Left side	0.182	0.385	0.015	0.055	0.076	0.582	0.622	0.643	0.567	0.197	0.237	0.258
	Right side	0.074	0.152	0.085	0.015	0.100	0.311	0.241	0.326	0.226	0.159	0.089	0.174
	Top side	0.192	0.223	0.182	0.214	0.302	0.597	0.629	0.717	0.415	0.374	0.406	0.494
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n77_Ant 2	Front	0.519	0.297	0.105	0.094	0.142	0.921	0.910	0.958	0.816	0.624	0.613	0.661
	Back	0.366	0.444	0.130	0.125	0.147	0.940	0.935	0.957	0.810	0.496	0.491	0.513
	Left side	0.073	0.385	0.015	0.055	0.076	0.473	0.513	0.534	0.458	0.088	0.128	0.149
	Right side	0.843	0.152	0.085	0.015	0.100	1.080	1.010	1.095	0.995	0.928	0.858	0.943
	Top side		0.223	0.182	0.214	0.302	0.405	0.437	0.525	0.223	0.182	0.214	0.302
	Bottom side	0.209					0.209	0.209	0.209	0.209	0.209	0.209	0.209



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

WWAN Band	Exposure Position	1	4	5	6	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 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	0.550	0.128	0.148	0.124	<b>0.678</b>	<b>0.698</b>	<b>0.674</b>
	Back	0.429	0.213	0.205	0.190	<b>0.642</b>	<b>0.634</b>	<b>0.619</b>
	Left side	0.770	0.022	0.084	0.078	<b>0.792</b>	<b>0.854</b>	<b>0.848</b>
	Right side	0.376	0.112	0.020	0.087	<b>0.488</b>	<b>0.396</b>	<b>0.463</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.604				<b>0.604</b>	<b>0.604</b>	<b>0.604</b>
GSM1900_Ant 2	Front	0.661	0.128	0.148	0.124	<b>0.789</b>	<b>0.809</b>	<b>0.785</b>
	Back	0.729	0.213	0.205	0.190	<b>0.942</b>	<b>0.934</b>	<b>0.919</b>
	Left side	0.081	0.022	0.084	0.078	<b>0.103</b>	<b>0.165</b>	<b>0.159</b>
	Right side	0.549	0.112	0.020	0.087	<b>0.661</b>	<b>0.569</b>	<b>0.636</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.904				<b>0.904</b>	<b>0.904</b>	<b>0.904</b>
WCDMA II_Ant 2	Front	0.758	0.128	0.148	0.124	<b>0.886</b>	<b>0.906</b>	<b>0.882</b>
	Back	0.682	0.213	0.205	0.190	<b>0.895</b>	<b>0.887</b>	<b>0.872</b>
	Left side	0.079	0.022	0.084	0.078	<b>0.101</b>	<b>0.163</b>	<b>0.157</b>
	Right side	0.458	0.112	0.020	0.087	<b>0.570</b>	<b>0.478</b>	<b>0.545</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.903				<b>0.903</b>	<b>0.903</b>	<b>0.903</b>
WCDMA IV_Ant 2	Front	0.739	0.128	0.148	0.124	<b>0.867</b>	<b>0.887</b>	<b>0.863</b>
	Back	0.667	0.213	0.205	0.190	<b>0.880</b>	<b>0.872</b>	<b>0.857</b>
	Left side	0.294	0.022	0.084	0.078	<b>0.316</b>	<b>0.378</b>	<b>0.372</b>
	Right side	0.555	0.112	0.020	0.087	<b>0.667</b>	<b>0.575</b>	<b>0.642</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.894				<b>0.894</b>	<b>0.894</b>	<b>0.894</b>
WCDMA V_Ant 0	Front	0.281	0.128	0.148	0.124	<b>0.409</b>	<b>0.429</b>	<b>0.405</b>
	Back	0.190	0.213	0.205	0.190	<b>0.403</b>	<b>0.395</b>	<b>0.380</b>
	Left side	0.298	0.022	0.084	0.078	<b>0.320</b>	<b>0.382</b>	<b>0.376</b>
	Right side	0.138	0.112	0.020	0.087	<b>0.250</b>	<b>0.158</b>	<b>0.225</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.111				<b>0.111</b>	<b>0.111</b>	<b>0.111</b>
LTE Band 7_Ant 2	Front	0.577	0.128	0.148	0.124	<b>0.705</b>	<b>0.725</b>	<b>0.701</b>
	Back	0.587	0.213	0.205	0.190	<b>0.800</b>	<b>0.792</b>	<b>0.777</b>
	Left side	0.038	0.022	0.084	0.078	<b>0.060</b>	<b>0.122</b>	<b>0.116</b>
	Right side	0.421	0.112	0.020	0.087	<b>0.533</b>	<b>0.441</b>	<b>0.508</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.866				<b>0.866</b>	<b>0.866</b>	<b>0.866</b>
LTE Band 12_Ant 0	Front	0.294	0.128	0.148	0.124	<b>0.422</b>	<b>0.442</b>	<b>0.418</b>
	Back	0.312	0.213	0.205	0.190	<b>0.525</b>	<b>0.517</b>	<b>0.502</b>
	Left side	0.506	0.022	0.084	0.078	<b>0.528</b>	<b>0.590</b>	<b>0.584</b>
	Right side	0.309	0.112	0.020	0.087	<b>0.421</b>	<b>0.329</b>	<b>0.396</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.111				<b>0.111</b>	<b>0.111</b>	<b>0.111</b>
LTE Band 13_Ant 0	Front	0.386	0.128	0.148	0.124	<b>0.514</b>	<b>0.534</b>	<b>0.510</b>
	Back	0.382	0.213	0.205	0.190	<b>0.595</b>	<b>0.587</b>	<b>0.572</b>
	Left side	0.458	0.022	0.084	0.078	<b>0.480</b>	<b>0.542</b>	<b>0.536</b>
	Right side	0.318	0.112	0.020	0.087	<b>0.430</b>	<b>0.338</b>	<b>0.405</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.137				<b>0.137</b>	<b>0.137</b>	<b>0.137</b>
LTE Band 14_Ant 0	Front	0.385	0.128	0.148	0.124	<b>0.513</b>	<b>0.533</b>	<b>0.509</b>
	Back	0.367	0.213	0.205	0.190	<b>0.580</b>	<b>0.572</b>	<b>0.557</b>
	Left side	0.446	0.022	0.084	0.078	<b>0.468</b>	<b>0.530</b>	<b>0.524</b>



	Right side	0.303	0.112	0.020	0.087	<b>0.415</b>	<b>0.323</b>	<b>0.390</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.152				<b>0.152</b>	<b>0.152</b>	<b>0.152</b>
LTE Band 25_Ant 2	Front	0.599	0.128	0.148	0.124	<b>0.727</b>	<b>0.747</b>	<b>0.723</b>
	Back	0.593	0.213	0.205	0.190	<b>0.806</b>	<b>0.798</b>	<b>0.783</b>
	Left side	0.065	0.022	0.084	0.078	<b>0.087</b>	<b>0.149</b>	<b>0.143</b>
	Right side	0.356	0.112	0.020	0.087	<b>0.468</b>	<b>0.376</b>	<b>0.443</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.894				<b>0.894</b>	<b>0.894</b>	<b>0.894</b>
LTE Band 26_Ant 0	Front	0.311	0.128	0.148	0.124	<b>0.439</b>	<b>0.459</b>	<b>0.435</b>
	Back	0.329	0.213	0.205	0.190	<b>0.542</b>	<b>0.534</b>	<b>0.519</b>
	Left side	0.473	0.022	0.084	0.078	<b>0.495</b>	<b>0.557</b>	<b>0.551</b>
	Right side	0.231	0.112	0.020	0.087	<b>0.343</b>	<b>0.251</b>	<b>0.318</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.270				<b>0.270</b>	<b>0.270</b>	<b>0.270</b>
LTE Band 30_Ant 2	Front	0.531	0.128	0.148	0.124	<b>0.659</b>	<b>0.679</b>	<b>0.655</b>
	Back	0.610	0.213	0.205	0.190	<b>0.823</b>	<b>0.815</b>	<b>0.800</b>
	Left side	0.038	0.022	0.084	0.078	<b>0.060</b>	<b>0.122</b>	<b>0.116</b>
	Right side	0.483	0.112	0.020	0.087	<b>0.595</b>	<b>0.503</b>	<b>0.570</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.897				<b>0.897</b>	<b>0.897</b>	<b>0.897</b>
LTE Band 41_Ant 2	Front	0.718	0.128	0.148	0.124	<b>0.846</b>	<b>0.866</b>	<b>0.842</b>
	Back	0.761	0.213	0.205	0.190	<b>0.974</b>	<b>0.966</b>	<b>0.951</b>
	Left side	0.034	0.022	0.084	0.078	<b>0.056</b>	<b>0.118</b>	<b>0.112</b>
	Right side	0.551	0.112	0.020	0.087	<b>0.663</b>	<b>0.571</b>	<b>0.638</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.891				<b>0.891</b>	<b>0.891</b>	<b>0.891</b>
LTE Band 48_Ant 6	Front	0.506	0.128	0.148	0.124	<b>0.634</b>	<b>0.654</b>	<b>0.630</b>
	Back	0.517	0.213	0.205	0.190	<b>0.730</b>	<b>0.722</b>	<b>0.707</b>
	Left side	0.891	0.022	0.084	0.078	<b>0.913</b>	<b>0.975</b>	<b>0.969</b>
	Right side	0.032	0.112	0.020	0.087	<b>0.144</b>	<b>0.052</b>	<b>0.119</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.147				<b>0.147</b>	<b>0.147</b>	<b>0.147</b>
LTE Band 66_Ant 2	Front	0.561	0.128	0.148	0.124	<b>0.689</b>	<b>0.709</b>	<b>0.685</b>
	Back	0.540	0.213	0.205	0.190	<b>0.753</b>	<b>0.745</b>	<b>0.730</b>
	Left side	0.158	0.022	0.084	0.078	<b>0.180</b>	<b>0.242</b>	<b>0.236</b>
	Right side	0.433	0.112	0.020	0.087	<b>0.545</b>	<b>0.453</b>	<b>0.520</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.910				<b>0.910</b>	<b>0.910</b>	<b>0.910</b>
LTE Band 71_Ant 0	Front	0.341	0.128	0.148	0.124	<b>0.469</b>	<b>0.489</b>	<b>0.465</b>
	Back	0.333	0.213	0.205	0.190	<b>0.546</b>	<b>0.538</b>	<b>0.523</b>
	Left side	0.468	0.022	0.084	0.078	<b>0.490</b>	<b>0.552</b>	<b>0.546</b>
	Right side	0.326	0.112	0.020	0.087	<b>0.438</b>	<b>0.346</b>	<b>0.413</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.066				<b>0.066</b>	<b>0.066</b>	<b>0.066</b>
FR1 n5_Ant 0	Front	0.258	0.128	0.148	0.124	<b>0.386</b>	<b>0.406</b>	<b>0.382</b>
	Back	0.230	0.213	0.205	0.190	<b>0.443</b>	<b>0.435</b>	<b>0.420</b>
	Left side	0.425	0.022	0.084	0.078	<b>0.447</b>	<b>0.509</b>	<b>0.503</b>
	Right side	0.175	0.112	0.020	0.087	<b>0.287</b>	<b>0.195</b>	<b>0.262</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.160				<b>0.160</b>	<b>0.160</b>	<b>0.160</b>
FR1 n7_Ant 2	Front	0.547	0.128	0.148	0.124	<b>0.675</b>	<b>0.695</b>	<b>0.671</b>
	Back	0.535	0.213	0.205	0.190	<b>0.748</b>	<b>0.740</b>	<b>0.725</b>
	Left side	0.029	0.022	0.084	0.078	<b>0.051</b>	<b>0.113</b>	<b>0.107</b>
	Right side	0.495	0.112	0.020	0.087	<b>0.607</b>	<b>0.515</b>	<b>0.582</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>



	Bottom side	0.910				<b>0.910</b>	<b>0.910</b>	<b>0.910</b>
FR1 n12_Ant 0	Front	0.316	0.128	0.148	0.124	<b>0.444</b>	<b>0.464</b>	<b>0.440</b>
	Back	0.293	0.213	0.205	0.190	<b>0.506</b>	<b>0.498</b>	<b>0.483</b>
	Left side	0.404	0.022	0.084	0.078	<b>0.426</b>	<b>0.488</b>	<b>0.482</b>
	Right side	0.244	0.112	0.020	0.087	<b>0.356</b>	<b>0.264</b>	<b>0.331</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.064				<b>0.064</b>	<b>0.064</b>	<b>0.064</b>
FR1 n25_Ant 2	Front	0.616	0.128	0.148	0.124	<b>0.744</b>	<b>0.764</b>	<b>0.740</b>
	Back	0.550	0.213	0.205	0.190	<b>0.763</b>	<b>0.755</b>	<b>0.740</b>
	Left side	0.055	0.022	0.084	0.078	<b>0.077</b>	<b>0.139</b>	<b>0.133</b>
	Right side	0.350	0.112	0.020	0.087	<b>0.462</b>	<b>0.370</b>	<b>0.437</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.897				<b>0.897</b>	<b>0.897</b>	<b>0.897</b>
FR1 n30_Ant 2	Front	0.633	0.128	0.148	0.124	<b>0.761</b>	<b>0.781</b>	<b>0.757</b>
	Back	0.659	0.213	0.205	0.190	<b>0.872</b>	<b>0.864</b>	<b>0.849</b>
	Left side	0.025	0.022	0.084	0.078	<b>0.047</b>	<b>0.109</b>	<b>0.103</b>
	Right side	0.530	0.112	0.020	0.087	<b>0.642</b>	<b>0.550</b>	<b>0.617</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.898				<b>0.898</b>	<b>0.898</b>	<b>0.898</b>
FR1 n41_Ant 5	Front	0.449	0.128	0.148	0.124	<b>0.577</b>	<b>0.597</b>	<b>0.573</b>
	Back	0.542	0.213	0.205	0.190	<b>0.755</b>	<b>0.747</b>	<b>0.732</b>
	Left side	0.028	0.022	0.084	0.078	<b>0.050</b>	<b>0.112</b>	<b>0.106</b>
	Right side	0.910	0.112	0.020	0.087	<b>1.022</b>	<b>0.930</b>	<b>0.997</b>
	Top side	0.157	0.258	0.362	0.288	<b>0.415</b>	<b>0.519</b>	<b>0.445</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 2	Front	0.653	0.128	0.148	0.124	<b>0.781</b>	<b>0.801</b>	<b>0.777</b>
	Back	0.697	0.213	0.205	0.190	<b>0.910</b>	<b>0.902</b>	<b>0.887</b>
	Left side	0.206	0.022	0.084	0.078	<b>0.228</b>	<b>0.290</b>	<b>0.284</b>
	Right side	0.514	0.112	0.020	0.087	<b>0.626</b>	<b>0.534</b>	<b>0.601</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.817				<b>0.817</b>	<b>0.817</b>	<b>0.817</b>
FR1 n71_Ant 0	Front	0.225	0.128	0.148	0.124	<b>0.353</b>	<b>0.373</b>	<b>0.349</b>
	Back	0.215	0.213	0.205	0.190	<b>0.428</b>	<b>0.420</b>	<b>0.405</b>
	Left side	0.232	0.022	0.084	0.078	<b>0.254</b>	<b>0.316</b>	<b>0.310</b>
	Right side	0.171	0.112	0.020	0.087	<b>0.283</b>	<b>0.191</b>	<b>0.258</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.031				<b>0.031</b>	<b>0.031</b>	<b>0.031</b>
FR1 n77_Ant 6	Front	0.552	0.128	0.148	0.124	<b>0.680</b>	<b>0.700</b>	<b>0.676</b>
	Back	0.562	0.213	0.205	0.190	<b>0.775</b>	<b>0.767</b>	<b>0.752</b>
	Left side	0.788	0.022	0.084	0.078	<b>0.810</b>	<b>0.872</b>	<b>0.866</b>
	Right side	0.026	0.112	0.020	0.087	<b>0.138</b>	<b>0.046</b>	<b>0.113</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.151				<b>0.151</b>	<b>0.151</b>	<b>0.151</b>



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

WWAN Band	Exposure Position	1	4	5	6	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 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	0.545	0.128	0.148	0.124	<b>0.673</b>	<b>0.693</b>	<b>0.669</b>
	Back	0.824	0.213	0.205	0.190	<b>1.037</b>	<b>1.029</b>	<b>1.014</b>
	Left side	0.281	0.022	0.084	0.078	<b>0.303</b>	<b>0.365</b>	<b>0.359</b>
	Right side	0.221	0.112	0.020	0.087	<b>0.333</b>	<b>0.241</b>	<b>0.308</b>
	Top side	0.462	0.258	0.362	0.288	<b>0.720</b>	<b>0.824</b>	<b>0.750</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
GSM1900_Ant 0	Front	0.738	0.128	0.148	0.124	<b>0.866</b>	<b>0.886</b>	<b>0.862</b>
	Back	0.654	0.213	0.205	0.190	<b>0.867</b>	<b>0.859</b>	<b>0.844</b>
	Left side	0.077	0.022	0.084	0.078	<b>0.099</b>	<b>0.161</b>	<b>0.155</b>
	Right side	0.633	0.112	0.020	0.087	<b>0.745</b>	<b>0.653</b>	<b>0.720</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.887				<b>0.887</b>	<b>0.887</b>	<b>0.887</b>
WCDMA II_Ant 0	Front	0.552	0.128	0.148	0.124	<b>0.680</b>	<b>0.700</b>	<b>0.676</b>
	Back	0.715	0.213	0.205	0.190	<b>0.928</b>	<b>0.920</b>	<b>0.905</b>
	Left side	0.665	0.022	0.084	0.078	<b>0.687</b>	<b>0.749</b>	<b>0.743</b>
	Right side	0.039	0.112	0.020	0.087	<b>0.151</b>	<b>0.059</b>	<b>0.126</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.907				<b>0.907</b>	<b>0.907</b>	<b>0.907</b>
WCDMA IV_Ant 0	Front	0.504	0.128	0.148	0.124	<b>0.632</b>	<b>0.652</b>	<b>0.628</b>
	Back	0.585	0.213	0.205	0.190	<b>0.798</b>	<b>0.790</b>	<b>0.775</b>
	Left side	0.807	0.022	0.084	0.078	<b>0.829</b>	<b>0.891</b>	<b>0.885</b>
	Right side	0.094	0.112	0.020	0.087	<b>0.206</b>	<b>0.114</b>	<b>0.181</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.400				<b>0.400</b>	<b>0.400</b>	<b>0.400</b>
WCDMA V_Ant 1	Front	0.349	0.128	0.148	0.124	<b>0.477</b>	<b>0.497</b>	<b>0.473</b>
	Back	0.493	0.213	0.205	0.190	<b>0.706</b>	<b>0.698</b>	<b>0.683</b>
	Left side	0.205	0.022	0.084	0.078	<b>0.227</b>	<b>0.289</b>	<b>0.283</b>
	Right side	0.106	0.112	0.020	0.087	<b>0.218</b>	<b>0.126</b>	<b>0.193</b>
	Top side	0.297	0.258	0.362	0.288	<b>0.555</b>	<b>0.659</b>	<b>0.585</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 7_Ant 0	Front	0.426	0.128	0.148	0.124	<b>0.554</b>	<b>0.574</b>	<b>0.550</b>
	Back	0.500	0.213	0.205	0.190	<b>0.713</b>	<b>0.705</b>	<b>0.690</b>
	Left side	0.787	0.022	0.084	0.078	<b>0.809</b>	<b>0.871</b>	<b>0.865</b>
	Right side	0.069	0.112	0.020	0.087	<b>0.181</b>	<b>0.089</b>	<b>0.156</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.309				<b>0.309</b>	<b>0.309</b>	<b>0.309</b>
LTE Band 12_Ant 1	Front	0.215	0.128	0.148	0.124	<b>0.343</b>	<b>0.363</b>	<b>0.339</b>
	Back	0.284	0.213	0.205	0.190	<b>0.497</b>	<b>0.489</b>	<b>0.474</b>
	Left side	0.168	0.022	0.084	0.078	<b>0.190</b>	<b>0.252</b>	<b>0.246</b>
	Right side	0.055	0.112	0.020	0.087	<b>0.167</b>	<b>0.075</b>	<b>0.142</b>
	Top side	0.164	0.258	0.362	0.288	<b>0.422</b>	<b>0.526</b>	<b>0.452</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 13_Ant 1	Front	0.331	0.128	0.148	0.124	<b>0.459</b>	<b>0.479</b>	<b>0.455</b>
	Back	0.444	0.213	0.205	0.190	<b>0.657</b>	<b>0.649</b>	<b>0.634</b>
	Left side	0.358	0.022	0.084	0.078	<b>0.380</b>	<b>0.442</b>	<b>0.436</b>
	Right side	0.176	0.112	0.020	0.087	<b>0.288</b>	<b>0.196</b>	<b>0.263</b>
	Top side	0.250	0.258	0.362	0.288	<b>0.508</b>	<b>0.612</b>	<b>0.538</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 14_Ant 1	Front	0.331	0.128	0.148	0.124	<b>0.459</b>	<b>0.479</b>	<b>0.455</b>
	Back	0.498	0.213	0.205	0.190	<b>0.711</b>	<b>0.703</b>	<b>0.688</b>
	Left side	0.362	0.022	0.084	0.078	<b>0.384</b>	<b>0.446</b>	<b>0.440</b>



	Right side	0.185	0.112	0.020	0.087	<b>0.297</b>	<b>0.205</b>	<b>0.272</b>
	Top side	0.275	0.258	0.362	0.288	<b>0.533</b>	<b>0.637</b>	<b>0.563</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 25_Ant 0	Front	0.474	0.128	0.148	0.124	<b>0.602</b>	<b>0.622</b>	<b>0.598</b>
	Back	0.634	0.213	0.205	0.190	<b>0.847</b>	<b>0.839</b>	<b>0.824</b>
	Left side	0.640	0.022	0.084	0.078	<b>0.662</b>	<b>0.724</b>	<b>0.718</b>
	Right side	0.028	0.112	0.020	0.087	<b>0.140</b>	<b>0.048</b>	<b>0.115</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.904				<b>0.904</b>	<b>0.904</b>	<b>0.904</b>
LTE Band 26_Ant 1	Front	0.332	0.128	0.148	0.124	<b>0.460</b>	<b>0.480</b>	<b>0.456</b>
	Back	0.497	0.213	0.205	0.190	<b>0.710</b>	<b>0.702</b>	<b>0.687</b>
	Left side	0.177	0.022	0.084	0.078	<b>0.199</b>	<b>0.261</b>	<b>0.255</b>
	Right side	0.146	0.112	0.020	0.087	<b>0.258</b>	<b>0.166</b>	<b>0.233</b>
	Top side	0.329	0.258	0.362	0.288	<b>0.587</b>	<b>0.691</b>	<b>0.617</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
LTE Band 30_Ant 0	Front	0.430	0.128	0.148	0.124	<b>0.558</b>	<b>0.578</b>	<b>0.554</b>
	Back	0.506	0.213	0.205	0.190	<b>0.719</b>	<b>0.711</b>	<b>0.696</b>
	Left side	0.889	0.022	0.084	0.078	<b>0.911</b>	<b>0.973</b>	<b>0.967</b>
	Right side	0.048	0.112	0.020	0.087	<b>0.160</b>	<b>0.068</b>	<b>0.135</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.287				<b>0.287</b>	<b>0.287</b>	<b>0.287</b>
LTE Band 41_Ant 0	Front	0.230	0.128	0.148	0.124	<b>0.358</b>	<b>0.378</b>	<b>0.354</b>
	Back	0.327	0.213	0.205	0.190	<b>0.540</b>	<b>0.532</b>	<b>0.517</b>
	Left side	0.600	0.022	0.084	0.078	<b>0.622</b>	<b>0.684</b>	<b>0.678</b>
	Right side	0.056	0.112	0.020	0.087	<b>0.168</b>	<b>0.076</b>	<b>0.143</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.244				<b>0.244</b>	<b>0.244</b>	<b>0.244</b>
LTE Band 48_Ant 2	Front	0.410	0.128	0.148	0.124	<b>0.538</b>	<b>0.558</b>	<b>0.534</b>
	Back	0.418	0.213	0.205	0.190	<b>0.631</b>	<b>0.623</b>	<b>0.608</b>
	Left side	0.049	0.022	0.084	0.078	<b>0.071</b>	<b>0.133</b>	<b>0.127</b>
	Right side	0.905	0.112	0.020	0.087	<b>1.017</b>	<b>0.925</b>	<b>0.992</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.178				<b>0.178</b>	<b>0.178</b>	<b>0.178</b>
LTE Band 66_Ant 0	Front	0.367	0.128	0.148	0.124	<b>0.495</b>	<b>0.515</b>	<b>0.491</b>
	Back	0.529	0.213	0.205	0.190	<b>0.742</b>	<b>0.734</b>	<b>0.719</b>
	Left side	0.755	0.022	0.084	0.078	<b>0.777</b>	<b>0.839</b>	<b>0.833</b>
	Right side	0.082	0.112	0.020	0.087	<b>0.194</b>	<b>0.102</b>	<b>0.169</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.256				<b>0.256</b>	<b>0.256</b>	<b>0.256</b>
LTE Band 71_Ant 1	Front	0.181	0.128	0.148	0.124	<b>0.309</b>	<b>0.329</b>	<b>0.305</b>
	Back	0.220	0.213	0.205	0.190	<b>0.433</b>	<b>0.425</b>	<b>0.410</b>
	Left side	0.195	0.022	0.084	0.078	<b>0.217</b>	<b>0.279</b>	<b>0.273</b>
	Right side	0.070	0.112	0.020	0.087	<b>0.182</b>	<b>0.090</b>	<b>0.157</b>
	Top side	0.105	0.258	0.362	0.288	<b>0.363</b>	<b>0.467</b>	<b>0.393</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n5_Ant 1	Front	0.266	0.128	0.148	0.124	<b>0.394</b>	<b>0.414</b>	<b>0.390</b>
	Back	0.396	0.213	0.205	0.190	<b>0.609</b>	<b>0.601</b>	<b>0.586</b>
	Left side	0.123	0.022	0.084	0.078	<b>0.145</b>	<b>0.207</b>	<b>0.201</b>
	Right side	0.133	0.112	0.020	0.087	<b>0.245</b>	<b>0.153</b>	<b>0.220</b>
	Top side	0.236	0.258	0.362	0.288	<b>0.494</b>	<b>0.598</b>	<b>0.524</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n7_Ant 0	Front	0.407	0.128	0.148	0.124	<b>0.535</b>	<b>0.555</b>	<b>0.531</b>
	Back	0.266	0.213	0.205	0.190	<b>0.479</b>	<b>0.471</b>	<b>0.456</b>
	Left side	0.653	0.022	0.084	0.078	<b>0.675</b>	<b>0.737</b>	<b>0.731</b>
	Right side	0.068	0.112	0.020	0.087	<b>0.180</b>	<b>0.088</b>	<b>0.155</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>



	Bottom side	0.168				<b>0.168</b>	<b>0.168</b>	<b>0.168</b>
FR1 n12_Ant 1	Front	0.187	0.128	0.148	0.124	<b>0.315</b>	<b>0.335</b>	<b>0.311</b>
	Back	0.251	0.213	0.205	0.190	<b>0.464</b>	<b>0.456</b>	<b>0.441</b>
	Left side	0.141	0.022	0.084	0.078	<b>0.163</b>	<b>0.225</b>	<b>0.219</b>
	Right side	0.001	0.112	0.020	0.087	<b>0.113</b>	<b>0.021</b>	<b>0.088</b>
	Top side	0.102	0.258	0.362	0.288	<b>0.360</b>	<b>0.464</b>	<b>0.390</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n25_Ant 0	Front	0.533	0.128	0.148	0.124	<b>0.661</b>	<b>0.681</b>	<b>0.657</b>
	Back	0.628	0.213	0.205	0.190	<b>0.841</b>	<b>0.833</b>	<b>0.818</b>
	Left side	0.624	0.022	0.084	0.078	<b>0.646</b>	<b>0.708</b>	<b>0.702</b>
	Right side	0.026	0.112	0.020	0.087	<b>0.138</b>	<b>0.046</b>	<b>0.113</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.838				<b>0.838</b>	<b>0.838</b>	<b>0.838</b>
FR1 n30_Ant 0	Front	0.403	0.128	0.148	0.124	<b>0.531</b>	<b>0.551</b>	<b>0.527</b>
	Back	0.456	0.213	0.205	0.190	<b>0.669</b>	<b>0.661</b>	<b>0.646</b>
	Left side	0.756	0.022	0.084	0.078	<b>0.778</b>	<b>0.840</b>	<b>0.834</b>
	Right side	0.051	0.112	0.020	0.087	<b>0.163</b>	<b>0.071</b>	<b>0.138</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.248				<b>0.248</b>	<b>0.248</b>	<b>0.248</b>
FR1 n41_Ant 1	Front	0.500	0.128	0.148	0.124	<b>0.628</b>	<b>0.648</b>	<b>0.624</b>
	Back	0.446	0.213	0.205	0.190	<b>0.659</b>	<b>0.651</b>	<b>0.636</b>
	Left side	0.613	0.022	0.084	0.078	<b>0.635</b>	<b>0.697</b>	<b>0.691</b>
	Right side	0.013	0.112	0.020	0.087	<b>0.125</b>	<b>0.033</b>	<b>0.100</b>
	Top side	0.345	0.258	0.362	0.288	<b>0.603</b>	<b>0.707</b>	<b>0.633</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n66_Ant 0	Front	0.429	0.128	0.148	0.124	<b>0.557</b>	<b>0.577</b>	<b>0.553</b>
	Back	0.553	0.213	0.205	0.190	<b>0.766</b>	<b>0.758</b>	<b>0.743</b>
	Left side	0.798	0.022	0.084	0.078	<b>0.820</b>	<b>0.882</b>	<b>0.876</b>
	Right side	0.106	0.112	0.020	0.087	<b>0.218</b>	<b>0.126</b>	<b>0.193</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.390				<b>0.390</b>	<b>0.390</b>	<b>0.390</b>
FR1 n71_Ant 1	Front	0.155	0.128	0.148	0.124	<b>0.283</b>	<b>0.303</b>	<b>0.279</b>
	Back	0.193	0.213	0.205	0.190	<b>0.406</b>	<b>0.398</b>	<b>0.383</b>
	Left side	0.182	0.022	0.084	0.078	<b>0.204</b>	<b>0.266</b>	<b>0.260</b>
	Right side	0.074	0.112	0.020	0.087	<b>0.186</b>	<b>0.094</b>	<b>0.161</b>
	Top side	0.192	0.258	0.362	0.288	<b>0.450</b>	<b>0.554</b>	<b>0.480</b>
	Bottom side					<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
FR1 n77_Ant 2	Front	0.519	0.128	0.148	0.124	<b>0.647</b>	<b>0.667</b>	<b>0.643</b>
	Back	0.366	0.213	0.205	0.190	<b>0.579</b>	<b>0.571</b>	<b>0.556</b>
	Left side	0.073	0.022	0.084	0.078	<b>0.095</b>	<b>0.157</b>	<b>0.151</b>
	Right side	0.843	0.112	0.020	0.087	<b>0.955</b>	<b>0.863</b>	<b>0.930</b>
	Top side		0.258	0.362	0.288	<b>0.258</b>	<b>0.362</b>	<b>0.288</b>
	Bottom side	0.209				<b>0.209</b>	<b>0.209</b>	<b>0.209</b>



**16.4 Body-Worn Accessory Exposure Conditions**

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

Exposure Position	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)
	5/6GHz WLAN Ant 4+3 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)			
Front	0.544	0.128	0.148	0.124	<b>0.672</b>	<b>0.692</b>	<b>0.668</b>
Back	1.025	0.213	0.205	0.190	<b>1.238</b>	<b>1.230</b>	<b>1.215</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 4+3 1g SAR (W/kg)	
Right Cheek	0.486	0.988	<b>1.474</b>
Right Tilted	0.558	0.755	<b>1.313</b>
Left Cheek	0.359	0.983	<b>1.342</b>
Left Tilted	0.481	0.912	<b>1.393</b>

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

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 4+3 1g SAR (W/kg)	
GSM850_Ant 0	Front	0.550	0.143	0.236	<b>0.929</b>
	Back	0.429	0.214	0.352	<b>0.995</b>
GSM1900_Ant 2	Front	0.853	0.143	0.236	<b>1.232</b>
	Back	0.908	0.214	0.352	<b>1.474</b>
WCDMA II_Ant 2	Front	0.758	0.143	0.236	<b>1.137</b>
	Back	0.889	0.214	0.352	<b>1.455</b>
WCDMA IV_Ant 2	Front	0.741	0.143	0.236	<b>1.120</b>
	Back	0.877	0.214	0.352	<b>1.443</b>
WCDMA V_Ant 0	Front	0.281	0.143	0.236	<b>0.660</b>
	Back	0.190	0.214	0.352	<b>0.756</b>
LTE Band 7_Ant 2	Front	0.708	0.143	0.236	<b>1.087</b>
	Back	0.908	0.214	0.352	<b>1.474</b>
LTE Band 12_Ant 0	Front	0.294	0.143	0.236	<b>0.673</b>
	Back	0.312	0.214	0.352	<b>0.878</b>
LTE Band 13_Ant 0	Front	0.386	0.143	0.236	<b>0.765</b>
	Back	0.382	0.214	0.352	<b>0.948</b>
LTE Band 14_Ant 0	Front	0.385	0.143	0.236	<b>0.764</b>
	Back	0.367	0.214	0.352	<b>0.933</b>
LTE Band 25_Ant 2	Front	0.858	0.143	0.236	<b>1.237</b>
	Back	0.908	0.214	0.352	<b>1.474</b>
LTE Band 26_Ant 0	Front	0.311	0.143	0.236	<b>0.690</b>
	Back	0.329	0.214	0.352	<b>0.895</b>
LTE Band 30_Ant 2	Front	0.752	0.143	0.236	<b>1.131</b>
	Back	0.863	0.214	0.352	<b>1.429</b>
LTE Band 41_Ant 2	Front	0.799	0.143	0.236	<b>1.178</b>
	Back	0.884	0.214	0.352	<b>1.450</b>
LTE Band 48_Ant 6	Front	0.506	0.143	0.236	<b>0.885</b>
	Back	0.517	0.214	0.352	<b>1.083</b>
LTE Band 66_Ant 2	Front	0.786	0.143	0.236	<b>1.165</b>





	Back	0.811	0.214	0.352	<b>1.377</b>
LTE Band 71_Ant 0	Front	0.341	0.143	0.236	<b>0.720</b>
	Back	0.333	0.214	0.352	<b>0.899</b>
FR1 n5_Ant 0	Front	0.258	0.143	0.236	<b>0.637</b>
	Back	0.230	0.214	0.352	<b>0.796</b>
FR1 n7_Ant 2	Front	0.680	0.143	0.236	<b>1.059</b>
	Back	0.909	0.214	0.352	<b>1.475</b>
FR1 n12_Ant 0	Front	0.316	0.143	0.236	<b>0.695</b>
	Back	0.293	0.214	0.352	<b>0.859</b>
FR1 n25_Ant 2	Front	0.775	0.143	0.236	<b>1.154</b>
	Back	0.910	0.214	0.352	<b>1.476</b>
FR1 n30_Ant 2	Front	0.710	0.143	0.236	<b>1.089</b>
	Back	0.906	0.214	0.352	<b>1.472</b>
FR1 n41_Ant 5	Front	0.685	0.143	0.236	<b>1.064</b>
	Back	0.692	0.214	0.352	<b>1.258</b>
FR1 n66_Ant 2	Front	0.766	0.143	0.236	<b>1.145</b>
	Back	0.821	0.214	0.352	<b>1.387</b>
FR1 n71_Ant 0	Front	0.225	0.143	0.236	<b>0.604</b>
	Back	0.215	0.214	0.352	<b>0.781</b>
FR1 n77_Ant 6	Front	0.719	0.143	0.236	<b>1.098</b>
	Back	0.685	0.214	0.352	<b>1.251</b>



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

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN Ant 4+3	5/6GHz WLAN Ant 4+3	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850_Ant 1	Front	0.545	0.143	0.236	0.924
	Back	0.824	0.214	0.352	1.390
GSM1900_Ant 0	Front	0.701	0.143	0.236	1.080
	Back	0.894	0.214	0.352	1.460
WCDMA II_Ant 0	Front	0.590	0.143	0.236	0.969
	Back	0.907	0.214	0.352	1.473
WCDMA IV_Ant 0	Front	0.504	0.143	0.236	0.883
	Back	0.585	0.214	0.352	1.151
WCDMA V_Ant 1	Front	0.349	0.143	0.236	0.728
	Back	0.493	0.214	0.352	1.059
LTE Band 7_Ant 0	Front	0.426	0.143	0.236	0.805
	Back	0.500	0.214	0.352	1.066
LTE Band 12_Ant 1	Front	0.215	0.143	0.236	0.594
	Back	0.284	0.214	0.352	0.850
LTE Band 13_Ant 1	Front	0.331	0.143	0.236	0.710
	Back	0.444	0.214	0.352	1.010
LTE Band 14_Ant 1	Front	0.331	0.143	0.236	0.710
	Back	0.498	0.214	0.352	1.064
LTE Band 25_Ant 0	Front	0.474	0.143	0.236	0.853
	Back	0.634	0.214	0.352	1.200
LTE Band 26_Ant 1	Front	0.332	0.143	0.236	0.711
	Back	0.497	0.214	0.352	1.063
LTE Band 30_Ant 0	Front	0.483	0.143	0.236	0.862
	Back	0.567	0.214	0.352	1.133
LTE Band 41_Ant 0	Front	0.230	0.143	0.236	0.609
	Back	0.327	0.214	0.352	0.893
LTE Band 48_Ant 2	Front	0.439	0.143	0.236	0.818
	Back	0.448	0.214	0.352	1.014
LTE Band 66_Ant 0	Front	0.367	0.143	0.236	0.746
	Back	0.529	0.214	0.352	1.095
LTE Band 71_Ant 1	Front	0.181	0.143	0.236	0.560
	Back	0.220	0.214	0.352	0.786
FR1 n5_Ant 1	Front	0.266	0.143	0.236	0.645
	Back	0.396	0.214	0.352	0.962
FR1 n7_Ant 0	Front	0.407	0.143	0.236	0.786
	Back	0.266	0.214	0.352	0.832
FR1 n12_Ant 1	Front	0.187	0.143	0.236	0.566
	Back	0.251	0.214	0.352	0.817
FR1 n25_Ant 0	Front	0.545	0.143	0.236	0.924
	Back	0.799	0.214	0.352	1.365
FR1 n30_Ant 0	Front	0.403	0.143	0.236	0.782
	Back	0.456	0.214	0.352	1.022
FR1 n41_Ant 1	Front	0.500	0.143	0.236	0.879
	Back	0.446	0.214	0.352	1.012
FR1 n66_Ant 0	Front	0.429	0.143	0.236	0.808
	Back	0.553	0.214	0.352	1.119
FR1 n71_Ant 1	Front	0.155	0.143	0.236	0.534
	Back	0.193	0.214	0.352	0.759
FR1 n77_Ant 2	Front	0.734	0.143	0.236	1.113
	Back	0.633	0.214	0.352	1.199



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

WWAN Band	Exposure Position	1	2	3	1+3 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 4+3 1g SAR (W/kg)		
GSM850_Ant 0	Front	0.550	0.343	0.484	1.034	0.893
	Back	0.429	0.449	0.612	1.041	0.878
GSM1900_Ant 2	Front	0.853	0.343	0.484	1.337	1.196
	Back	0.908	0.449	0.612	1.520	1.357
WCDMA II_Ant 2	Front	0.758	0.343	0.484	1.242	1.101
	Back	0.889	0.449	0.612	1.501	1.338
WCDMA IV_Ant 2	Front	0.741	0.343	0.484	1.225	1.084
	Back	0.877	0.449	0.612	1.489	1.326
WCDMA V_Ant 0	Front	0.281	0.343	0.484	0.765	0.624
	Back	0.190	0.449	0.612	0.802	0.639
LTE Band 7_Ant 2	Front	0.708	0.343	0.484	1.192	1.051
	Back	0.908	0.449	0.612	1.520	1.357
LTE Band 12_Ant 0	Front	0.294	0.343	0.484	0.778	0.637
	Back	0.312	0.449	0.612	0.924	0.761
LTE Band 13_Ant 0	Front	0.386	0.343	0.484	0.870	0.729
	Back	0.382	0.449	0.612	0.994	0.831
LTE Band 14_Ant 0	Front	0.385	0.343	0.484	0.869	0.728
	Back	0.367	0.449	0.612	0.979	0.816
LTE Band 25_Ant 2	Front	0.858	0.343	0.484	1.342	1.201
	Back	0.908	0.449	0.612	1.520	1.357
LTE Band 26_Ant 0	Front	0.311	0.343	0.484	0.795	0.654
	Back	0.329	0.449	0.612	0.941	0.778
LTE Band 30_Ant 2	Front	0.752	0.343	0.484	1.236	1.095
	Back	0.863	0.449	0.612	1.475	1.312
LTE Band 41_Ant 2	Front	0.799	0.343	0.484	1.283	1.142
	Back	0.884	0.449	0.612	1.496	1.333
LTE Band 48_Ant 6	Front	0.506	0.343	0.484	0.990	0.849
	Back	0.517	0.449	0.612	1.129	0.966
LTE Band 66_Ant 2	Front	0.786	0.343	0.484	1.270	1.129
	Back	0.811	0.449	0.612	1.423	1.260
LTE Band 71_Ant 0	Front	0.341	0.343	0.484	0.825	0.684
	Back	0.333	0.449	0.612	0.945	0.782
FR1 n5_Ant 0	Front	0.258	0.343	0.484	0.742	0.601
	Back	0.230	0.449	0.612	0.842	0.679
FR1 n7_Ant 2	Front	0.680	0.343	0.484	1.164	1.023
	Back	0.909	0.449	0.612	1.521	1.358
FR1 n12_Ant 0	Front	0.316	0.343	0.484	0.800	0.659
	Back	0.293	0.449	0.612	0.905	0.742
FR1 n25_Ant 2	Front	0.775	0.343	0.484	1.259	1.118
	Back	0.910	0.449	0.612	1.522	1.359
FR1 n30_Ant 2	Front	0.710	0.343	0.484	1.194	1.053
	Back	0.906	0.449	0.612	1.518	1.355
FR1 n41_Ant 5	Front	0.685	0.343	0.484	1.169	1.028
	Back	0.692	0.449	0.612	1.304	1.141
FR1 n66_Ant 2	Front	0.766	0.343	0.484	1.250	1.109
	Back	0.821	0.449	0.612	1.433	1.270
FR1 n71_Ant 0	Front	0.225	0.343	0.484	0.709	0.568
	Back	0.215	0.449	0.612	0.827	0.664
FR1 n77_Ant 6	Front	0.719	0.343	0.484	1.203	1.062
	Back	0.685	0.449	0.612	1.297	1.134



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

WWAN Band	Exposure Position	1	2	3	1+3 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	2.4GHz WLAN Ant 4+3 1g SAR (W/kg)	5/6GHz WLAN Ant 4+3 1g SAR (W/kg)		
GSM850_Ant 1	Front	0.545	0.343	0.484	<b>1.029</b>	<b>0.888</b>
	Back	0.824	0.449	0.612	<b>1.436</b>	<b>1.273</b>
GSM1900_Ant 0	Front	0.701	0.343	0.484	<b>1.185</b>	<b>1.044</b>
	Back	0.894	0.449	0.612	<b>1.506</b>	<b>1.343</b>
WCDMA II_Ant 0	Front	0.590	0.343	0.484	<b>1.074</b>	<b>0.933</b>
	Back	0.907	0.449	0.612	<b>1.519</b>	<b>1.356</b>
WCDMA IV_Ant 0	Front	0.504	0.343	0.484	<b>0.988</b>	<b>0.847</b>
	Back	0.585	0.449	0.612	<b>1.197</b>	<b>1.034</b>
WCDMA V_Ant 1	Front	0.349	0.343	0.484	<b>0.833</b>	<b>0.692</b>
	Back	0.493	0.449	0.612	<b>1.105</b>	<b>0.942</b>
LTE Band 7_Ant 0	Front	0.426	0.343	0.484	<b>0.910</b>	<b>0.769</b>
	Back	0.500	0.449	0.612	<b>1.112</b>	<b>0.949</b>
LTE Band 12_Ant 1	Front	0.215	0.343	0.484	<b>0.699</b>	<b>0.558</b>
	Back	0.284	0.449	0.612	<b>0.896</b>	<b>0.733</b>
LTE Band 13_Ant 1	Front	0.331	0.343	0.484	<b>0.815</b>	<b>0.674</b>
	Back	0.444	0.449	0.612	<b>1.056</b>	<b>0.893</b>
LTE Band 14_Ant 1	Front	0.331	0.343	0.484	<b>0.815</b>	<b>0.674</b>
	Back	0.498	0.449	0.612	<b>1.110</b>	<b>0.947</b>
LTE Band 25_Ant 0	Front	0.474	0.343	0.484	<b>0.958</b>	<b>0.817</b>
	Back	0.634	0.449	0.612	<b>1.246</b>	<b>1.083</b>
LTE Band 26_Ant 1	Front	0.332	0.343	0.484	<b>0.816</b>	<b>0.675</b>
	Back	0.497	0.449	0.612	<b>1.109</b>	<b>0.946</b>
LTE Band 30_Ant 0	Front	0.483	0.343	0.484	<b>0.967</b>	<b>0.826</b>
	Back	0.567	0.449	0.612	<b>1.179</b>	<b>1.016</b>
LTE Band 41_Ant 0	Front	0.230	0.343	0.484	<b>0.714</b>	<b>0.573</b>
	Back	0.327	0.449	0.612	<b>0.939</b>	<b>0.776</b>
LTE Band 48_Ant 2	Front	0.439	0.343	0.484	<b>0.923</b>	<b>0.782</b>
	Back	0.448	0.449	0.612	<b>1.060</b>	<b>0.897</b>
LTE Band 66_Ant 0	Front	0.367	0.343	0.484	<b>0.851</b>	<b>0.710</b>
	Back	0.529	0.449	0.612	<b>1.141</b>	<b>0.978</b>
LTE Band 71_Ant 1	Front	0.181	0.343	0.484	<b>0.665</b>	<b>0.524</b>
	Back	0.220	0.449	0.612	<b>0.832</b>	<b>0.669</b>
FR1 n5_Ant 1	Front	0.266	0.343	0.484	<b>0.750</b>	<b>0.609</b>
	Back	0.396	0.449	0.612	<b>1.008</b>	<b>0.845</b>
FR1 n7_Ant 0	Front	0.407	0.343	0.484	<b>0.891</b>	<b>0.750</b>
	Back	0.266	0.449	0.612	<b>0.878</b>	<b>0.715</b>
FR1 n12_Ant 1	Front	0.187	0.343	0.484	<b>0.671</b>	<b>0.530</b>
	Back	0.251	0.449	0.612	<b>0.863</b>	<b>0.700</b>
FR1 n25_Ant 0	Front	0.545	0.343	0.484	<b>1.029</b>	<b>0.888</b>
	Back	0.799	0.449	0.612	<b>1.411</b>	<b>1.248</b>
FR1 n30_Ant 0	Front	0.403	0.343	0.484	<b>0.887</b>	<b>0.746</b>
	Back	0.456	0.449	0.612	<b>1.068</b>	<b>0.905</b>
FR1 n41_Ant 1	Front	0.500	0.343	0.484	<b>0.984</b>	<b>0.843</b>
	Back	0.446	0.449	0.612	<b>1.058</b>	<b>0.895</b>
FR1 n66_Ant 0	Front	0.429	0.343	0.484	<b>0.913</b>	<b>0.772</b>
	Back	0.553	0.449	0.612	<b>1.165</b>	<b>1.002</b>
FR1 n71_Ant 1	Front	0.155	0.343	0.484	<b>0.639</b>	<b>0.498</b>
	Back	0.193	0.449	0.612	<b>0.805</b>	<b>0.642</b>
FR1 n77_Ant 2	Front	0.734	0.343	0.484	<b>1.218</b>	<b>1.077</b>
	Back	0.633	0.449	0.612	<b>1.245</b>	<b>1.082</b>



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

WWAN Band	Exposure Position	1	3	4	5	6	1+3+4	1+3+5	1+3+6	1+3	1+4	1+5	1+6
		WWAN	5/8GHz WLAN Ant 4+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)	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)							
GSM850_Ant 0	Front	0.550	0.297	0.105	0.094	0.142	0.952	0.941	0.989	0.847	0.655	0.644	0.692
	Back	0.429	0.444	0.130	0.125	0.147	1.003	0.998	1.020	0.873	0.559	0.554	0.576
GSM1900_Ant 2	Front	0.853	0.297	0.105	0.094	0.142	1.255	1.244	1.292	1.150	0.958	0.947	0.995
	Back	0.908	0.444	0.130	0.125	0.147	1.482	1.477	1.499	1.352	1.038	1.033	1.055
WCDMA II_Ant 2	Front	0.758	0.297	0.105	0.094	0.142	1.160	1.149	1.197	1.055	0.863	0.852	0.900
	Back	0.889	0.444	0.130	0.125	0.147	1.463	1.458	1.480	1.333	1.019	1.014	1.036
WCDMA IV_Ant 2	Front	0.741	0.297	0.105	0.094	0.142	1.143	1.132	1.180	1.038	0.846	0.835	0.883
	Back	0.877	0.444	0.130	0.125	0.147	1.451	1.446	1.468	1.321	1.007	1.002	1.024
WCDMA V_Ant 0	Front	0.281	0.297	0.105	0.094	0.142	0.683	0.672	0.720	0.578	0.386	0.375	0.423
	Back	0.190	0.444	0.130	0.125	0.147	0.764	0.759	0.781	0.634	0.320	0.315	0.337
LTE Band 7_Ant 2	Front	0.708	0.297	0.105	0.094	0.142	1.110	1.099	1.147	1.005	0.813	0.802	0.850
	Back	0.908	0.444	0.130	0.125	0.147	1.482	1.477	1.499	1.352	1.038	1.033	1.055
LTE Band 12_Ant 0	Front	0.294	0.297	0.105	0.094	0.142	0.696	0.685	0.733	0.591	0.399	0.388	0.436
	Back	0.312	0.444	0.130	0.125	0.147	0.886	0.881	0.903	0.756	0.442	0.437	0.459
LTE Band 13_Ant 0	Front	0.386	0.297	0.105	0.094	0.142	0.788	0.777	0.825	0.683	0.491	0.480	0.528
	Back	0.382	0.444	0.130	0.125	0.147	0.956	0.951	0.973	0.826	0.512	0.507	0.529
LTE Band 14_Ant 0	Front	0.385	0.297	0.105	0.094	0.142	0.787	0.776	0.824	0.682	0.490	0.479	0.527
	Back	0.367	0.444	0.130	0.125	0.147	0.941	0.936	0.958	0.811	0.497	0.492	0.514
LTE Band 25_Ant 2	Front	0.858	0.297	0.105	0.094	0.142	1.260	1.249	1.297	1.155	0.963	0.952	1.000
	Back	0.908	0.444	0.130	0.125	0.147	1.482	1.477	1.499	1.352	1.038	1.033	1.055
LTE Band 26_Ant 0	Front	0.311	0.297	0.105	0.094	0.142	0.713	0.702	0.750	0.608	0.416	0.405	0.453
	Back	0.329	0.444	0.130	0.125	0.147	0.903	0.898	0.920	0.773	0.459	0.454	0.476
LTE Band 30_Ant 2	Front	0.752	0.297	0.105	0.094	0.142	1.154	1.143	1.191	1.049	0.857	0.846	0.894
	Back	0.863	0.444	0.130	0.125	0.147	1.437	1.432	1.454	1.307	0.993	0.988	1.010
LTE Band 41_Ant 2	Front	0.799	0.297	0.105	0.094	0.142	1.201	1.190	1.238	1.096	0.904	0.893	0.941
	Back	0.884	0.444	0.130	0.125	0.147	1.458	1.453	1.475	1.328	1.014	1.009	1.031
LTE Band 48_Ant 6	Front	0.506	0.297	0.105	0.094	0.142	0.908	0.897	0.945	0.803	0.611	0.600	0.648
	Back	0.517	0.444	0.130	0.125	0.147	1.091	1.086	1.108	0.961	0.647	0.642	0.664
LTE Band 66_Ant 2	Front	0.786	0.297	0.105	0.094	0.142	1.188	1.177	1.225	1.083	0.891	0.880	0.928
	Back	0.811	0.444	0.130	0.125	0.147	1.385	1.380	1.402	1.255	0.941	0.936	0.958
LTE Band 71_Ant 0	Front	0.341	0.297	0.105	0.094	0.142	0.743	0.732	0.780	0.638	0.446	0.435	0.483
	Back	0.333	0.444	0.130	0.125	0.147	0.907	0.902	0.924	0.777	0.463	0.458	0.480
FR1 n5_Ant 0	Front	0.258	0.297	0.105	0.094	0.142	0.660	0.649	0.697	0.555	0.363	0.352	0.400
	Back	0.230	0.444	0.130	0.125	0.147	0.804	0.799	0.821	0.674	0.360	0.355	0.377
FR1 n7_Ant 2	Front	0.680	0.297	0.105	0.094	0.142	1.082	1.071	1.119	0.977	0.785	0.774	0.822
	Back	0.909	0.444	0.130	0.125	0.147	1.483	1.478	1.500	1.353	1.039	1.034	1.056
FR1 n12_Ant 0	Front	0.316	0.297	0.105	0.094	0.142	0.718	0.707	0.755	0.613	0.421	0.410	0.458
	Back	0.293	0.444	0.130	0.125	0.147	0.867	0.862	0.884	0.737	0.423	0.418	0.440
FR1 n25_Ant 2	Front	0.775	0.297	0.105	0.094	0.142	1.177	1.166	1.214	1.072	0.880	0.869	0.917
	Back	0.910	0.444	0.130	0.125	0.147	1.484	1.479	1.501	1.354	1.040	1.035	1.057
FR1 n30_Ant 2	Front	0.710	0.297	0.105	0.094	0.142	1.112	1.101	1.149	1.007	0.815	0.804	0.852
	Back	0.906	0.444	0.130	0.125	0.147	1.480	1.475	1.497	1.350	1.036	1.031	1.053
FR1 n41_Ant 5	Front	0.685	0.297	0.105	0.094	0.142	1.087	1.076	1.124	0.982	0.790	0.779	0.827
	Back	0.692	0.444	0.130	0.125	0.147	1.266	1.261	1.283	1.136	0.822	0.817	0.839
FR1 n66_Ant 2	Front	0.766	0.297	0.105	0.094	0.142	1.168	1.157	1.205	1.063	0.871	0.860	0.908
	Back	0.821	0.444	0.130	0.125	0.147	1.395	1.390	1.412	1.265	0.951	0.946	0.968
FR1 n71_Ant 0	Front	0.225	0.297	0.105	0.094	0.142	0.627	0.616	0.664	0.522	0.330	0.319	0.367
	Back	0.215	0.444	0.130	0.125	0.147	0.789	0.784	0.806	0.659	0.345	0.340	0.362
FR1 n77_Ant 6	Front	0.719	0.297	0.105	0.094	0.142	1.121	1.110	1.158	1.016	0.824	0.813	0.861
	Back	0.685	0.444	0.130	0.125	0.147	1.259	1.254	1.276	1.129	0.815	0.810	0.832



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

WWAN Band	Exposure Position	1	3	4	5	6	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+3+6 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 4+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	0.545	0.297	0.105	0.094	0.142	0.947	0.936	0.984	0.842	0.650	0.639	0.687
	Back	0.824	0.444	0.130	0.125	0.147	1.398	1.393	1.415	1.268	0.954	0.949	0.971
GSM1900_Ant 0	Front	0.701	0.297	0.105	0.094	0.142	1.103	1.092	1.140	0.998	0.806	0.795	0.843
	Back	0.894	0.444	0.130	0.125	0.147	1.468	1.463	1.485	1.338	1.024	1.019	1.041
WCDMA II_Ant 0	Front	0.590	0.297	0.105	0.094	0.142	0.992	0.981	1.029	0.887	0.695	0.684	0.732
	Back	0.907	0.444	0.130	0.125	0.147	1.481	1.476	1.498	1.351	1.037	1.032	1.054
WCDMA IV_Ant 0	Front	0.504	0.297	0.105	0.094	0.142	0.906	0.895	0.943	0.801	0.609	0.598	0.646
	Back	0.585	0.444	0.130	0.125	0.147	1.159	1.154	1.176	1.029	0.715	0.710	0.732
WCDMA V_Ant 1	Front	0.349	0.297	0.105	0.094	0.142	0.751	0.740	0.788	0.646	0.454	0.443	0.491
	Back	0.493	0.444	0.130	0.125	0.147	1.067	1.062	1.084	0.937	0.623	0.618	0.640
LTE Band 7_Ant 0	Front	0.426	0.297	0.105	0.094	0.142	0.828	0.817	0.865	0.723	0.531	0.520	0.568
	Back	0.500	0.444	0.130	0.125	0.147	1.074	1.069	1.091	0.944	0.630	0.625	0.647
LTE Band 12_Ant 1	Front	0.215	0.297	0.105	0.094	0.142	0.617	0.606	0.654	0.512	0.320	0.309	0.357
	Back	0.284	0.444	0.130	0.125	0.147	0.858	0.853	0.875	0.728	0.414	0.409	0.431
LTE Band 13_Ant 1	Front	0.331	0.297	0.105	0.094	0.142	0.733	0.722	0.770	0.628	0.436	0.425	0.473
	Back	0.444	0.444	0.130	0.125	0.147	1.018	1.013	1.035	0.888	0.574	0.569	0.591
LTE Band 14_Ant 1	Front	0.331	0.297	0.105	0.094	0.142	0.733	0.722	0.770	0.628	0.436	0.425	0.473
	Back	0.498	0.444	0.130	0.125	0.147	1.072	1.067	1.089	0.942	0.628	0.623	0.645
LTE Band 25_Ant 0	Front	0.474	0.297	0.105	0.094	0.142	0.876	0.865	0.913	0.771	0.579	0.568	0.616
	Back	0.634	0.444	0.130	0.125	0.147	1.208	1.203	1.225	1.078	0.764	0.759	0.781
LTE Band 26_Ant 1	Front	0.332	0.297	0.105	0.094	0.142	0.734	0.723	0.771	0.629	0.437	0.426	0.474
	Back	0.497	0.444	0.130	0.125	0.147	1.071	1.066	1.088	0.941	0.627	0.622	0.644
LTE Band 30_Ant 0	Front	0.483	0.297	0.105	0.094	0.142	0.885	0.874	0.922	0.780	0.588	0.577	0.625
	Back	0.567	0.444	0.130	0.125	0.147	1.141	1.136	1.158	1.011	0.697	0.692	0.714
LTE Band 41_Ant 0	Front	0.230	0.297	0.105	0.094	0.142	0.632	0.621	0.669	0.527	0.335	0.324	0.372
	Back	0.327	0.444	0.130	0.125	0.147	0.901	0.896	0.918	0.771	0.457	0.452	0.474
LTE Band 48_Ant 2	Front	0.439	0.297	0.105	0.094	0.142	0.841	0.830	0.878	0.736	0.544	0.533	0.581
	Back	0.448	0.444	0.130	0.125	0.147	1.022	1.017	1.039	0.892	0.578	0.573	0.595
LTE Band 66_Ant 0	Front	0.367	0.297	0.105	0.094	0.142	0.769	0.758	0.806	0.664	0.472	0.461	0.509
	Back	0.529	0.444	0.130	0.125	0.147	1.103	1.098	1.120	0.973	0.659	0.654	0.676
LTE Band 71_Ant 1	Front	0.181	0.297	0.105	0.094	0.142	0.583	0.572	0.620	0.478	0.286	0.275	0.323
	Back	0.220	0.444	0.130	0.125	0.147	0.794	0.789	0.811	0.664	0.350	0.345	0.367
FR1 n5_Ant 1	Front	0.266	0.297	0.105	0.094	0.142	0.668	0.657	0.705	0.563	0.371	0.360	0.408
	Back	0.396	0.444	0.130	0.125	0.147	0.970	0.965	0.987	0.840	0.526	0.521	0.543
FR1 n7_Ant 0	Front	0.407	0.297	0.105	0.094	0.142	0.809	0.798	0.846	0.704	0.512	0.501	0.549
	Back	0.266	0.444	0.130	0.125	0.147	0.840	0.835	0.857	0.710	0.396	0.391	0.413
FR1 n12_Ant 1	Front	0.187	0.297	0.105	0.094	0.142	0.589	0.578	0.626	0.484	0.292	0.281	0.329
	Back	0.251	0.444	0.130	0.125	0.147	0.825	0.820	0.842	0.695	0.381	0.376	0.398
FR1 n25_Ant 0	Front	0.545	0.297	0.105	0.094	0.142	0.947	0.936	0.984	0.842	0.650	0.639	0.687
	Back	0.799	0.444	0.130	0.125	0.147	1.373	1.368	1.390	1.243	0.929	0.924	0.946
FR1 n30_Ant 0	Front	0.403	0.297	0.105	0.094	0.142	0.805	0.794	0.842	0.700	0.508	0.497	0.545
	Back	0.456	0.444	0.130	0.125	0.147	1.030	1.025	1.047	0.900	0.586	0.581	0.603
FR1 n41_Ant 1	Front	0.500	0.297	0.105	0.094	0.142	0.902	0.891	0.939	0.797	0.605	0.594	0.642
	Back	0.446	0.444	0.130	0.125	0.147	1.020	1.015	1.037	0.890	0.576	0.571	0.593
FR1 n66_Ant 0	Front	0.429	0.297	0.105	0.094	0.142	0.831	0.820	0.868	0.726	0.534	0.523	0.571
	Back	0.553	0.444	0.130	0.125	0.147	1.127	1.122	1.144	0.997	0.683	0.678	0.700
FR1 n71_Ant 1	Front	0.155	0.297	0.105	0.094	0.142	0.557	0.546	0.594	0.452	0.260	0.249	0.297
	Back	0.193	0.444	0.130	0.125	0.147	0.767	0.762	0.784	0.637	0.323	0.318	0.340
FR1 n77_Ant 2	Front	0.734	0.297	0.105	0.094	0.142	1.136	1.125	1.173	1.031	0.839	0.828	0.876
	Back	0.633	0.444	0.130	0.125	0.147	1.207	1.202	1.224	1.077	0.763	0.758	0.780



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

WWAN Band	Exposure Position	1	4	5	6	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 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	0.550	0.128	0.148	0.124	0.678	0.698	0.674
	Back	0.429	0.213	0.205	0.190	0.642	0.634	0.619
GSM1900_Ant 2	Front	0.853	0.128	0.148	0.124	0.981	1.001	0.977
	Back	0.908	0.213	0.205	0.190	1.121	1.113	1.098
WCDMA II_Ant 2	Front	0.758	0.128	0.148	0.124	0.886	0.906	0.882
	Back	0.889	0.213	0.205	0.190	1.102	1.094	1.079
WCDMA IV_Ant 2	Front	0.741	0.128	0.148	0.124	0.869	0.889	0.865
	Back	0.877	0.213	0.205	0.190	1.090	1.082	1.067
WCDMA V_Ant 0	Front	0.281	0.128	0.148	0.124	0.409	0.429	0.405
	Back	0.190	0.213	0.205	0.190	0.403	0.395	0.380
LTE Band 7_Ant 2	Front	0.708	0.128	0.148	0.124	0.836	0.856	0.832
	Back	0.908	0.213	0.205	0.190	1.121	1.113	1.098
LTE Band 12_Ant 0	Front	0.294	0.128	0.148	0.124	0.422	0.442	0.418
	Back	0.312	0.213	0.205	0.190	0.525	0.517	0.502
LTE Band 13_Ant 0	Front	0.386	0.128	0.148	0.124	0.514	0.534	0.510
	Back	0.382	0.213	0.205	0.190	0.595	0.587	0.572
LTE Band 14_Ant 0	Front	0.385	0.128	0.148	0.124	0.513	0.533	0.509
	Back	0.367	0.213	0.205	0.190	0.580	0.572	0.557
LTE Band 25_Ant 2	Front	0.858	0.128	0.148	0.124	0.986	1.006	0.982
	Back	0.908	0.213	0.205	0.190	1.121	1.113	1.098
LTE Band 26_Ant 0	Front	0.311	0.128	0.148	0.124	0.439	0.459	0.435
	Back	0.329	0.213	0.205	0.190	0.542	0.534	0.519
LTE Band 30_Ant 2	Front	0.752	0.128	0.148	0.124	0.880	0.900	0.876
	Back	0.863	0.213	0.205	0.190	1.076	1.068	1.053
LTE Band 41_Ant 2	Front	0.799	0.128	0.148	0.124	0.927	0.947	0.923
	Back	0.884	0.213	0.205	0.190	1.097	1.089	1.074
LTE Band 48_Ant 6	Front	0.506	0.128	0.148	0.124	0.634	0.654	0.630
	Back	0.517	0.213	0.205	0.190	0.730	0.722	0.707
LTE Band 66_Ant 2	Front	0.786	0.128	0.148	0.124	0.914	0.934	0.910
	Back	0.811	0.213	0.205	0.190	1.024	1.016	1.001
LTE Band 71_Ant 0	Front	0.341	0.128	0.148	0.124	0.469	0.489	0.465
	Back	0.333	0.213	0.205	0.190	0.546	0.538	0.523
FR1 n5_Ant 0	Front	0.258	0.128	0.148	0.124	0.386	0.406	0.382
	Back	0.230	0.213	0.205	0.190	0.443	0.435	0.420
FR1 n7_Ant 2	Front	0.680	0.128	0.148	0.124	0.808	0.828	0.804
	Back	0.909	0.213	0.205	0.190	1.122	1.114	1.099
FR1 n12_Ant 0	Front	0.316	0.128	0.148	0.124	0.444	0.464	0.440
	Back	0.293	0.213	0.205	0.190	0.506	0.498	0.483
FR1 n25_Ant 2	Front	0.775	0.128	0.148	0.124	0.903	0.923	0.899
	Back	0.910	0.213	0.205	0.190	1.123	1.115	1.100
FR1 n30_Ant 2	Front	0.710	0.128	0.148	0.124	0.838	0.858	0.834
	Back	0.906	0.213	0.205	0.190	1.119	1.111	1.096
FR1 n41_Ant 5	Front	0.685	0.128	0.148	0.124	0.813	0.833	0.809
	Back	0.692	0.213	0.205	0.190	0.905	0.897	0.882
FR1 n66_Ant 2	Front	0.766	0.128	0.148	0.124	0.894	0.914	0.890
	Back	0.821	0.213	0.205	0.190	1.034	1.026	1.011
FR1 n71_Ant 0	Front	0.225	0.128	0.148	0.124	0.353	0.373	0.349
	Back	0.215	0.213	0.205	0.190	0.428	0.420	0.405
FR1 n77_Ant 6	Front	0.719	0.128	0.148	0.124	0.847	0.867	0.843
	Back	0.685	0.213	0.205	0.190	0.898	0.890	0.875



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

WWAN Band	Exposure Position	1	4	5	6	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 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	0.545	0.128	0.148	0.124	0.673	0.693	0.669
	Back	0.824	0.213	0.205	0.190	1.037	1.029	1.014
GSM1900_Ant 0	Front	0.701	0.128	0.148	0.124	0.829	0.849	0.825
	Back	0.894	0.213	0.205	0.190	1.107	1.099	1.084
WCDMA II_Ant 0	Front	0.590	0.128	0.148	0.124	0.718	0.738	0.714
	Back	0.907	0.213	0.205	0.190	1.120	1.112	1.097
WCDMA IV_Ant 0	Front	0.504	0.128	0.148	0.124	0.632	0.652	0.628
	Back	0.585	0.213	0.205	0.190	0.798	0.790	0.775
WCDMA V_Ant 1	Front	0.349	0.128	0.148	0.124	0.477	0.497	0.473
	Back	0.493	0.213	0.205	0.190	0.706	0.698	0.683
LTE Band 7_Ant 0	Front	0.426	0.128	0.148	0.124	0.554	0.574	0.550
	Back	0.500	0.213	0.205	0.190	0.713	0.705	0.690
LTE Band 12_Ant 1	Front	0.215	0.128	0.148	0.124	0.343	0.363	0.339
	Back	0.284	0.213	0.205	0.190	0.497	0.489	0.474
LTE Band 13_Ant 1	Front	0.331	0.128	0.148	0.124	0.459	0.479	0.455
	Back	0.444	0.213	0.205	0.190	0.657	0.649	0.634
LTE Band 14_Ant 1	Front	0.331	0.128	0.148	0.124	0.459	0.479	0.455
	Back	0.498	0.213	0.205	0.190	0.711	0.703	0.688
LTE Band 25_Ant 0	Front	0.474	0.128	0.148	0.124	0.602	0.622	0.598
	Back	0.634	0.213	0.205	0.190	0.847	0.839	0.824
LTE Band 26_Ant 1	Front	0.332	0.128	0.148	0.124	0.460	0.480	0.456
	Back	0.497	0.213	0.205	0.190	0.710	0.702	0.687
LTE Band 30_Ant 0	Front	0.483	0.128	0.148	0.124	0.611	0.631	0.607
	Back	0.567	0.213	0.205	0.190	0.780	0.772	0.757
LTE Band 41_Ant 0	Front	0.230	0.128	0.148	0.124	0.358	0.378	0.354
	Back	0.327	0.213	0.205	0.190	0.540	0.532	0.517
LTE Band 48_Ant 2	Front	0.439	0.128	0.148	0.124	0.567	0.587	0.563
	Back	0.448	0.213	0.205	0.190	0.661	0.653	0.638
LTE Band 66_Ant 0	Front	0.367	0.128	0.148	0.124	0.495	0.515	0.491
	Back	0.529	0.213	0.205	0.190	0.742	0.734	0.719
LTE Band 71_Ant 1	Front	0.181	0.128	0.148	0.124	0.309	0.329	0.305
	Back	0.220	0.213	0.205	0.190	0.433	0.425	0.410
FR1 n5_Ant 1	Front	0.266	0.128	0.148	0.124	0.394	0.414	0.390
	Back	0.396	0.213	0.205	0.190	0.609	0.601	0.586
FR1 n7_Ant 0	Front	0.407	0.128	0.148	0.124	0.535	0.555	0.531
	Back	0.266	0.213	0.205	0.190	0.479	0.471	0.456
FR1 n12_Ant 1	Front	0.187	0.128	0.148	0.124	0.315	0.335	0.311
	Back	0.251	0.213	0.205	0.190	0.464	0.456	0.441
FR1 n25_Ant 0	Front	0.545	0.128	0.148	0.124	0.673	0.693	0.669
	Back	0.799	0.213	0.205	0.190	1.012	1.004	0.989
FR1 n30_Ant 0	Front	0.403	0.128	0.148	0.124	0.531	0.551	0.527
	Back	0.456	0.213	0.205	0.190	0.669	0.661	0.646
FR1 n41_Ant 1	Front	0.500	0.128	0.148	0.124	0.628	0.648	0.624
	Back	0.446	0.213	0.205	0.190	0.659	0.651	0.636
FR1 n66_Ant 0	Front	0.429	0.128	0.148	0.124	0.557	0.577	0.553
	Back	0.553	0.213	0.205	0.190	0.766	0.758	0.743
FR1 n71_Ant 1	Front	0.155	0.128	0.148	0.124	0.283	0.303	0.279
	Back	0.193	0.213	0.205	0.190	0.406	0.398	0.383
FR1 n77_Ant 2	Front	0.734	0.128	0.148	0.124	0.862	0.882	0.858
	Back	0.633	0.213	0.205	0.190	0.846	0.838	0.823





**16.5 Product Specific Exposure Conditions**

WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 4+3	
		10g SAR (W/kg)	10g SAR (W/kg)	
WCDMA II_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	1.965		1.965
WCDMA IV_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	2.544		2.544
LTE Band 7_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	2.821		2.821
LTE Band 25_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	2.046		2.046
LTE Band 30_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	2.498		2.498
LTE Band 66_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	2.478		2.478
FR1 n7_Ant 2TX0	Front at 0mm		1.903	1.903
	Back at 0mm		1.150	1.150
	Left side at 0mm		2.826	2.826
	Right side at 0mm		0.556	0.556
	Top side at 0mm		1.592	1.592
	Bottom side at 0mm	2.485		2.485



WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 4+3	
		10g SAR (W/kg)	10g SAR (W/kg)	
FR1 n25_Ant 2TX0	Front at 0mm		1.903	<b>1.903</b>
	Back at 0mm		1.150	<b>1.150</b>
	Left side at 0mm		2.826	<b>2.826</b>
	Right side at 0mm		0.556	<b>0.556</b>
	Top side at 0mm		1.592	<b>1.592</b>
	Bottom side at 0mm	1.834		<b>1.834</b>
FR1 n30_Ant 2TX0	Front at 0mm		1.903	<b>1.903</b>
	Back at 0mm		1.150	<b>1.150</b>
	Left side at 0mm		2.826	<b>2.826</b>
	Right side at 0mm		0.556	<b>0.556</b>
	Top side at 0mm		1.592	<b>1.592</b>
	Bottom side at 0mm	2.416		<b>2.416</b>
FR1 n66_Ant 2TX0	Front at 0mm		1.903	<b>1.903</b>
	Back at 0mm		1.150	<b>1.150</b>
	Left side at 0mm		2.826	<b>2.826</b>
	Right side at 0mm		0.556	<b>0.556</b>
	Top side at 0mm		1.592	<b>1.592</b>
	Bottom side at 0mm	2.810		<b>2.810</b>

WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
		WWAN	5/6GHz WLAN Ant 4+3	
		10g SAR (W/kg)	10g SAR (W/kg)	
GSM1900_Ant 0TX1	Front at 0mm		1.903	<b>1.903</b>
	Back at 0mm		1.150	<b>1.150</b>
	Left side at 0mm		2.826	<b>2.826</b>
	Right side at 10mm		0.556	<b>0.556</b>
	Top side at 0mm		1.592	<b>1.592</b>
	Bottom side at 0mm	0.951		<b>0.951</b>
WCDMA II_Ant 0TX1	Front at 0mm		1.903	<b>1.903</b>
	Back at 0mm		1.150	<b>1.150</b>
	Left side at 0mm		2.826	<b>2.826</b>
	Right side at 10mm		0.556	<b>0.556</b>
	Top side at 0mm		1.592	<b>1.592</b>
	Bottom side at 0mm	0.999		<b>0.999</b>



### 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).

Antenna configuration	
Transmit switching diversity configuration	Support transmit antenna and band
TX 0	ANT 0: LTE B5/B12/B13/B14/B17/B26/B71



17.1 Supplemental Head SAR results

Head (Ant0) Power Index 2/3	RF exposure position						Average Value of Time Sweep single-point SAR(W/kg)													
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Single-point SAR Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	LTE Band 5	10M_QPSK_1_0	M	20525	Left Cheek	0.318	0.330	0.258	0.267	0.263	0.265	0.294	0.316	0.329	0.261	0.320	0.245	0.247	0.249	0.281
							0.309	0.245	0.253	0.310	0.247	0.253	0.297	0.252	0.308	0.307				
LTE Band 12	10M_QPSK_1_0	M	23095	Left Cheek	0.250	0.282	0.260	0.262	0.269	0.260	0.247	0.270	0.208	0.270	0.282	0.275	0.271	0.273	0.280	0.268
							0.271	0.220	0.242	0.243	0.247	0.256	0.263	0.214						
LTE Band 13	10M_QPSK_1_0	M	23230	Left Cheek	0.275	0.313	0.244	0.285	0.249	0.297	0.309	0.263	0.249	0.239	0.299	0.247	0.289	0.254	0.294	0.307
							0.265	0.254	0.248	0.309	0.248	0.288	0.253	0.292	0.298	0.258	0.251	0.247	0.300	
LTE Band 14	10M_QPSK_1_0	M	23330	Left Cheek	0.293	0.348	0.265	0.268	0.272	0.314	0.307	0.293	0.314	0.285	0.286	0.291	0.336	0.327	0.315	0.337
							0.271	0.276	0.281	0.324	0.316	0.303	0.325							
LTE Band 17	10M_QPSK_1_0	M	23790	Left Cheek	0.293	0.323	0.279	0.282	0.284	0.282	0.300	0.291	0.291	0.238	0.280	0.285	0.300	0.284	0.302	0.303
							0.214	0.275	0.279	0.283	0.298	0.300	0.294	0.288	0.282	0.297	0.280	0.258		
LTE Band 26	15M_QPSK_1_0	M	26865	Left Cheek	0.258	0.323	0.254	0.256	0.286	0.257	0.294	0.269	0.311	0.312	0.263	0.308	0.266	0.254	0.255	0.306
							0.307	0.262	0.272	0.281	0.277	0.274	0.309	0.301						
LTE Band 71	20M_QPSK_1_0	M	133322	Left Cheek	0.238	0.287	0.254	0.246	0.258	0.284	0.258	0.255	0.242	0.245	0.243	0.263	0.259	0.269	0.258	0.246
							0.272	0.236	0.245	0.239	0.265	0.199	0.240	0.264	0.266					



17.2 Supplemental Body SAR results

Body (Ant0) Power Index 4	RF exposure position						Average Value of Time Sweep single-point SAR(W/kg)													
	Band	Mode	Channel	Test Position	Measured 1g SAR (W/kg)	Single-point SAR Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	LTE Band 5	10M_QPSK_1_0	M	20525	Left Side	0.410	0.452	0.348	0.357	0.355	0.353	0.381	0.407	0.409	0.350	0.395	0.349	0.354	0.352	0.392
							15	16	17	18	19	20	21	22	23	24				
							0.420	0.353	0.357	0.413	0.350	0.355	0.404	0.352	0.411	0.409				
LTE Band 12	10M_QPSK_1_0	M	23095	Left Side	0.438	0.489	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							15	16	17	18	19	20	21	22						
							0.441	0.444	0.455	0.453	0.424	0.388	0.399	0.339	0.431	0.452	0.436	0.460	0.465	0.457
							0.428	0.447	0.327	0.430	0.435	0.439	0.435	0.455						
LTE Band 13	10M_QPSK_1_0	M	23230	Left Side	0.384	0.435	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							15	16	17	18	19	20	21	22	23	24	25	26	27	
							0.381	0.360	0.366	0.415	0.424	0.378	0.373	0.361	0.419	0.361	0.413	0.373	0.412	0.419
							0.380	0.372	0.361	0.422	0.347	0.390	0.353	0.399	0.410	0.364	0.361	0.348	0.414	
LTE Band 14	10M_QPSK_1_0	M	23330	Left Side	0.380	0.427	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							15	16	17	18	19	20	21							
							0.358	0.360	0.366	0.409	0.405	0.390	0.410	0.350	0.353	0.365	0.406	0.396	0.383	0.411
							0.351	0.354	0.357	0.403	0.398	0.385	0.405							
LTE Band 17	10M_QPSK_1_0	M	23790	Left Side	0.576	0.635	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							15	16	17	18	19	20	21	22	23	24	25	26		
							0.554	0.551	0.562	0.560	0.588	0.571	0.574	0.465	0.555	0.562	0.585	0.560	0.583	0.599
							0.420	0.531	0.555	0.560	0.584	0.591	0.564	0.569	0.559	0.582	0.556	0.499		
LTE Band 26	15M_QPSK_1_0	M	26865	Left Side	0.395	0.469	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							15	16	17	18	19	20	21	22						
							0.377	0.377	0.414	0.380	0.425	0.394	0.439	0.440	0.383	0.436	0.389	0.380	0.384	0.441
							0.447	0.393	0.370	0.384	0.380	0.377	0.407	0.408						
LTE Band 71	20M_QPSK_1_0	M	133322	Left Side	0.403	0.458	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							15	16	17	18	19	20	21	22	23					
							0.447	0.450	0.446	0.459	0.453	0.446	0.424	0.422	0.421	0.438	0.434	0.442	0.435	0.423
							0.436	0.419	0.428	0.422	0.438	0.398	0.428	0.425	0.431					

Test Engineer : Kevin Guo, Charles Shen, Jeff Tsao, Chris Yang, Ginger Chiang, Jerry Hsu, Murphy Lee, Kells Chen, Ray Sun, Tommy Chen, Shane Song, Willy Yu, Wilson Lin, Jordar Jhuang, Luke Lee, White Huang



## **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.