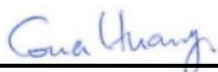


FCC SAR TEST REPORT

FCC ID : A4RGTF7P
Equipment : Phone
Model Name : GTF7P, G3Y12
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on May 22, 2024 and testing was started from Jul. 16, 2024 and completed on Aug. 31, 2024. 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. Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager



Sporton International Inc. Wensan Laboratory

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History of this test report

Report No.	Version	Description	Issued Date
FA451607B	01	Initial issue of report	Sep. 30, 2024
FA451607B	02	Update section 12, 13, 15	Oct. 23, 2024



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for Google LLC, Phone, GTF7P, G3Y12, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g 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	0.99	0.90	0.58		1.59	
	GSM1900	0.48	0.74	0.74			
	WCDMA II	0.67	0.60	0.63			
	WCDMA IV	0.77	0.57	0.57			
	WCDMA V	0.99	0.82	0.64			
	LTE Band 2	0.62	0.71	0.71			
	LTE Band 7	0.95	0.88	0.83			
	LTE Band 12/17	0.83	0.46	0.46			
	LTE Band 5/26	0.98	0.78	0.65			
	LTE Band 38/41	0.71	0.70	0.82			
	LTE Band 4/66	0.67	0.61	0.58			
	FR1 n2	0.61	0.94	0.80			
	FR1 n7	0.85	0.99	0.74			
	FR1 n12	0.87	0.37	0.47			
	FR1 n5/n26	0.88	0.73	0.65			
	FR1 n38/n41	0.95	0.89	0.84			
	FR1 n66	0.63	0.74	0.74			
	FR1 n77/n78	0.98	0.79	0.81			
DXX	13.56 MHz			0.06		2.79	
DTS	2.4GHz WLAN	1.17	0.73	0.31		1.59	
NII	5GHz WLAN	1.18	0.77	0.49	2.79	1.59	2.79
6CD	6GHz WLAN	1.13	0.21	0.14	0.49		
DSS	Bluetooth	0.24	0.52	0.23		1.59	
Equipment Class	Frequency Band	Head	Body-worn	Hotspot	Product Specific	Reported PD (mW/cm^2)	
		Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	Reported APD (mW/cm^2)		
6CD	6GHz WLAN	0.67	0.16	0.11	1.16	0.74	
Date of Testing:		2023/07/16 ~ 2023/08/31					

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW3786 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), Human Exposure to RF Radiation Limits (1.0 mW/cm²=10 W/m²) specified in FCC 47 CFR part 1.1310 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	GTF7P, G3Y12
FCC ID	A4RGTF7P
S/N	46181JEBF10880, 46181JEBF10882, 46181JEBF10899, 46181JEBF10878, 46181JEBF10901, 46181JEBF10885, 46181JEBF10898, 46181JEBF10889, 46181JEBF10902, 46181JEBF10895, 46181JEBF10897, 46181JEBF10908, 46181JEBF10900, 46181JEBF10959, 46181JEBF11003, 46181JEBF10985, 46181JEBF10987, 46181JEBF10967, 46181JEBF10999, 46181JEBF10979, 46181JEBF10971
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 17: 704 MHz ~ 716 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 66: 1710 MHz ~ 1780 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 n26 : 814 MHz ~ 849 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz 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 5.9 GHz Band: 5850 MHz ~ 5895 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 WPC Rx: 110.1 kHz ~ 148.5 kHz
Mode	GSM/GPRS/EGPRS UMTS: 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/HE20/HE40/HE80 Bluetooth BR/EDR/LE/LE CS NFC: ASK WPC Rx: 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.
Remark: - Dynamic antenna tuning mechanism is available at Ant. 0, for its < 3GHz LTE and NR band, and the supplemental antenna tuner test results were including in appendix G, details are illustrated in the operational description. - This device WLAN 2.4GHz / 5.2GHz / 5.8GHz and 6GHz VLP supports Hotspot operation and Bluetooth support tethering applications. - The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot and product specific), the TAS feature will manage to ensure the power level not exceeding the associated power table. Also device implement Spatial TAS predefine antenna group to analysis simultaneous transmission include in appendix F. - The device implements the sensor detection for SAR compliance and the power verification include in appendix E.	

2.2 Maximum Tune-up Limit

General Note:

1. In the report PC3 as power class3, PC2 as power class2.
2. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition.
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. Detail output power measurement refer to appendix D.
4. The index 1 is for the max power conditions, and the use case supplemental SAR were evaluated in appendix G.
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.

Antenna configuration	
Transmit switching diversity configuration	Support transmit antenna and band
TX 0	ANT 0: GSM850, UMTS B5, LTE B5/B12//B17/B26, NR n5/n12/n26 ANT 1: NR n77/n78 ANT 2: GSM1900, UMTS B2/B4, LTE B2/B4/B7/B38/B41/B66, NR n2/n7n38/n41/n66 ANT 6: NR n77/n78
TX 1	ANT 0: GSM1900, UMTS B2/B4, LTE B2/B4/B7/B38/B41/B66, NR n2/n7n38/n41/n66 ANT 1: GSM850, UMTS B5, LTE B5/B12//B17/B26, NR n5/n12/n26 ANT 2: NR n77/n78 ANT 5: NR n77/n78

Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Maximum Power Condition	Head	Head	Hotspot	Body-worn/ Extremity	Body-worn/ Extremity
			Index 1	Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GSM/GPRS 1TX	0	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
GSM850 GPRS 2TX	0	25.00%	32.5	32.5	31.8	32.2	32.5	32.2
GSM850 GPRS 3TX	0	37.50%	31.5	31.5	30	30.4	31.5	30.4
GSM850 GPRS 4TX	0	50.00%	30	30	28.8	29.2	30	29.2
GSM850 EDGE 1TX	0	12.50%	28	28	28	28	28	28
GSM850 EDGE 2TX	0	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	0	37.50%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 4TX	0	50.00%	25.5	25.5	25.5	25.5	25.5	25.5
GSM850 GSM/GPRS 1TX	1	12.50%	33	31	28.9	32.2	33	32.2
GSM850 GPRS 2TX	1	25.00%	32.5	28	25.9	29.2	32.3	29.2
GSM850 GPRS 3TX	1	37.50%	30.5	26.2	24.1	27.4	30.5	27.4
GSM850 GPRS 4TX	1	50.00%	28	25	22.9	26.2	28	26.2
GSM850 EDGE 1TX	1	12.50%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 2TX	1	25.00%	27	27	25.9	27	27	27
GSM850 EDGE 3TX	1	37.50%	27	26.2	24.1	27	27	27
GSM850 EDGE 4TX	1	50.00%	24	24	22.9	24	24	24
GSM1900 GSM/GPRS 1TX	2	12.50%	30.5	30.5	30.5	30.5	30.5	30.5
GSM1900 GPRS 2TX	2	25.00%	29.5	29.5	29.5	28.8	28.8	28.8
GSM1900 GPRS 3TX	2	37.50%	29	29	29	27	27	27
GSM1900 GPRS 4TX	2	50.00%	28	28	28	25.8	25.8	25.8
GSM1900 EDGE 1TX	2	12.50%	26	26	26	26	26	26
GSM1900 EDGE 2TX	2	25.00%	25	25	25	25	25	25
GSM1900 EDGE 3TX	2	37.50%	25	25	25	25	25	25
GSM1900 EDGE 4TX	2	50.00%	24	24	24	24	24	24
GSM1900 GSM/GPRS 1TX	0	12.50%	30	30	30	30	30	30
GSM1900 GPRS 2TX	0	25.00%	29.5	29.5	29.5	28.5	29.5	28.5
GSM1900 GPRS 3TX	0	37.50%	28.5	28.5	28.5	26.7	28.5	26.7
GSM1900 GPRS 4TX	0	50.00%	27.5	27.5	27.5	25.5	27.3	25.5
GSM1900 EDGE 1TX	0	12.50%	26	26	26	26	26	26
GSM1900 EDGE 2TX	0	25.00%	24.5	24.5	24.5	24.5	24.5	24.5
GSM1900 EDGE 3TX	0	37.50%	24.5	24.5	24.5	24.5	24.5	24.5
GSM1900 EDGE 4TX	0	50.00%	23.5	23.5	23.5	23.5	23.5	23.5

Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Maximum Power 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
WCDMA B2	2	100.00%	25	25	24.5	21.7	21.7	21.7
WCDMA B2	0	100.00%	24.5	24.5	24.5	23.1	23.8	23.1
WCDMA B4	2	100.00%	25.7	25.7	24.7	22.4	22.4	22.4
WCDMA B4	0	100.00%	25.2	25.2	25.2	24.3	25	24.3
WCDMA B5	0	100.00%	25	25	25	25	25	25
WCDMA B5	1	100.00%	24.5	21.6	19.5	22.5	24.5	22.5
LTE Band 2	2	100.00%	25	25	24.9	21.9	21.9	21.9
LTE Band 2	0	100.00%	24.5	24.5	24.5	22	23.5	22
LTE Band 7	2	100.00%	25.7	25.7	23.7	21.3	21.6	21.6
LTE Band 7	0	100.00%	25.2	25.2	24.9	21	23.6	21
LTE Band 12/B17	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE Band 12/B17	1	100.00%	25.2	22.4	21	25.1	25.2	25.1
LTE Band 26/B5	0	100.00%	25.7	25.7	25.4	25.5	25.7	25.7
LTE Band 26/B5	1	100.00%	25.2	21.4	19.3	22.7	25.2	22.7
LTE Band 41/B38 PC3	2	63.30%	25.7	25.7	25	23.3	23.7	23.7
LTE Band 41/B38 PC2	2	43.30%	27.5	27.5	26.6	24.9	25.3	25.3
LTE Band 41/B38 PC3	0	63.30%	25.2	25.2	25.2	23.6	25.2	23.6
LTE Band 41/B38 PC2	0	43.30%	27	27	27	25.2	27	25.2
LTE Band 66/B4	2	100.00%	25.7	25.7	25.3	22.1	22.1	22.1
LTE Band 66/B4	0	100.00%	25.2	25.2	25.2	23.7	24.7	23.7

Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Maximum Power Condition	Head	Head	Hotspot	Body-worn/ Extremity	Body-worn/ Extremity
			Standalone	Simultaneous	Simultaneous	Simultaneous	Standalone	Simultaneous
			Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
FR1 n2	2	100.00%	25	25	24.9	21.8	22.5	21.8
FR1 n2	0	100.00%	24.5	24.5	24.5	22	23.7	22
FR1 n7	2	100.00%	25.7	25.4	23.9	21.3	22	21.3
FR1 n7	0	100.00%	25.2	25.2	24.8	20.6	23.6	20.6
FR1 n12	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n12	1	100.00%	25.2	22.1	20.5	25.2	25.2	25.2
FR1 n26/n5	0	100.00%	25.7	25.7	25.5	25.7	25.7	25.7
FR1 n26/n5	1	100.00%	25.2	21.5	19.8	23.1	25.2	23.1
FR1 n41/n38 PC3	2	100.00%	25.7	25.5	23.5	21.6	21.7	21.7
FR1 n41 PC2	2	50.00%	27.5	27.5	26.5	24.6	24.7	24.7
FR1 n41/n38 PC3	0	100.00%	25.2	25.2	25.2	21.9	24.4	21.9
FR1 n41 PC2	0	50.00%	27	27	27	24.9	27	24.9
FR1 n66	2	100.00%	25.7	25.7	25.5	22.5	22.5	22.5
FR1 n66	0	100.00%	25.2	25.2	25.2	23	24.8	23
FR1 n77/n78 PC3	6	100.00%	25.7	25.7	24.3	20.8	20.8	20.8
FR1 n77/n78 PC2	6	50.00%	27.3	27.3	27.3	23.9	23.9	23.9
FR1 n77/n78 PC3	2	100.00%	25.2	25.1	23	19.5	21	21
FR1 n77/n78 PC2	2	50.00%	26.7	26.7	26	22.5	24	24
FR1 n77/n78 PC2	1	50.00%	26	18.3	16.7	22.5	25.4	22.5
FR1 n77/n78 PC2	5	50.00%	26	18.2	17.5	22.5	25.5	22.5



<WLAN Maximum Power>

General Note:

1. The device implements the power management for WLAN SAR compliance for different exposure conditions and user cases. In each exposure condition, the power index selection is determined by the user cases as tested in Section 14 of this report. Full details about the proprietary power management decision are illustrated in the operational description.
2. 4+3(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3
3. 4+3(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4

Burst Average Power (dBm)																						
2.4GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11b (SISO)	1	2412	22.50	22.50	15.00	15.00		15.00	10.00	10.00		10.00	20.50	20.50		20.50	15.00	15.00		15.00		
	6	2437	22.50	22.50	15.00	15.00		15.00	10.00	10.00		10.00	20.50	20.50		20.50	15.00	15.00		15.00		
	11	2462	22.50	21.50	15.00	15.00		15.00	10.00	10.00		10.00	20.50	20.50		20.50	15.00	15.00		15.00		
	12	2467	22.50	20.00	15.00	15.00		15.00	10.00	10.00		10.00	20.50	20.00		20.00	15.00	15.00		15.00		
	13	2472	22.00	19.00	15.00	15.00		15.00	10.00	10.00		10.00	20.50	19.00		19.00	15.00	15.00		15.00		
802.11g (SISO)	1	2412		17.00				15.00				10.00				17.00				15.00		
	2	2417		19.50																		
	6	2437		21.50				15.00				10.00				20.50				15.00		
	10	2457		18.00																		
	11	2462		16.00				15.00				10.00				16.00				15.00		
	12	2467		12.00				12.00				10.00				12.00				12.00		
	13	2472		3.00				3.00				3.00				3.00				3.00		
802.11n HT20 (SISO)	1	2412		17.00				15.00				10.00				17.00				15.00		
	2	2417		18.50																		
	6	2437		21.50				15.00				10.00				20.50				15.00		
	10	2457		14.50																		
	11	2462		15.00				15.00				10.00				15.00				15.00		
	12	2467		11.50				11.50				10.00				11.50				11.50		
	13	2472		4.50				4.50				4.50				4.50				4.50		
802.11ac VHT20 (SISO)	1	2412		17.00				15.00				10.00				17.00				15.00		
	2	2417		18.50																		
	6	2437		21.50				15.00				10.00				20.50				15.00		
	10	2457		14.50																		
	11	2462		15.00				15.00				10.00				15.00				15.00		
	12	2467		11.50				11.50				10.00				11.50				11.50		
	13	2472		4.50				4.50				4.50				4.50				4.50		
802.11ax HE20 (SISO)	1	2412		17.00				15.00				10.00				17.00				15.00		
	2	2417		18.50																		
	6	2437		21.50				15.00				10.00				20.50				15.00		
	10	2457		14.50																		
	11	2462		15.00				15.00				10.00				15.00				15.00		
	12	2467		11.50				11.50				10.00				11.50				11.50		
	13	2472		4.50				4.50				4.50				4.50				4.50		



Burst Average Power (dBm)																						
2.4GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11g (MIMO)	1	2412	17.00	17.00	15.00	15.00			10.00	10.00			17.00	17.00			15.00	15.00				
	2	2417	19.50	19.50																		
	6	2437	21.50	21.50	15.00	15.00			10.00	10.00			20.50	20.50			15.00	15.00				
	10	2457	18.00	18.00																		
	11	2462	16.00	16.00	15.00	15.00			10.00	10.00			16.00	16.00			15.00	15.00				
	12	2467	12.00	12.00	12.00	12.00			10.00	10.00			12.00	12.00			12.00	12.00				
	13	2472	3.00	3.00	3.00	3.00			3.00	3.00			3.00	3.00			3.00	3.00				
802.11n HT20 (MIMO)	1	2412	17.00	17.00	15.00	15.00			10.00	10.00			17.00	17.00			15.00	15.00				
	2	2417	18.50	18.50																		
	6	2437	21.50	21.50	15.00	15.00			10.00	10.00			20.50	20.50			15.00	15.00				
	10	2457	14.50	14.50																		
	11	2462	15.00	15.00	15.00	15.00			10.00	10.00			15.00	15.00			15.00	15.00				
	12	2467	11.50	11.50	11.50	11.50			10.00	10.00			11.50	11.50			11.50	11.50				
	13	2472	4.50	4.50	4.50	4.50			4.50	4.50			4.50	4.50			4.50	4.50				
802.11ac VHT20 (MIMO)	1	2412	17.00	17.00	15.00	15.00			10.00	10.00			17.00	17.00			15.00	15.00				
	2	2417	18.50	18.50																		
	6	2437	21.50	21.50	15.00	15.00			10.00	10.00			20.50	20.50			15.00	15.00				
	10	2457	14.50	14.50																		
	11	2462	15.00	15.00	15.00	15.00			10.00	10.00			15.00	15.00			15.00	15.00				
	12	2467	11.50	11.50	11.50	11.50			10.00	10.00			11.50	11.50			11.50	11.50				
	13	2472	4.50	4.50	4.50	4.50			4.50	4.50			4.50	4.50			4.50	4.50				
802.11ax HE20 (MIMO)	1	2412	17.00	17.00	15.00	15.00			10.00	10.00			17.00	17.00			15.00	15.00				
	2	2417	18.50	18.50																		
	6	2437	21.50	21.50	15.00	15.00			10.00	10.00			20.50	20.50			15.00	15.00				
	10	2457	14.50	14.50																		
	11	2462	15.00	15.00	15.00	15.00			10.00	10.00			15.00	15.00			15.00	15.00				
	12	2467	11.50	11.50	11.50	11.50			10.00	10.00			11.50	11.50			11.50	11.50				
	13	2472	4.50	4.50	4.50	4.50			4.50	4.50			4.50	4.50			4.50	4.50				



Burst Average Power (dBm)																						
5.2GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	36	5180	15.50				14.00				11.50				15.50				15.50			
	40	5200	17.50				14.00				11.50				17.50				17.50			
	44	5220	17.50				14.00				11.50				17.50				17.50			
	48	5240	17.00				14.00				11.50				17.00				17.00			
802.11n HT20 (SISO)	36	5180	14.50				14.00				11.50				14.50				14.50			
	40	5200	17.00				14.00				11.50				17.00				17.00			
	44	5220	17.50				14.00				11.50				17.50				17.50			
	48	5240	17.00				14.00				11.50				17.00				17.00			
802.11n HT40 (SISO)	38	5190	11.50				11.50				11.50				11.50				11.50			
	46	5230	15.50				14.00				11.50				15.50				15.50			
802.11ac VHT20 (SISO)	36	5180	14.50				14.00				11.50				14.50				14.50			
	40	5200	17.00				14.00				11.50				17.00				17.00			
	44	5220	17.50				14.00				11.50				17.50				17.50			
	48	5240	17.00				14.00				11.50				17.00				17.00			
802.11ac VHT40 (SISO)	38	5190	11.50				11.50				11.50				11.50				11.50			
	46	5230	15.50				14.00				11.50				15.50				15.50			
802.11ac VHT80 (SISO)	42	5210	11.50				11.50				11.50				11.50				11.50			
802.11ax HE20 (SISO)	36	5180	14.50				14.00				11.50				14.50				14.50			
	40	5200	17.00				14.00				11.50				17.00				17.00			
	44	5220	17.50				14.00				11.50				17.50				17.50			
	48	5240	17.00				14.00				11.50				17.00				17.00			
802.11ax HE40 (SISO)	38	5190	11.50				11.50				11.50				11.50				11.50			
	46	5230	15.50				14.00				11.50				15.50				15.50			
802.11ax HE80 (SISO)	42	5210	11.50				11.50				11.50				11.50				11.50			



Burst Average Power (dBm)																						
5.2GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	36	5180	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
	40	5200	17.50	17.50	13.50	13.50			10.50	10.50			17.50	17.50			17.50	17.50			17.50	17.50
	44	5220	17.50	17.50	13.50	13.50			10.50	10.50			17.50	17.50			17.50	17.50			17.50	17.50
	48	5240	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
802.11n HT20 (MIMO)	36	5180	14.50	14.50	13.50	13.50			10.50	10.50			14.50	14.50			14.50	14.50			14.50	14.50
	40	5200	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
	44	5220	17.50	17.50	13.50	13.50			10.50	10.50			17.50	17.50			17.50	17.50			17.50	17.50
	48	5240	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
802.11n HT40 (MIMO)	38	5190	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
	46	5230	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
802.11ac VHT20 (MIMO)	36	5180	14.50	14.50	13.50	13.50			10.50	10.50			14.50	14.50			14.50	14.50			14.50	14.50
	40	5200	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
	44	5220	17.50	17.50	13.50	13.50			10.50	10.50			17.50	17.50			17.50	17.50			17.50	17.50
	48	5240	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
802.11ac VHT40 (MIMO)	38	5190	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
	46	5230	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
802.11ac VHT80 (MIMO)	42	5210	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ax HE20 (MIMO)	36	5180	14.50	14.50	13.50	13.50			10.50	10.50			14.50	14.50			14.50	14.50			14.50	14.50
	40	5200	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
	44	5220	17.50	17.50	13.50	13.50			10.50	10.50			17.50	17.50			17.50	17.50			17.50	17.50
	48	5240	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
802.11ax HE40 (MIMO)	38	5190	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
	46	5230	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
802.11ax HE80 (MIMO)	42	5210	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50



Burst Average Power (dBm)																						
5.3GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	52	5260	18.50				14.00				11.50				18.50				18.50			
	56	5280	17.00				14.00				11.50				17.00				17.00			
	60	5300	16.50				14.00				11.50				16.50				16.50			
	64	5320	14.00				14.00				11.50				14.00				14.00			
802.11n HT20 (SISO)	52	5260	20.00				14.00				11.50				20.00				20.00			
	56	5280	16.50				14.00				11.50				16.50				16.50			
	60	5300	16.50				14.00				11.50				16.50				16.50			
	64	5320	11.50				11.50				11.50				11.50				11.50			
802.11n HT40 (SISO)	54	5270	15.50				14.00				11.50				15.50				15.50			
	62	5310	11.50				11.50				11.50				11.50				11.50			
802.11ac VHT20 (SISO)	52	5260	20.00				14.00				11.50				20.00				20.00			
	56	5280	16.50				14.00				11.50				16.50				16.50			
	60	5300	16.50				14.00				11.50				16.50				16.50			
	64	5320	11.50				11.50				11.50				11.50				11.50			
802.11ac VHT40 (SISO)	54	5270	15.50				14.00				11.50				15.50				15.50			
	62	5310	11.50				11.50				11.50				11.50				11.50			
802.11ac VHT80 (SISO)	58	5290	11.50				11.50				11.50				11.50				11.50			
802.11ax HE20 (SISO)	52	5260	20.00				14.00				11.50				20.00				20.00			
	56	5280	16.50				14.00				11.50				16.50				16.50			
	60	5300	16.50				14.00				11.50				16.50				16.50			
	64	5320	11.50				11.50				11.50				11.50				11.50			
802.11ax HE40 (SISO)	54	5270	15.50				14.00				11.50				15.50				15.50			
	62	5310	11.50				11.50				11.50				11.50				11.50			
802.11ax HE80 (SISO)	58	5290	11.50				11.50				11.50				11.50				11.50			



Burst Average Power (dBm)																						
5.3GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	52	5260	18.50	18.50	13.50	13.50			10.50	10.50			18.50	18.50			18.50	18.50			18.50	18.50
	56	5280	17.00	17.00	13.50	13.50			10.50	10.50			17.00	17.00			17.00	17.00			17.00	17.00
	60	5300	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	64	5320	14.00	14.00	13.50	13.50			10.50	10.50			14.00	14.00			14.00	14.00			14.00	14.00
802.11n HT20 (MIMO)	52	5260	20.00	20.00	13.50	13.50			10.50	10.50			20.00	20.00			20.00	20.00			20.00	20.00
	56	5280	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	60	5300	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	64	5320	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11n HT40 (MIMO)	54	5270	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
	62	5310	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ac VHT20 (MIMO)	52	5260	20.00	20.00	13.50	13.50			10.50	10.50			20.00	20.00			20.00	20.00			20.00	20.00
	56	5280	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	60	5300	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	64	5320	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ac VHT40 (MIMO)	54	5270	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
	62	5310	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ac VHT80 (MIMO)	58	5290	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ax HE20 (MIMO)	52	5260	20.00	20.00	13.50	13.50			10.50	10.50			20.00	20.00			20.00	20.00			20.00	20.00
	56	5280	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	60	5300	16.50	16.50	13.50	13.50			10.50	10.50			16.50	16.50			16.50	16.50			16.50	16.50
	64	5320	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ax HE40 (MIMO)	54	5270	15.50	15.50	13.50	13.50			10.50	10.50			15.50	15.50			15.50	15.50			15.50	15.50
	62	5310	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50
802.11ax HE80 (MIMO)	58	5290	11.50	11.50	11.50	11.50			10.50	10.50			11.50	11.50			11.50	11.50			11.50	11.50



Burst Average Power (dBm)																						
5.5GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	100	5500	15.50				14.00				10.00				15.50				15.50			
	104	5520	19.00																			
	116	5580	19.00				14.00				10.00				19.00				19.00			
	124	5620	19.00				14.00				10.00				19.00				19.00			
	132	5660	18.00				14.00				10.00				18.00				18.00			
	136	5680	17.50																			
	140	5700	13.50																			
	144	5720	19.50				14.00				10.00				19.50				19.50			
802.11n HT20 (SISO)	100	5500	15.00				14.00				10.00				15.00				15.00			
	104	5520	18.50																			
	116	5580	19.50				14.00				10.00				19.50				19.50			
	124	5620	19.50				14.00				10.00				19.50				19.50			
	132	5660	18.00				14.00				10.00				18.00				18.00			
	136	5680	16.50																			
	140	5700	11.50																			
	144	5720	19.50				14.00				10.00				19.50				19.50			
802.11n HT40 (SISO)	102	5510	14.00				14.00				10.00				14.00				14.00			
	110	5550	18.00				14.00				10.00				18.00				18.00			
	126	5630	18.00				14.00				10.00				18.00				18.00			
	134	5670	15.00				14.00				10.00				15.00				15.00			
	142	5710	19.00				14.00				10.00				19.00				19.00			
802.11ac VHT20 (SISO)	100	5500	15.00				14.00				10.00				15.00				15.00			
	104	5520	18.50																			
	116	5580	19.50				14.00				10.00				19.50				19.50			
	124	5620	19.50				14.00				10.00				19.50				19.50			
	132	5660	18.00				14.00				10.00				18.00				18.00			
	136	5680	16.50																			
	140	5700	11.50																			
	144	5720	19.50				14.00				10.00				19.50				19.50			
802.11ac VHT40 (SISO)	102	5510	14.00				14.00				10.00				14.00				14.00			
	110	5550	18.00				14.00				10.00				18.00				18.00			
	126	5630	18.00				14.00				10.00				18.00				18.00			
	134	5670	15.00				14.00				10.00				15.00				15.00			
	142	5710	19.00				14.00				10.00				19.00				19.00			
802.11ac VHT80 (SISO)	106	5530	11.50				11.50				10.00				11.50				11.50			
	122	5610	17.50				14.00				10.00				17.50				17.50			
	138	5690	19.00				14.00				10.00				19.00				19.00			
802.11ax HE20 (SISO)	100	5500	15.00				14.00				10.00				15.00				15.00			
	104	5520	18.50																			
	116	5580	19.50				14.00				10.00				19.50				19.50			
	124	5620	19.50				14.00				10.00				19.50				19.50			
	132	5660	18.00				14.00				10.00				18.00				18.00			
	136	5680	16.50																			
	140	5700	11.50																			
	144	5720	19.50				14.00				10.00				19.50				19.50			
802.11ax HE40 (SISO)	102	5510	14.00				14.00				10.00				14.00				14.00			
	110	5550	18.00				14.00				10.00				18.00				18.00			
	126	5630	18.00				14.00				10.00				18.00				18.00			
	134	5670	15.00				14.00				10.00				15.00				15.00			
	142	5710	19.00				14.00				10.00				19.00				19.00			
802.11ax HE80 (SISO)	106	5530	11.50				11.50				10.00				11.50				11.50			
	122	5610	17.50				14.00				10.00				17.50				17.50			
	138	5690	19.00				14.00				10.00				19.00				19.00			



Burst Average Power (dBm)																						
5.5GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	100	5500	15.50	15.50	13.50	13.50			9.50	9.50			15.50	15.50			15.50	15.50			15.50	15.50
	104	5520	19.00	19.00																		
	116	5580	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
	124	5620	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
	132	5660	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	136	5680	17.50	17.50																		
	140	5700	13.50	13.50																		
	144	5720	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
802.11n HT20 (MIMO)	100	5500	15.00	15.00	13.50	13.50			9.50	9.50			15.00	15.00			15.00	15.00			15.00	15.00
	104	5520	18.50	18.50																		
	116	5580	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
	124	5620	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
	132	5660	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	136	5680	16.50	16.50																		
	140	5700	11.50	11.50																		
	144	5720	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
802.11n HT40 (MIMO)	102	5510	14.00	14.00	13.50	13.50			9.50	9.50			14.00	14.00			14.00	14.00			14.00	14.00
	110	5550	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	126	5630	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	134	5670	15.00	15.00	13.50	13.50			9.50	9.50			15.00	15.00			15.00	15.00			15.00	15.00
	142	5710	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
	142	5710	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
802.11ac VHT20 (MIMO)	100	5500	15.00	15.00	13.50	13.50			9.50	9.50			15.00	15.00			15.00	15.00			15.00	15.00
	104	5520	18.50	18.50																		
	116	5580	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
	124	5620	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
	132	5660	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	136	5680	16.50	16.50																		
	140	5700	11.50	11.50																		
	144	5720	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
802.11ac VHT40 (MIMO)	102	5510	14.00	14.00	13.50	13.50			9.50	9.50			14.00	14.00			14.00	14.00			14.00	14.00
	110	5550	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	126	5630	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	134	5670	15.00	15.00	13.50	13.50			9.50	9.50			15.00	15.00			15.00	15.00			15.00	15.00
	142	5710	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
802.11ac VHT80 (MIMO)	106	5530	11.50	11.50	11.50	11.50			9.50	9.50			11.50	11.50			11.50	11.50			11.50	11.50
	122	5610	17.50	17.50	13.50	13.50			9.50	9.50			17.50	17.50			17.50	17.50			17.50	17.50
	138	5690	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
802.11ax HE20 (MIMO)	100	5500	15.00	15.00	13.50	13.50			9.50	9.50			15.00	15.00			15.00	15.00			15.00	15.00
	104	5520	18.50	18.50																		
	116	5580	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
	124	5620	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
	132	5660	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	136	5680	16.50	16.50																		
	140	5700	11.50	11.50																		
	144	5720	19.50	19.50	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.50	17.50
802.11ax HE40 (MIMO)	102	5510	14.00	14.00	13.50	13.50			9.50	9.50			14.00	14.00			14.00	14.00			14.00	14.00
	110	5550	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	126	5630	18.00	18.00	13.50	13.50			9.50	9.50			18.00	18.00			18.00	18.00			17.50	17.50
	134	5670	15.00	15.00	13.50	13.50			9.50	9.50			15.00	15.00			15.00	15.00			15.00	15.00
	142	5710	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
	142	5710	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50
802.11ax HE80 (MIMO)	106	5530	11.50	11.50	11.50	11.50			9.50	9.50			11.50	11.50			11.50	11.50			11.50	11.50
	122	5610	17.50	17.50	13.50	13.50			9.50	9.50			17.50	17.50			17.50	17.50			17.50	17.50
	138	5690	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.50	17.50

Burst Average Power (dBm)																						
5.8GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	149	5745	20.00				14.50				10.50				20.00				18.00			
	157	5785	20.00				14.50				10.50				20.00				18.00			
	165	5825	20.00				14.50				10.50				20.00				18.00			
802.11n HT20 (SISO)	149	5745	20.00				14.50				10.50				20.00				18.00			
	157	5785	20.00				14.50				10.50				20.00				18.00			
	165	5825	20.00				14.50				10.50				20.00				18.00			
802.11n HT40 (SISO)	151	5755	19.00				14.50				10.50				19.00				18.00			
	159	5795	19.00				14.50				10.50				19.00				18.00			
802.11ac VHT20 (SISO)	149	5745	20.00				14.50				10.50				20.00				18.00			
	157	5785	20.00				14.50				10.50				20.00				18.00			
	165	5825	20.00				14.50				10.50				20.00				18.00			
802.11ac VHT40 (SISO)	151	5755	19.00				14.50				10.50				19.00				18.00			
	159	5795	19.00				14.50				10.50				19.00				18.00			
802.11ac VHT80 (SISO)	155	5775	17.50				14.50				10.50				17.50				17.50			
802.11ax HE20 (SISO)	149	5745	20.00				14.50				10.50				20.00				18.00			
	157	5785	20.00				14.50				10.50				20.00				18.00			
	165	5825	20.00				14.50				10.50				20.00				18.00			
802.11ax HE40 (SISO)	151	5755	19.00				14.50				10.50				19.00				18.00			
	159	5795	19.00				14.50				10.50				19.00				18.00			
802.11ax HE80 (SISO)	155	5775	17.50				14.50				10.50				17.50				17.50			

Burst Average Power (dBm)																						
5.8GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	149	5745	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	157	5785	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	165	5825	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
802.11n HT20 (MIMO)	149	5745	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	157	5785	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	165	5825	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
802.11n HT40 (MIMO)	151	5755	19.00	19.00	13.50	13.50			9.00	9.00			19.00	19.00			18.00	18.00			15.50	15.50
	159	5795	19.00	19.00	13.50	13.50			9.00	9.00			19.00	19.00			18.00	18.00			15.50	15.50
802.11ac VHT20 (MIMO)	149	5745	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	157	5785	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	165	5825	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
802.11ac VHT40 (MIMO)	151	5755	19.00	19.00	13.50	13.50			9.00	9.00			19.00	19.00			18.00	18.00			15.50	15.50
	159	5795	19.00	19.00	13.50	13.50			9.00	9.00			19.00	19.00			18.00	18.00			15.50	15.50
802.11ac VHT80 (MIMO)	155	5775	17.50	17.50	13.50	13.50			9.00	9.00			17.50	17.50			17.50	17.50			15.50	15.50
802.11ax HE20 (MIMO)	149	5745	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	157	5785	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
	165	5825	20.00	20.00	13.50	13.50			9.00	9.00			20.00	20.00			18.00	18.00			15.50	15.50
802.11ax HE40 (MIMO)	151	5755	19.00	19.00	13.50	13.50			9.00	9.00			19.00	19.00			18.00	18.00			15.50	15.50
	159	5795	19.00	19.00	13.50	13.50			9.00	9.00			19.00	19.00			18.00	18.00			15.50	15.50
802.11ax HE80 (MIMO)	155	5775	17.50	17.50	13.50	13.50			9.00	9.00			17.50	17.50			17.50	17.50			15.50	15.50



Burst Average Power (dBm)																						
5.9GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	169	5845	20.00				14.50				11.00				19.50				19.50			
	173	5865	20.00				14.50				11.00				19.50				19.50			
	177	5885	20.00				14.50				11.00				19.50				19.50			
802.11n HT20 (SISO)	169	5845	20.00				14.50				11.00				19.50				19.50			
	173	5865	20.00				14.50				11.00				19.50				19.50			
	177	5885	18.50				14.50				11.00				18.50				18.50			
802.11n HT40 (SISO)	167	5835	19.00				14.50				11.00				19.00				19.00			
	175	5875	19.00				14.50				11.00				19.00				19.00			
802.11ac VHT20 (SISO)	169	5845	20.00				14.50				11.00				19.50				19.50			
	173	5865	20.00				14.50				11.00				19.50				19.50			
	177	5885	18.50				14.50				11.00				18.50				18.50			
802.11ac VHT40 (SISO)	167	5835	19.00				14.50				11.00				19.00				19.00			
	175	5875	19.00				14.50				11.00				19.00				19.00			
802.11ac VHT80 (SISO)	171	5855	17.50				14.50				11.00				17.50				17.50			
802.11ax HE20 (SISO)	169	5845	20.00				14.50				11.00				19.50				19.50			
	173	5865	20.00				14.50				11.00				19.50				19.50			
	177	5885	18.50				14.50				11.00				18.50				18.50			
802.11ax HE40 (SISO)	167	5835	19.00				14.50				11.00				19.00				19.00			
	175	5875	19.00				14.50				11.00				19.00				19.00			
802.11ax HE80 (SISO)	171	5855	17.50				14.50				11.00				17.50				17.50			

Burst Average Power (dBm)																						
5.9GHz Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	169	5845	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	173	5865	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	177	5885	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
802.11n HT20 (MIMO)	169	5845	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	173	5865	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	177	5885	18.50	18.50	13.50	13.50			9.50	9.50			18.50	18.50			18.50	18.50			17.00	17.00
802.11n HT40 (MIMO)	167	5835	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.00	17.00
	175	5875	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.00	17.00
802.11ac VHT20 (MIMO)	169	5845	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	173	5865	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	177	5885	18.50	18.50	13.50	13.50			9.50	9.50			18.50	18.50			18.50	18.50			17.00	17.00
802.11ac VHT40 (MIMO)	167	5835	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.00	17.00
	175	5875	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.00	17.00
802.11ac VHT80 (MIMO)	171	5855	17.50	17.50	13.50	13.50			9.50	9.50			17.50	17.50			17.50	17.50			17.00	17.00
802.11ax HE20 (MIMO)	169	5845	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	173	5865	20.00	20.00	13.50	13.50			9.50	9.50			19.50	19.50			19.50	19.50			17.00	17.00
	177	5885	18.50	18.50	13.50	13.50			9.50	9.50			18.50	18.50			18.50	18.50			17.00	17.00
802.11ax HE40 (MIMO)	167	5835	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.00	17.00
	175	5875	19.00	19.00	13.50	13.50			9.50	9.50			19.00	19.00			19.00	19.00			17.00	17.00
802.11ax HE80 (MIMO)	171	5855	17.50	17.50	13.50	13.50			9.50	9.50			17.50	17.50			17.50	17.50			17.00	17.00

Standard Power(SP)

Maximum Transmit Burst Average Power (dBm)						
6GHz Mode	Channel	Frequency (MHz)	Index 0			
			Ant 4	Ant 3	Ant 4	Ant 3
			SISO		MIMO	
802.11a	1	5955	17.50		17.50	17.50
	49	6195	19.00		19.00	19.00
	93	6415	19.00		19.00	19.00
	117	6535	19.00		19.00	19.00
	149	6695	19.00		19.00	19.00
	181	6855	19.00		19.00	19.00
802.11ax-HE20	1	5955	17.50		17.50	17.50
	49	6195	19.00		19.00	19.00
	93	6415	19.00		19.00	19.00
	117	6535	19.00		19.00	19.00
	149	6695	19.00		19.00	19.00
	181	6855	19.00		19.00	19.00
802.11ax-HE40	3	5965	16.00		16.00	16.00
	51	6205	19.00		19.00	19.00
	91	6405	19.00		19.00	19.00
	123	6565	19.00		19.00	19.00
	147	6685	19.00		19.00	19.00
	179	6845	19.00		19.00	19.00
802.11ax-HE80	7	5985	15.00		15.00	15.00
	55	6225	19.00		19.00	19.00
	87	6385	19.00		19.00	19.00
	135	6625	19.00		19.00	19.00
	151	6705	19.00		19.00	19.00
	167	6785	19.00		19.00	19.00



Burst Average Power (dBm)																				
6GHz Mode	Channel	Frequency (MHz)	Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	1	5955			12.50				10.50				14.00				14.00			
	57	6235			12.50				10.50				14.00				14.00			
	173	6815			14.50				11.50				13.50				13.50			
802.11ax HE20 (SISO)	1	5955			12.50				10.50				14.00				14.00			
	57	6235			12.50				10.50				14.00				14.00			
	173	6815			14.50				11.50				13.50				13.50			
802.11ax HE40 (SISO)	3	5965			12.50				10.50				14.00				14.00			
	59	6245			12.50				10.50				14.00				14.00			
	171	6805			14.50				11.50				13.50				13.50			
802.11ax HE80 (SISO)	7	5985			12.50				10.50				14.00				14.00			
	71	6305			12.50				10.50				14.00				14.00			
	167	6785			14.50				11.50				13.50				13.50			

Burst Average Power (dBm)																				
6GHz Mode	Channel	Frequency (MHz)	Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	1	5955	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	57	6235	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	173	6815	14.50	14.50			14.50	14.50			11.00	11.00			11.00	11.00			11.00	11.00
802.11ax HE20 (MIMO)	1	5955	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	57	6235	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	173	6815	14.50	14.50			14.50	14.50			11.00	11.00			11.00	11.00			11.00	11.00
802.11ax HE40 (MIMO)	3	5965	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	59	6245	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	171	6805	14.50	14.50			14.50	14.50			11.00	11.00			11.00	11.00			11.00	11.00
802.11ax HE80 (MIMO)	7	5985	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	71	6305	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	167	6785	14.50	14.50			14.50	14.50			11.00	11.00			11.00	11.00			11.00	11.00



Low Power Indoor(LPI)

Maximum Transmit Burst Average Power (dBm)						
6GHz Mode	Channel	Frequency (MHz)	Index 0			
			Ant 4	Ant 3	Ant 4	Ant 3
			SISO		MIMO	
802.11a	1	5955	10.00		10.00	10.00
	49	6195	10.00		10.00	10.00
	93	6415	10.00		10.00	10.00
	97	6435	9.50		9.50	9.50
	105	6475	9.50		9.50	9.50
	113	6515	9.50		9.50	9.50
	117	6535	7.00		7.00	7.00
	149	6695	7.00		7.00	7.00
	181	6855	7.00		7.00	7.00
	185	6875	7.00		7.00	7.00
	189	6895	6.50		6.50	6.50
	209	6995	6.50		6.50	6.50
	229	7095	8.00		8.00	8.00
802.11ax-HE20	1	5955	10.00		10.00	10.00
	49	6195	10.00		10.00	10.00
	93	6415	10.00		10.00	10.00
	97	6435	9.50		9.50	9.50
	105	6475	9.50		9.50	9.50
	113	6515	9.50		9.50	9.50
	117	6535	7.50		7.50	7.50
	149	6695	7.00		7.00	7.00
	181	6855	7.50		7.50	7.50
	185	6875	7.50		7.50	7.50
	189	6895	7.50		7.50	7.50
	209	6995	7.50		7.50	7.50
802.11ax-HE40	3	5965	12.00		12.00	12.00
	51	6205	12.00		12.00	12.00
	91	6405	12.00		12.00	12.00
	99	6445	11.50		11.50	11.50
	107	6485	11.50		11.50	11.50
	115	6525	11.50		11.50	11.50
	123	6565	11.00		11.00	11.00
	147	6685	11.00		11.00	11.00
	179	6845	11.00		11.00	11.00
	187	6885	11.00		11.00	11.00
	195	6925	11.00		11.00	11.00
	211	7005	11.00		11.00	11.00
802.11ax-HE80	7	5985	15.50		15.50	15.50
	55	6225	15.50		15.50	15.50
	87	6385	15.50		15.50	15.50
	103	6465	16.00		16.00	16.00
	119	6545	16.00		16.00	16.00
	135	6625	14.00		14.00	14.00
	151	6705	14.00		14.00	14.00
	167	6785	14.00		14.00	14.00
	183	6865	14.00		14.00	14.00
	199	6945	13.50		13.50	13.50
	215	7025	14.50		14.50	14.50



Burst Average Power (dBm)																				
6GHz Mode	Channel	Frequency (MHz)	Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	1	5955			10.00				10.00				10.00				10.00			
	57	6235			10.00				10.00				10.00				10.00			
	113	6515			9.50				9.50				9.50				9.50			
	173	6815			7.00				7.00				7.00				7.00			
802.11ax HE20 (SISO)	1	5955			10.00				10.00				10.00				10.00			
	57	6235			10.00				10.00				10.00				10.00			
	113	6515			9.50				9.50				9.50				9.50			
	173	6815			7.50				7.50				7.50				7.50			
802.11ax HE40 (SISO)	3	5965			12.00				10.50				12.00				12.00			
	59	6245			12.00				10.50				12.00				12.00			
	107	6485			11.50				11.50				11.50				11.50			
	171	6805			11.00				11.00				11.00				11.00			
	227	7085			12.50				12.50				12.50				12.50			
802.11ax HE80 (SISO)	7	5985			12.50				10.50				14.00				14.00			
	71	6305			12.50				10.50				14.00				14.00			
	119	6545			13.50				12.50				12.50				12.50			
	167	6785			14.00				11.50				13.50				13.50			
	215	7025			14.50				14.50				14.50				14.50			

Burst Average Power (dBm)																				
6GHz Mode	Channel	Frequency (MHz)	Index 1		Index 2		Index 3		Index 4		Index 5		Index 6		Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	1	5955	10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00
	57	6235	10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00
	113	6515	9.50	9.50			9.50	9.50			9.50	9.50			9.50	9.50			9.50	9.50
	173	6815	7.00	7.00			7.00	7.00			7.00	7.00			7.00	7.00			7.00	7.00
802.11ax HE20 (MIMO)	1	5955	10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00
	57	6235	10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00			10.00	10.00
	113	6515	9.50	9.50			9.50	9.50			9.50	9.50			9.50	9.50			9.50	9.50
	173	6815	7.50	7.50			7.50	7.50			7.50	7.50			7.50	7.50			7.50	7.50
802.11ax HE40 (MIMO)	3	5965	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	59	6245	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	107	6485	11.50	11.50			11.50	11.50			11.50	11.50			11.50	11.50			11.50	11.50
	171	6805	11.00	11.00			11.00	11.00			11.00	11.00			11.00	11.00			11.00	11.00
	227	7085	12.50	12.50			12.50	12.50			12.50	12.50			12.50	12.50			12.50	12.50
802.11ax HE80 (MIMO)	7	5985	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	71	6305	11.50	11.50			11.50	11.50			12.00	12.00			12.00	12.00			12.00	12.00
	119	6545	13.50	13.50			13.50	13.50			12.50	12.50			12.50	12.50			12.50	12.50
	167	6785	14.00	14.00			14.00	14.00			11.00	11.00			11.00	11.00			11.00	11.00
	215	7025	14.50	14.50			14.50	14.50			13.50	13.50			13.50	13.50			13.50	13.50



Very Low Power(VLP)

Maximum Transmit Burst Average Power (dBm)						
6GHz Mode	Channel	Frequency (MHz)	Index 0			
			Ant 4	Ant 3	Ant 4	Ant 3
			SISO		MIMO	
802.11a	1	5955	5.00		5.00	5.00
	49	6195	5.00		5.00	5.00
	93	6415	5.00		5.00	5.00
	117	6535	3.00		3.00	3.00
	149	6695	3.00		3.00	3.00
	181	6855	3.00		3.00	3.00
802.11ax-HE20	1	5955	5.00		5.00	5.00
	49	6195	5.50		5.50	5.50
	93	6415	6.00		6.00	6.00
	117	6535	3.00		3.00	3.00
	149	6695	3.00		3.00	3.00
	181	6855	3.00		3.00	3.00
802.11ax-HE40	3	5965	9.00		9.00	9.00
	51	6205	9.50		9.50	9.50
	91	6405	9.50		9.50	9.50
	123	6565	6.00		6.00	6.00
	147	6685	6.00		6.00	6.00
	179	6845	6.00		6.00	6.00
802.11ax-HE80	7	5985	11.50		11.50	11.50
	55	6225	12.00		12.00	12.00
	87	6385	12.00		12.00	12.00
	135	6625	8.50		8.50	8.50
	151	6705	8.50		8.50	8.50
	167	6785	8.50		8.50	8.50



Burst Average Power (dBm)								
6GHz Mode	Channel	Frequency (MHz)	Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (SISO)	1	5955			5.00			
	57	6235			5.00			
	173	6815			3.00			
802.11ax HE20 (SISO)	1	5955			5.00			
	57	6235			6.00			
	173	6815			3.00			
802.11ax HE40 (SISO)	3	5965			9.00			
	59	6245			9.50			
	171	6805			6.00			
802.11ax HE80 (SISO)	7	5985			11.50			
	71	6305			12.00			
	167	6785			8.50			

Burst Average Power (dBm)								
6GHz Mode	Channel	Frequency (MHz)	Index 7		Index 8		Index 9	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
802.11a (MIMO)	1	5955	5.00	5.00			5.00	5.00
	57	6235	5.00	5.00			5.00	5.00
	173	6815	3.00	3.00			3.00	3.00
802.11ax HE20 (MIMO)	1	5955	5.00	5.00			5.00	5.00
	57	6235	6.00	6.00			6.00	6.00
	173	6815	3.00	3.00			3.00	3.00
802.11ax HE40 (MIMO)	3	5965	9.00	9.00			9.00	9.00
	59	6245	9.50	9.50			9.50	9.50
	171	6805	6.00	6.00			6.00	6.00
802.11ax HE80 (MIMO)	7	5985	11.50	11.50			11.50	11.50
	71	6305	12.00	12.00			12.00	12.00
	167	6785	8.50	8.50			8.50	8.50

<Bluetooth Maximum Power>
General Note:

1. The device implements the power management for Bluetooth SAR compliance for different exposure conditions and user cases. In each exposure condition, the power index selection is determined by the user cases as tested in Section 14 of this report. Full details about the proprietary power management decision are illustrated in the operational description.

Burst Average Power (dBm)												
Bluetooth Mode	Channel	Frequency (MHz)	Index 0		Index 1		Index 2		Index 3		Index 4	
			Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
BR / EDR 1Mbps (SISO)	0	2402	20.00	18.50	9.50	9.50	20.00	18.50	20.00	18.50	15.00	15.00
	39	2441	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	78	2480	20.00	20.00	9.50	9.50	20.00	20.00	20.00	20.00	15.00	15.00
BR / EDR 2Mbps (SISO)	0	2402	18.00	17.00	9.50	9.50	18.00	17.00	18.00	17.00	15.00	15.00
	39	2441	18.00	17.50	9.50	9.50	18.00	17.50	18.00	17.50	15.00	15.00
	78	2480	18.00	17.50	9.50	9.50	18.00	17.50	18.00	17.50	15.00	15.00
BR / EDR 3Mbps (SISO)	0	2402	18.00	17.00	9.50	9.50	18.00	17.00	18.00	17.00	15.00	15.00
	39	2441	18.00	17.50	9.50	9.50	18.00	17.50	18.00	17.50	15.00	15.00
	78	2480	18.00	17.50	9.50	9.50	18.00	17.50	18.00	17.50	15.00	15.00
LE 1Mbps (SISO)	0	2402	20.00	18.50	9.50	9.50	20.00	18.50	20.00	18.50	15.00	15.00
	19	2440	20.00	18.50	9.50	9.50	20.00	18.50	20.00	18.50	15.00	15.00
	39	2480	20.00	20.00	9.50	9.50	20.00	20.00	20.00	20.00	15.00	15.00
LE 2Mbps (SISO)	0	2402	20.00	18.50	9.50	9.50	20.00	18.50	20.00	18.50	15.00	15.00
	19	2440	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	39	2480	20.00	20.00	9.50	9.50	20.00	20.00	20.00	20.00	15.00	15.00
BLE CS GFSK 1Mbps (SISO)	1	2404	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	19	2440	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	38	2478	20.00	20.00	9.50	9.50	20.00	20.00	20.00	20.00	15.00	15.00
BLE CS GFSK 2Mbps (SISO)	1	2404	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	19	2440	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	38	2478	20.00	19.50	9.50	9.50	20.00	19.50	20.00	19.50	15.00	15.00
BLE CS ASK 1Mbps (SISO)	2	2404	20.00	18.50	9.50	9.50	20.00	18.50	20.00	18.50	15.00	15.00
	38	2440	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	76	2478	20.00	20.00	9.50	9.50	20.00	20.00	20.00	20.00	15.00	15.00
BLE CS ASK 2Mbps (SISO)	2	2404	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	38	2440	20.50	18.50	9.50	9.50	20.50	18.50	20.50	18.50	15.00	15.00
	76	2478	20.00	20.00	9.50	9.50	20.00	20.00	20.00	20.00	15.00	15.00

2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																		
FCC ID			A4RGTF7P															
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 17: 704 MHz ~ 716 MHz															
			LTE Band 26: 814 MHz ~ 849 MHz															
			LTE Band 38: 2570 MHz ~ 2620 MHz															
			LTE Band 41: 2496 MHz ~ 2690 MHz															
Channel Bandwidth			LTE Band 66: 1710 MHz ~ 1780 MHz															
			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 17: 5MHz, 10MHz															
			LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz															
			LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz															
uplink modulations used			QPSK / 16QAM / 64QAM / 256QAM															
			Voice and Data															
			Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3															
LTE MPR permanently built-in by design			Modulation		Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)							
					1.4 MHz		3.0 MHz		5 MHz				10 MHz		15 MHz		20 MHz	
			QPSK		> 5		> 4		> 8		> 12		> 16		> 18		≤ 1	
			16 QAM		≤ 5		≤ 4		≤ 8		≤ 12		≤ 16		≤ 18		≤ 1	
			16 QAM		> 5		> 4		> 8		> 12		> 16		> 18		≤ 2	
			64 QAM		≤ 5		≤ 4		≤ 8		≤ 12		≤ 16		≤ 18		≤ 2	
			64 QAM		> 5		> 4		> 8		> 12		> 16		> 18		≤ 3	
			256 QAM		≥ 1										≤ 5			
LTE A-MPR			In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)															
Spectrum plots for RB configuration			A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.															
Power reduction applied to satisfy SAR compliance			The device has several different power modes for 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 12.															
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					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844				
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711				
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)					
L	23755		706.5		23780		709					
M	23790		710		23790		710					
H	23825		713.5		23800		711					
LTE Band 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 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	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)	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	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 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

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

5G NR Information																
FCC ID			A4RGTF7P													
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 n26 : 814 MHz ~ 849 MHz													
			5G NR n38 : 2570 MHz ~ 2620 MHz													
			5G NR n41 : 2496 MHz ~ 2690 MHz													
			5G NR n66 : 1710 MHz ~ 1780 MHz													
			5G NR n77: 3700 MHz ~ 3980 MHz, 3450 MHz ~ 3550 MHz													
			5G NR n78: 3700 MHz ~ 3800 MHz, 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, 25 MHz, 30MHz, 40MHz, 50MHz													
			5G NR n12: 5MHz, 10MHz, 15MHz													
			5G NR n26: 5MHz, 10MHz, 15MHz, 20MHz													
			5G NR n38: 10MHz, 15MHz, 20MHz													
			5G NR n41: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz													
			5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz													
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													
LTE Anchor Bands for n5			LTE B2/7/66													
LTE Anchor Bands for n7			LTE B5/12													
LTE Anchor Bands for n12			LTE B2/7/66													
LTE Anchor Bands for n26			LTE B7													
LTE Anchor Bands for n38			LTE B5/12													
LTE Anchor Bands for n41			LTE B2/5/12/26/66													
LTE Anchor Bands for n66			LTE B5/12													
LTE Anchor Bands for n77			LTE B2/5/7/12/26/41/66													
LTE Anchor Bands for n78			LTE B2/4/5/7/12/26/38/41/66													
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 26																								
	Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz														
	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)	Ch. #		Freq. (MHz)												
L	163300		816.5	163800		819	164300		821.5	164800		824												
M	166300		831.5	166300		831.5	166300		831.5	166300		831.5												
H	169300		846.5	168800		844	168300		841.5	167800		839												
NR Band 38																								
	Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz															
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)													
L	515004		2575.02		515502		2577.51		516000		2580													
M	519000		2595		519000		2595		519000		2595													
H	522996		2614.98		522498		2612.49		522000		2610													
NR Band 41																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz			
	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	500202	2501.01	500700	2503.5	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	506202	2531.01	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	518598	2592.99		
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640		
NR Band 66																								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz											
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)										
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	346000	1730										
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745										
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352000	1760										
NR Band 77_Part 270																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	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)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	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	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930
NR Band 78_Part 270																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	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)	Ch. #	Freq. (MHz)
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750		
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.50	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		
NR Band 77/78_Part 27Q																								
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	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)	Ch. #	Freq. (MHz)
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	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	633332	3499.98		
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	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 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 ² averaged over 4 cm ²
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_{limit} values correspond to SAR_{design target}.
2. GSM 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 P_{limit} power levels in the table correspond to the burst average power levels which don't account for TX duty cycle.
3. UMTS, LTE and 5G NR TDD: P_{limit} power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
4. Maximum target power, P_{max}, 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_{limit} for supported technologies and bands (P_{limit} corresponding to SAR design target)>

Wireless technology/ band (No Accounting duty cycle)	Antenna	Duty cycle	Maximum Power Condition	Head		Hotspot	Body-worn/Extremity		P Max Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
			Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	
			P limit						
			Burst average power (dBm)						
GSM850 GSM/GPRS 1TX	0	12.50%	32.50	37.50	33.80	34.20	35.30	34.20	32.50
GSM850 GPRS 2TX	0	25.00%	31.50	34.50	30.80	31.20	32.30	31.20	31.50
GSM850 GPRS 3TX	0	37.50%	30.50	32.70	29.00	29.40	30.50	29.40	30.50
GSM850 GPRS 4TX	0	50.00%	29.00	31.50	27.80	28.20	29.30	28.20	29.00
GSM850 EDGE 1TX	0	12.50%	27.00	37.50	33.80	34.20	35.30	34.20	27.00
GSM850 EDGE 2TX	0	25.00%	26.50	34.50	30.80	31.20	32.30	31.20	26.50
GSM850 EDGE 3TX	0	37.50%	26.50	32.70	29.00	29.40	30.50	29.40	26.50
GSM850 EDGE 4TX	0	50.00%	24.50	31.50	27.80	28.20	29.30	28.20	24.50
GSM850 GSM/GPRS 1TX	1	12.50%	32.00	30.00	27.90	31.20	34.30	31.20	32.00
GSM850 GPRS 2TX	1	25.00%	31.50	27.00	24.90	28.20	31.30	28.20	31.50
GSM850 GPRS 3TX	1	37.50%	29.50	25.20	23.10	26.40	29.50	26.40	29.50
GSM850 GPRS 4TX	1	50.00%	27.00	24.00	21.90	25.20	28.30	25.20	27.00
GSM850 EDGE 1TX	1	12.50%	26.50	30.00	27.90	31.20	34.30	31.20	26.50
GSM850 EDGE 2TX	1	25.00%	26.00	27.00	24.90	28.20	31.30	28.20	26.00
GSM850 EDGE 3TX	1	37.50%	26.00	25.20	23.10	26.40	29.50	26.40	26.00
GSM850 EDGE 4TX	1	50.00%	23.00	24.00	21.90	25.20	28.30	25.20	23.00
GSM1900 GSM/GPRS 1TX	2	12.50%	29.50	36.10	35.40	30.80	30.80	30.80	29.50
GSM1900 GPRS 2TX	2	25.00%	28.50	33.10	32.40	27.80	27.80	27.80	28.50
GSM1900 GPRS 3TX	2	37.50%	28.00	31.30	30.60	26.00	26.00	26.00	28.00
GSM1900 GPRS 4TX	2	50.00%	27.00	30.10	29.40	24.80	24.80	24.80	27.00
GSM1900 EDGE 1TX	2	12.50%	25.00	36.10	35.40	30.80	30.80	30.80	25.00
GSM1900 EDGE 2TX	2	25.00%	24.00	33.10	32.40	27.80	27.80	27.80	24.00
GSM1900 EDGE 3TX	2	37.50%	24.00	31.30	30.60	26.00	26.00	26.00	24.00
GSM1900 EDGE 4TX	2	50.00%	23.00	30.10	29.40	24.80	24.80	24.80	23.00
GSM1900 GSM/GPRS 1TX	0	12.50%	29.00	35.70	35.00	30.50	32.30	30.50	29.00
GSM1900 GPRS 2TX	0	25.00%	28.50	32.70	32.00	27.50	29.30	27.50	28.50
GSM1900 GPRS 3TX	0	37.50%	27.50	30.90	30.20	25.70	27.50	25.70	27.50
GSM1900 GPRS 4TX	0	50.00%	26.50	29.70	29.00	24.50	26.30	24.50	26.50
GSM1900 EDGE 1TX	0	12.50%	25.00	35.70	35.00	30.50	32.30	30.50	25.00
GSM1900 EDGE 2TX	0	25.00%	23.50	32.70	32.00	27.50	29.30	27.50	23.50
GSM1900 EDGE 3TX	0	37.50%	23.50	30.90	30.20	25.70	27.50	25.70	23.50
GSM1900 EDGE 4TX	0	50.00%	22.50	29.70	29.00	24.50	26.30	24.50	22.50

<P_{limit} for supported technologies and bands (P_{limit} corresponding to SAR design target)>

Wireless technology/ band (Accounting duty cycle)	Antenna	Duty cycle	Maximum Power Condition	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
			Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	
			P limit						
Time-average power (dBm)									
WCDMA B2	2	100.00%	24.00	25.70	23.50	20.70	20.70	20.70	24.00
WCDMA B2	0	100.00%	23.50	26.60	25.90	22.10	22.80	22.10	23.50
WCDMA B4	2	100.00%	24.70	25.80	23.70	21.40	21.40	21.40	24.70
WCDMA B4	0	100.00%	24.20	27.40	26.70	23.30	24.00	23.30	24.20
WCDMA B5	0	100.00%	24.00	28.30	24.00	24.50	25.90	24.50	24.00
WCDMA B5	1	100.00%	23.50	20.60	18.50	21.50	25.00	21.50	23.50
LTE Band 2	2	100.00%	24.00	26.00	23.90	20.90	20.90	20.90	24.00
LTE Band 2	0	100.00%	23.50	26.00	25.30	21.00	22.50	21.00	23.50
LTE Band 7	2	100.00%	24.70	24.70	22.70	20.30	20.60	20.60	24.70
LTE Band 7	0	100.00%	24.20	26.30	23.90	20.00	22.60	20.00	24.20
LTE Band 12/B17	0	100.00%	24.70	30.80	30.10	24.70	25.40	24.70	24.70
LTE Band 12/B17	1	100.00%	24.20	21.40	20.00	24.10	27.50	24.10	24.20
LTE Band 26/B5	0	100.00%	24.70	28.30	24.40	24.50	25.80	25.10	24.70
LTE Band 26/B5	1	100.00%	24.20	20.40	18.30	21.70	25.40	21.70	24.20
LTE Band 41/B38 PC3	2	63.30%	22.70	24.10	22.00	20.30	20.70	20.70	22.70
LTE Band 41/B38 PC2	2	43.30%	22.90	24.10	22.00	20.30	20.70	20.70	22.90
LTE Band 41/B38 PC3	0	63.30%	22.20	28.30	27.60	20.60	23.50	20.60	22.20
LTE Band 41/B38 PC2	0	43.30%	22.40	28.30	27.60	20.60	23.50	20.60	22.40
LTE Band 66/B4	2	100.00%	24.70	26.40	24.30	21.10	21.10	21.10	24.70
LTE Band 66/B4	0	100.00%	24.20	26.90	26.20	22.70	23.70	22.70	24.20

<P_{limit} for supported technologies and bands (P_{limit} corresponding to SAR design target)>

Wireless technology/ band (Accounting duty cycle)	Antenna	Duty cycle	Maximum Power Condition	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
			Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	
			P limit						
Time-average power (dBm)									
FR1 n2	2	100.00%	24.00	26.10	23.90	20.80	21.50	20.80	24.00
FR1 n2	0	100.00%	23.50	25.90	25.20	21.00	22.70	21.00	23.50
FR1 n7	2	100.00%	24.70	24.40	22.90	20.30	21.00	20.30	24.70
FR1 n7	0	100.00%	24.20	26.30	23.80	19.60	22.60	19.60	24.20
FR1 n12	0	100.00%	24.70	29.60	28.90	24.90	25.60	24.90	24.70
FR1 n12	1	100.00%	24.20	21.10	19.50	27.30	28.00	27.30	24.20
FR1 n26/n5	0	100.00%	24.70	29.00	24.50	24.70	25.40	24.70	24.70
FR1 n26/n5	1	100.00%	24.20	20.50	18.80	22.10	25.60	22.10	24.20
FR1 n41/n38 PC3	2	100.00%	24.70	24.50	22.50	20.60	20.70	20.70	24.70
FR1 n41 PC2	2	50.00%	23.50	24.50	22.50	20.60	20.70	20.70	23.50
FR1 n41/n38 PC3	0	100.00%	24.20	27.40	26.70	20.90	23.40	20.90	24.20
FR1 n41 PC2	0	50.00%	23.00	27.40	26.70	20.90	23.40	20.90	23.00
FR1 n66	2	100.00%	24.70	26.70	24.50	21.50	21.50	21.50	24.70
FR1 n66	0	100.00%	24.20	26.90	26.20	22.00	23.80	22.00	24.20
FR1 n77/n78 PC3	6	100.00%	24.70	26.20	23.30	19.80	19.80	19.80	24.70
FR1 n77/n78 PC2	6	50.00%	23.20	26.20	23.30	19.80	19.80	19.80	23.20
FR1 n77/n78 PC3	2	100.00%	24.20	24.10	22.00	18.50	20.00	20.00	24.20
FR1 n77/n78 PC2	2	50.00%	22.70	24.10	22.00	18.50	20.00	20.00	22.70
FR1 n77/n78 PC2	1	50.00%	22.00	14.30	12.70	18.50	21.40	18.50	22.00
FR1 n77/n78 PC2	5	50.00%	22.00	14.20	13.50	18.50	21.50	18.50	22.00

4. RF Exposure Limits

4.1 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.

4.2 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.

4.3 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 4cm² 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 ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

5. 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
- IEC/IEEE 62209-1528:2020
- SPEAG DASY6 System Handbook
- SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)

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:

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

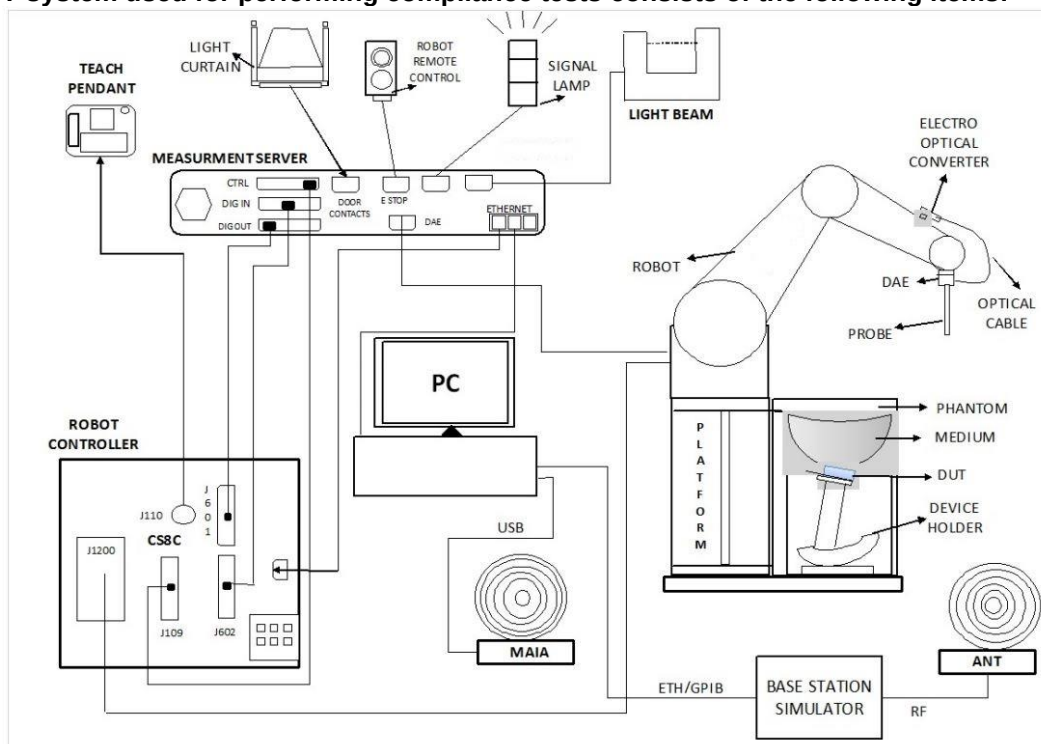
SAR is expressed in units of Watts per kilogram (W/kg)

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

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:



- The DASY system in SAR Configuration is shown above
- 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 windows software and the DASY 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.

Laboratory	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	SAR18-HY	SAR21-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	SAR16-HY	SAR19-HY	SAR22-HY
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	SAR17-HY	SAR20-HY	

7.2 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – >6 GHz Linearity: ± 0.2 dB (30 MHz – 6 GHz)	
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g – >100 mW/g Linearity: ± 0.2 dB (noise: typically <1 μ W/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

7.3 Data Acquisition Electronics (DAE)

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

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



Fig 5.1 Photo of DAE

7.4 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

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

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

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

8.4 Zoom Scan

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

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

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

8.5 Volume Scan Procedures

The volume scan is used to assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT 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 ⁽²⁾	D750V3	1107	Jun. 22, 2022	Jun. 19, 2025
SPEAG	835MHz System Validation Kit ⁽²⁾	D835V2	4d167	Nov. 24, 2022	Nov. 22, 2024
SPEAG	1750MHz System Validation Kit ⁽²⁾	D1750V2	1112	Jun. 22, 2022	Jun. 19, 2025
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d185	Jun. 17, 2022	Jun. 14, 2025
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1006	Jan. 18, 2022	Jan. 15, 2025
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	929	Nov. 21, 2022	Nov. 18, 2025
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1078	Jun. 23, 2022	Jun. 20, 2025
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1014	Jan. 17, 2022	Jan. 14, 2025
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1036	Mar. 23, 2022	Mar. 20, 2025
SPEAG	3700MHz System Validation Kit ⁽²⁾	D3700V2	1006	Jun. 20, 2022	Jun. 17, 2025
SPEAG	3700MHz System Validation Kit	D3700V2	1022	Jul. 10, 2024	Jul. 09, 2025
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1092	May. 15, 2023	May. 13, 2025
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1006	May. 25, 2023	May. 23, 2025
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1128	Feb. 22, 2023	Feb. 20, 2025
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1083	Oct. 20, 2023	Oct. 19, 2024
SPEAG	13MHz System Validation Kit ⁽²⁾	CLA13	1022	Sep. 01, 2022	Aug. 30, 2024
SPEAG	5G Verification Source	10GHz	1052	Oct. 13, 2023	Oct. 12, 2024
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9461	Oct. 12, 2023	Oct. 11, 2024
SPEAG	Data Acquisition Electronics	DAE4	661	May. 16, 2024	May. 15, 2025
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 13, 2024	Feb. 12, 2025
SPEAG	Data Acquisition Electronics	DAE4	1697	Nov. 20, 2023	Nov. 19, 2024
SPEAG	Data Acquisition Electronics	DAE4	1776	Feb. 13, 2024	Feb. 12, 2025
SPEAG	Data Acquisition Electronics	DAE4	1794	Feb. 15, 2024	Feb. 14, 2025
SPEAG	Data Acquisition Electronics	DAE4	1805	May. 22, 2024	May. 21, 2025
SPEAG	Data Acquisition Electronics	DAE4ip	1800	Jun. 18, 2024	Jun. 17, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 24, 2023	Oct. 23, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7590	Mar. 19, 2024	Mar. 18, 2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Dec. 14, 2023	Dec. 13, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7694	Oct. 26, 2023	Oct. 25, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7785	Nov. 23, 2023	Nov. 22, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7813	May. 30, 2024	May. 29, 2025
Testo	Hygro meter	608-H1	45196600	Nov. 02, 2023	Nov. 01, 2024
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Nov. 13, 2023	Nov. 12, 2024
Keysight	5G Wireless Test Platform	E7515B	MY58300712	Apr. 22, 2024	Apr. 21, 2025
R&S	BT Base Station	CBT	101136	Oct. 22, 2023	Oct. 21, 2024
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Sep. 27, 2023	Sep. 26, 2024
Keysight	ENA Network Analyzer	E5071C	MY46104758	Oct. 30, 2023	Oct. 29, 2024
SPEAG	Dielectric Probe Kit	DAK-3.5	1270	May. 21, 2024	May. 20, 2025
SPEAG	Dielectric Probe Kit	DAK-12	1169	Aug. 24, 2023	Aug. 23, 2024
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3632	Sep. 04, 2023	Sep. 03, 2024
Anritsu	Power Meter	ML2495A	1804003	Oct. 17, 2023	Oct. 16, 2024
Anritsu	Power Sensor	MA2411B	1726150	Oct. 17, 2023	Oct. 16, 2024
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Jan. 10, 2024	Jan. 09, 2025
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 16, 2023	Oct. 15, 2024
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 $\pm 2^\circ\text{C}$ 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_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	22.6	0.909	42.200	0.89	41.90	2.13	0.72	± 5	2024/7/17
750	22.3	0.888	42.300	0.89	41.90	-0.22	0.95	± 5	2024/7/25
750	22.2	0.885	42.400	0.89	41.90	-0.56	1.19	± 5	2024/7/26
750	22.5	0.883	41.700	0.89	41.90	-0.79	-0.48	± 5	2024/7/26
750	22.7	0.883	42.300	0.89	41.90	-0.79	0.95	± 5	2024/7/27
750	22.2	0.893	42.900	0.89	41.90	0.34	2.39	± 5	2024/8/2
750	22.3	0.888	41.700	0.89	41.90	-0.22	-0.48	± 5	2024/8/3
750	22.3	0.885	42.300	0.89	41.90	-0.56	0.95	± 5	2024/8/10
750	22.5	0.883	41.8	0.89	41.90	-0.79	-0.24	± 5	2024/8/29
750	22.3	0.906	42.4	0.89	41.90	1.80	1.19	± 5	2024/8/30
835	22.5	0.926	42.100	0.90	41.50	2.89	1.45	± 5	2024/7/22
835	22.2	0.919	42.100	0.90	41.50	2.11	1.45	± 5	2024/7/26
835	22.5	0.921	41.300	0.90	41.50	2.33	-0.48	± 5	2024/7/26
835	22.5	0.924	41.600	0.90	41.50	2.67	0.24	± 5	2024/7/28
835	22.1	0.928	42.700	0.90	41.50	3.11	2.89	± 5	2024/7/31
835	22.2	0.928	42.600	0.90	41.50	3.11	2.65	± 5	2024/8/2
835	22.5	0.925	41.600	0.90	41.50	2.78	0.24	± 5	2024/8/4
835	22.3	0.918	42	0.90	41.50	2.00	1.20	± 5	2024/8/10
835	22.5	0.916	41.5	0.90	41.50	1.78	0.00	± 5	2024/8/29
835	22.3	0.941	42.1	0.90	41.50	4.56	1.45	± 5	2024/8/30
1750	22.5	1.350	40.800	1.37	40.10	-1.46	1.75	± 5	2024/7/18
1750	22.5	1.370	40.700	1.37	40.10	0.00	1.50	± 5	2024/7/18
1750	22.7	1.370	40.700	1.37	40.10	0.00	1.50	± 5	2024/7/27
1750	22.5	1.370	41.000	1.37	40.10	0.00	2.24	± 5	2024/7/29
1750	22.5	1.380	41.000	1.37	40.10	0.73	2.24	± 5	2024/7/30
1750	22.5	1.360	40.600	1.37	40.10	-0.73	1.25	± 5	2024/8/3
1750	22.7	1.360	40.800	1.37	40.10	-0.73	1.75	± 5	2024/8/5
1750	22.5	1.350	40.600	1.37	40.10	-1.46	1.25	± 5	2024/8/6
1750	22.3	1.38	40.9	1.37	40.10	0.73	2.00	± 5	2024/8/13
1750	22.6	1.35	40.7	1.37	40.10	-1.46	1.50	± 5	2024/8/30
1750	22.4	1.36	40.6	1.37	40.10	-0.73	1.25	± 5	2024/8/31
1900	22.5	1.390	40.400	1.40	40.00	-0.71	1.00	± 5	2024/7/18
1900	22.7	1.380	40.500	1.40	40.00	-1.43	1.25	± 5	2024/7/27
1900	22.5	1.440	41.200	1.40	40.00	2.86	3.00	± 5	2024/7/29
1900	22.4	1.430	38.700	1.40	40.00	2.14	-3.25	± 5	2024/8/1
1900	22.5	1.430	39.000	1.40	40.00	2.14	-2.50	± 5	2024/8/3
1900	22.7	1.440	39.300	1.40	40.00	2.86	-1.75	± 5	2024/8/5
1900	22.5	1.440	38.500	1.40	40.00	2.86	-3.75	± 5	2024/8/7
1900	22.6	1.43	39.2	1.40	40.00	2.14	-2.00	± 5	2024/8/30
1900	22.4	1.44	39	1.40	40.00	2.86	-2.50	± 5	2024/8/31
2300	22.5	1.670	40.200	1.67	39.50	0.00	1.77	± 5	2024/7/25
2300	22.3	1.670	40.600	1.67	39.50	0.00	2.78	± 5	2024/8/1
2300	22.4	1.620	39.300	1.67	39.50	-2.99	-0.51	± 5	2024/8/4
2300	22.2	1.680	38.900	1.67	39.50	0.60	-1.52	± 5	2024/8/12
2300	22.3	1.66	38.8	1.67	39.50	-0.60	-1.77	± 5	2024/8/30
2600	22.5	1.970	38.100	1.96	39.00	0.51	-2.31	± 5	2024/7/22
2600	22.4	1.940	38.500	1.96	39.00	-1.02	-1.28	± 5	2024/7/24
2600	22.5	1.980	38.900	1.96	39.00	1.02	-0.26	± 5	2024/7/25



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2600	22.9	1.900	38.500	1.96	39.00	-3.06	-1.28	±5	2024/7/29
2600	22.6	1.980	38.100	1.96	39.00	1.02	-2.31	±5	2024/8/2
2600	22.5	1.990	38.700	1.96	39.00	1.53	-0.77	±5	2024/8/4
2600	22.4	1.930	38.100	1.96	39.00	-1.53	-2.31	±5	2024/8/4
2600	22.6	1.980	38.700	1.96	39.00	1.02	-0.77	±5	2024/8/11
2600	22.2	1.91	38.3	1.96	39.00	-2.55	-1.79	±5	2024/8/12
2600	22.3	1.89	37.7	1.96	39.00	-3.57	-3.33	±5	2024/8/30
2600	22.5	1.95	38.4	1.96	39.00	-0.51	-1.54	±5	2024/8/31
3500	22.5	2.980	38.700	2.91	37.90	2.41	2.11	±5	2024/7/16
3500	22.5	2.990	38.400	2.91	37.90	2.75	1.32	±5	2024/7/23
3500	22.5	2.940	37.900	2.91	37.90	1.03	0.00	±5	2024/7/30
3500	22.3	2.960	38.000	2.91	37.90	1.72	0.26	±5	2024/8/3
3500	22.4	2.950	38.100	2.91	37.90	1.37	0.53	±5	2024/8/4
3500	22.4	3.010	37.800	2.91	37.90	3.44	-0.26	±5	2024/8/7
3500	22.4	3.020	37.600	2.91	37.90	3.78	-0.79	±5	2024/8/8
3500	22.4	2.990	37.700	2.91	37.90	2.75	-0.53	±5	2024/8/8
3500	22.5	2.910	37.800	2.91	37.90	0.00	-0.26	±5	2024/8/9
3500	22.4	2.980	37.500	2.91	37.90	2.41	-1.06	±5	2024/8/9
3500	22.3	2.88	37.2	2.91	37.90	-1.03	-1.85	±5	2024/8/10
3500	22.4	2.94	37.4	2.91	37.90	1.03	-1.32	±5	2024/8/19
3500	22.3	2.93	37.7	2.91	37.90	0.69	-0.53	±5	2024/8/21
3500	22.4	3.01	37.8	2.91	37.90	3.44	-0.26	±5	2024/8/31
3700	22.5	3.190	38.500	3.12	37.70	2.24	2.12	±5	2024/7/16
3700	22.5	3.200	38.200	3.12	37.70	2.56	1.33	±5	2024/7/23
3700	22.5	3.100	37.700	3.12	37.70	-0.64	0.00	±5	2024/7/30
3700	22.3	3.150	37.700	3.12	37.70	0.96	0.00	±5	2024/8/3
3700	22.4	3.160	37.800	3.12	37.70	1.28	0.27	±5	2024/8/4
3700	22.4	3.2	37.5	3.12	37.70	2.56	-0.53	±5	2024/8/7
3700	22.4	3.200	37.300	3.12	37.70	2.56	-1.06	±5	2024/8/8
3700	22.4	3.180	37.400	3.12	37.70	1.92	-0.80	±5	2024/8/8
3700	22.5	3.090	37.500	3.12	37.70	-0.96	-0.53	±5	2024/8/9
3700	22.4	3.170	37.200	3.12	37.70	1.60	-1.33	±5	2024/8/9
3700	22.3	3.07	36.9	3.12	37.70	-1.60	-2.12	±5	2024/8/10
3700	22.4	3.12	37.1	3.12	37.70	0.00	-1.59	±5	2024/8/19
3700	22.3	3.14	37.5	3.12	37.70	0.64	-0.53	±5	2024/8/21
3700	22.4	3.2	37.5	3.12	37.70	2.56	-0.53	±5	2024/8/31
3900	22.5	3.420	38.000	3.33	37.51	2.70	1.31	±5	2024/7/23
3900	22.5	3.270	37.400	3.33	37.51	-1.80	-0.29	±5	2024/7/30
3900	22.3	3.350	37.400	3.33	37.51	0.60	-0.29	±5	2024/8/3
3900	22.4	3.370	37.700	3.33	37.51	1.20	0.51	±5	2024/8/4
3900	22.4	3.4	37.2	3.33	37.51	2.10	-0.83	±5	2024/8/7
3900	22.4	3.39	37.1	3.33	37.51	1.80	-1.09	±5	2024/8/8
3900	22.4	3.37	37	3.33	37.51	1.20	-1.36	±5	2024/8/9
3900	22.3	3.26	36.6	3.33	37.51	-2.10	-2.43	±5	2024/8/10
3900	22.4	3.41	37.2	3.33	37.51	2.40	-0.83	±5	2024/8/31
2450	22.5	1.820	39.800	1.80	39.20	1.11	1.53	±5	2024/8/1
2450	22.6	1.830	39.100	1.80	39.20	1.67	-0.26	±5	2024/8/6
2450	22.2	1.830	38.900	1.80	39.20	1.67	-0.77	±5	2024/8/7
2450	22.5	1.770	39.000	1.80	39.20	-1.67	-0.51	±5	2024/8/9
2450	22.4	1.780	39.000	1.80	39.20	-1.11	-0.51	±5	2024/8/14
5250	22.5	4.590	35.600	4.71	35.95	-2.55	-0.97	±5	2024/7/26
5250	22.7	4.550	35.400	4.71	35.95	-3.40	-1.53	±5	2024/7/27
5250	22.5	4.720	36.600	4.71	35.95	0.21	1.81	±5	2024/8/2
5250	22.2	4.670	36.400	4.71	35.95	-0.85	1.25	±5	2024/8/4
5250	22.5	4.690	36.500	4.71	35.95	-0.42	1.53	±5	2024/8/9
5250	22.7	4.740	36.700	4.71	35.95	0.64	2.09	±5	2024/8/10
5250	22.1	4.610	36.200	4.71	35.95	-2.12	0.70	±5	2024/8/10
5250	22.5	4.600	35.200	4.71	35.95	-2.34	-2.09	±5	2024/8/11
5250	22.7	4.730	36.600	4.71	35.95	0.42	1.81	±5	2024/8/12
5250	22.2	4.790	37.000	4.71	35.95	1.70	2.92	±5	2024/8/12
5250	22.6	4.680	36.900	4.71	35.95	-0.64	2.64	±5	2024/8/13
5250	22.5	4.570	35.500	4.71	35.95	-2.97	-1.25	±5	2024/8/15
5600	22.5	4.990	35.000	5.07	35.50	-1.58	-1.41	±5	2024/7/26
5600	22.7	4.940	34.800	5.07	35.50	-2.56	-1.97	±5	2024/7/27



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5600	22.5	5.060	36.100	5.07	35.50	-0.20	1.69	±5	2024/8/3
5600	22.5	5.160	36.400	5.07	35.50	1.78	2.54	±5	2024/8/5
5600	22.5	5.070	35.500	5.07	35.50	0.00	0.00	±5	2024/8/8
5600	22.5	5.060	36.000	5.07	35.50	-0.20	1.41	±5	2024/8/9
5600	22.7	5.110	36.200	5.07	35.50	0.79	1.97	±5	2024/8/10
5600	22.1	4.940	35.700	5.07	35.50	-2.56	0.56	±5	2024/8/10
5600	22.5	4.990	34.600	5.07	35.50	-1.58	-2.54	±5	2024/8/11
5600	22.7	5.100	36.000	5.07	35.50	0.59	1.41	±5	2024/8/12
5600	22.2	5.190	36.400	5.07	35.50	2.37	2.54	±5	2024/8/12
5600	22.6	5.060	36.300	5.07	35.50	-0.20	2.25	±5	2024/8/13
5600	22.5	4.950	34.900	5.07	35.50	-2.37	-1.69	±5	2024/8/15
5750	22.5	5.170	34.700	5.22	35.35	-0.96	-1.84	±5	2024/7/26
5750	22.7	5.120	34.500	5.22	35.35	-1.92	-2.40	±5	2024/7/27
5800	22.4	5.320	34.800	5.27	35.30	0.95	-1.42	±5	2024/7/29
5800	22.2	5.210	35.600	5.27	35.30	-1.14	0.85	±5	2024/8/4
5800	22.5	5.380	36.100	5.27	35.30	2.09	2.27	±5	2024/8/5
5800	22.5	5.220	35.600	5.27	35.30	-0.95	0.85	±5	2024/8/8
5800	22.5	5.280	35.700	5.27	35.30	0.19	1.13	±5	2024/8/9
5800	22.7	5.330	35.900	5.27	35.30	1.14	1.70	±5	2024/8/10
5800	22.1	5.140	35.400	5.27	35.30	-2.47	0.28	±5	2024/8/10
5800	22.5	5.230	34.200	5.27	35.30	-0.76	-3.12	±5	2024/8/11
5800	22.7	5.310	35.800	5.27	35.30	0.76	1.42	±5	2024/8/12
5800	22.2	5.410	36.100	5.27	35.30	2.66	2.27	±5	2024/8/12
5800	22.6	5.270	36.100	5.27	35.30	0.00	2.27	±5	2024/8/13
5800	22.5	5.190	34.500	5.27	35.30	-1.52	-2.27	±5	2024/8/15
6500	22.5	6.090	34.600	6.07	34.50	0.33	0.29	±5	2024/7/25
6500	22.5	6.120	34.700	6.07	34.50	0.82	0.58	±5	2024/7/28
6500	22.5	6.140	34.900	6.07	34.50	1.15	1.16	±5	2024/8/3
6500	22.5	6.170	34.900	6.07	34.50	1.65	1.16	±5	2024/8/19
6500	22.1	6.020	34.700	6.07	34.50	-0.82	0.58	±5	2024/8/21
6500	22.2	6.100	34.400	6.07	34.50	0.49	-0.29	±5	2024/8/22
6500	22.4	6.070	34.400	6.07	34.50	0.00	-0.29	±5	2024/8/20
6500	22.5	5.830	35.400	6.07	34.50	-3.95	2.61	±5	2024/8/25
13	22.4	0.728	54.573	0.75	55.00	-2.93	-0.78	±5	2024/8/20
1750	22.5	1.350	40.800	1.37	40.10	-1.46	1.75	±5	2024/7/18
1750	22.7	1.370	40.700	1.37	40.10	0.00	1.50	±5	2024/7/27
1750	22.5	1.370	41.000	1.37	40.10	0.00	2.24	±5	2024/7/29
1750	22.5	1.380	41.000	1.37	40.10	0.73	2.24	±5	2024/7/30
1750	22.4	1.360	40.200	1.37	40.10	-0.73	0.25	±5	2024/8/1
1750	22.2	1.370	40.800	1.37	40.10	0.00	1.75	±5	2024/8/2
1750	22.5	1.390	41.000	1.37	40.10	1.46	2.24	±5	2024/8/2
1750	22.5	1.350	40.600	1.37	40.10	-1.46	1.25	±5	2024/8/5
1750	22.7	1.370	40.900	1.37	40.10	0.00	2.00	±5	2024/8/7
1750	22.5	1.360	40.700	1.37	40.10	-0.73	1.50	±5	2024/8/31
1900	22.7	1.380	40.500	1.40	40.00	-1.43	1.25	±5	2024/7/27
1900	22.5	1.440	41.200	1.40	40.00	2.86	3.00	±5	2024/7/29
1900	22.4	1.430	38.700	1.40	40.00	2.14	-3.25	±5	2024/8/1
1900	22.5	1.400	40.700	1.40	40.00	0.00	1.75	±5	2024/8/2
1900	22.5	1.430	39.000	1.40	40.00	2.14	-2.50	±5	2024/8/5
1900	22.7	1.410	39.300	1.40	40.00	0.71	-1.75	±5	2024/8/7
1900	22.5	1.430	40.900	1.40	40.00	2.14	2.25	±5	2024/8/31
3500	22.4	2.940	37.900	2.91	37.90	1.03	0.00	±5	2024/7/30
3500	22.5	2.990	37.700	2.91	37.90	2.75	-0.53	±5	2024/8/8
3500	22.5	3.000	37.400	2.91	37.90	3.09	-1.32	±5	2024/8/31
3700	22.4	3.100	37.700	3.12	37.70	-0.64	0.00	±5	2024/7/30
3700	22.5	3.180	37.400	3.12	37.70	1.92	-0.80	±5	2024/8/8
3700	22.5	3.190	37.100	3.12	37.70	2.24	-1.59	±5	2024/8/31
3900	22.4	3.270	37.400	3.33	37.51	-1.80	-0.29	±5	2024/7/30
3900	22.5	3.390	37.100	3.33	37.51	1.80	-1.09	±5	2024/8/8
3900	22.5	3.390	36.800	3.33	37.51	1.80	-1.89	±5	2024/8/31

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 (%)
SAR-21	2024/7/17	750	50	D750V3-1107	EX3DV4 - SN7813	DAE4 Sn1805	0.440	8.540	8.8	3.04
SAR-19	2024/7/25	750	50	D750V3-1107	EX3DV4 - SN7694	DAE4 Sn661	0.421	8.540	8.42	-1.41
SAR-18	2024/7/26	750	50	D750V3-1107	EX3DV4 - SN7785	DAE4ip Sn1800	0.432	8.540	8.64	1.17
SAR-21	2024/7/26	750	50	D750V3-1107	EX3DV4 - SN7813	DAE4 Sn1805	0.422	8.540	8.44	-1.17
SAR-18	2024/7/27	750	50	D750V3-1107	EX3DV4 - SN7785	DAE4ip Sn1800	0.426	8.540	8.52	-0.23
SAR-19	2024/8/2	750	50	D750V3-1107	EX3DV4 - SN7694	DAE4 Sn661	0.427	8.540	8.54	0.00
SAR-21	2024/8/3	750	50	D750V3-1107	EX3DV4 - SN7813	DAE4 Sn1805	0.433	8.540	8.66	1.41
SAR-19	2024/8/10	750	50	D750V3-1107	EX3DV4 - SN7694	DAE4 Sn661	0.424	8.540	8.48	-0.70
SAR-20	2024/8/29	750	50	D750V3-1107	EX3DV4 - SN7590	DAE4 Sn1776	0.417	8.540	8.34	-2.34
SAR-16	2024/8/30	750	50	D750V3-1107	EX3DV4 - SN3931	DAE4 Sn699	0.396	8.540	7.92	-7.26
SAR-19	2024/7/22	835	50	D835V2-4d167	EX3DV4 - SN7694	DAE4 Sn661	0.512	9.800	10.24	4.49
SAR-18	2024/7/26	835	50	D835V2-4d167	EX3DV4 - SN7785	DAE4ip Sn1800	0.526	9.800	10.52	7.35
SAR-21	2024/7/26	835	50	D835V2-4d167	EX3DV4 - SN7813	DAE4 Sn1805	0.527	9.800	10.54	7.55
SAR-21	2024/7/28	835	50	D835V2-4d167	EX3DV4 - SN7813	DAE4 Sn1805	0.536	9.800	10.72	9.39
SAR-18	2024/7/31	835	50	D835V2-4d167	EX3DV4 - SN7785	DAE4ip Sn1800	0.507	9.800	10.14	3.47
SAR-19	2024/8/2	835	50	D835V2-4d167	EX3DV4 - SN7694	DAE4 Sn661	0.513	9.800	10.26	4.69
SAR-19	2024/8/4	835	50	D835V2-4d167	EX3DV4 - SN7694	DAE4 Sn661	0.514	9.800	10.28	4.90
SAR-19	2024/8/10	835	50	D835V2-4d167	EX3DV4 - SN7694	DAE4 Sn661	0.517	9.800	10.34	5.51
SAR-20	2024/8/29	835	50	D835V2-4d167	EX3DV4 - SN7590	DAE4 Sn1776	0.483	9.800	9.66	-1.43
SAR-16	2024/8/30	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn699	0.491	9.800	9.82	0.20
SAR-21	2024/7/18	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.800	36.900	36	-2.44
SAR-19	2024/7/18	1750	50	D1750V2-1112	EX3DV4 - SN7694	DAE4 Sn661	1.840	36.900	36.8	-0.27
SAR-21	2024/7/27	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.790	36.900	35.8	-2.98
SAR-21	2024/7/29	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.920	36.900	38.4	4.07
SAR-21	2024/7/30	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.900	36.900	38	2.98
SAR-19	2024/8/3	1750	50	D1750V2-1112	EX3DV4 - SN7694	DAE4 Sn661	1.720	36.900	34.4	-6.78
SAR-19	2024/8/5	1750	50	D1750V2-1112	EX3DV4 - SN7694	DAE4 Sn661	1.720	36.900	34.4	-6.78
SAR-19	2024/8/6	1750	50	D1750V2-1112	EX3DV4 - SN7694	DAE4 Sn661	1.690	36.900	33.8	-8.40
SAR-19	2024/8/13	1750	50	D1750V2-1112	EX3DV4 - SN7694	DAE4 Sn661	1.670	36.900	33.4	-9.49
SAR-20	2024/8/30	1750	50	D1750V2-1112	EX3DV4 - SN7590	DAE4 Sn1776	1.830	36.900	36.6	-0.81
SAR-16	2024/8/31	1750	50	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn699	1.830	36.900	36.6	-0.81
SAR-19	2024/7/18	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn661	1.910	39.000	38.2	-2.05
SAR-21	2024/7/27	1900	50	D1900V2-5d185	EX3DV4 - SN7813	DAE4 Sn1805	1.950	39.000	39	0.00
SAR-21	2024/7/29	1900	50	D1900V2-5d185	EX3DV4 - SN7813	DAE4 Sn1805	2.080	39.000	41.6	6.67
SAR-17	2024/8/1	1900	50	D1900V2-5d185	EX3DV4 - SN7625	DAE4ip Sn1800	1.960	39.000	39.2	0.51
SAR-19	2024/8/3	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn661	1.870	39.000	37.4	-4.10
SAR-19	2024/8/5	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn661	1.910	39.000	38.2	-2.05
SAR-19	2024/8/7	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn661	1.830	39.000	36.6	-6.15
SAR-20	2024/8/30	1900	50	D1900V2-5d185	EX3DV4 - SN7590	DAE4 Sn1776	2.000	39.000	40	2.56
SAR-16	2024/8/31	1900	50	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn699	2.030	39.000	40.6	4.10
SAR-21	2024/7/25	2300	50	D2300V2-1006	EX3DV4 - SN7813	DAE4 Sn1805	2.410	48.300	48.2	-0.21
SAR-21	2024/8/1	2300	50	D2300V2-1006	EX3DV4 - SN7813	DAE4 Sn1805	2.390	48.300	47.8	-1.04
SAR-17	2024/8/4	2300	50	D2300V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	2.290	48.300	45.8	-5.18
SAR-19	2024/8/12	2300	50	D2300V2-1006	EX3DV4 - SN7694	DAE4 Sn661	2.220	48.300	44.4	-8.07
SAR-16	2024/8/30	2300	50	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn699	2.350	48.300	47	-2.69
SAR-18	2024/7/22	2600	50	D2600V2-1078	EX3DV4 - SN7785	DAE4ip Sn1800	2.810	55.400	56.2	1.44
SAR-19	2024/7/24	2600	50	D2600V2-1078	EX3DV4 - SN7694	DAE4 Sn661	2.550	55.400	51	-7.94
SAR-21	2024/7/25	2600	50	D2600V2-1078	EX3DV4 - SN7813	DAE4 Sn1805	2.680	55.400	53.6	-3.25
SAR-18	2024/7/29	2600	50	D2600V2-1078	EX3DV4 - SN7785	DAE4ip Sn1800	2.730	55.400	54.6	-1.44
SAR-17	2024/8/2	2600	50	D2600V2-1078	EX3DV4 - SN7625	DAE4ip Sn1800	2.620	55.400	52.4	-5.42
SAR-19	2024/8/4	2600	50	D2600V2-1078	EX3DV4 - SN7694	DAE4 Sn661	2.620	55.400	52.4	-5.42
SAR-17	2024/8/4	2600	50	D2600V2-1078	EX3DV4 - SN7625	DAE4ip Sn1800	2.680	55.400	53.6	-3.25
SAR-19	2024/8/11	2600	50	D2600V2-1078	EX3DV4 - SN7694	DAE4 Sn661	2.770	55.400	55.4	0.00
SAR-19	2024/8/12	2600	50	D2600V2-1078	EX3DV4 - SN7694	DAE4 Sn661	2.800	55.400	56	1.08
SAR-16	2024/8/30	2600	50	D2600V2-1078	EX3DV4 - SN3931	DAE4 Sn699	2.750	55.400	55	-0.72
SAR-20	2024/8/31	2600	50	D2600V2-1078	EX3DV4 - SN7590	DAE4 Sn1776	2.520	55.400	50.4	-9.03



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SAR-21	2024/7/16	3500	50	D3500V2-1014	EX3DV4 - SN7813	DAE4 Sn1805	3.540	67.200	70.8	5.36
SAR-19	2024/7/23	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn661	3.050	67.200	61	-9.23
SAR-18	2024/7/30	3500	50	D3500V2-1014	EX3DV4 - SN7785	DAE4ip Sn1800	3.430	67.200	68.6	2.08
SAR-17	2024/8/3	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.310	67.200	66.2	-1.49
SAR-21	2024/8/4	3500	50	D3500V2-1014	EX3DV4 - SN7813	DAE4 Sn1805	3.380	67.200	67.6	0.60
SAR-17	2024/8/7	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.500	67.200	70	4.17
SAR-19	2024/8/8	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn661	3.280	67.200	65.6	-2.38
SAR-17	2024/8/8	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.490	67.200	69.8	3.87
SAR-19	2024/8/9	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn661	3.290	67.200	65.8	-2.08
SAR-17	2024/8/9	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.460	67.200	69.2	2.98
SAR-17	2024/8/10	3500	50	D3500V2-1036	EX3DV4 - SN7625	DAE4ip Sn1800	3.290	67.400	65.8	-2.37
SAR-17	2024/8/19	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.330	67.200	66.6	-0.89
SAR-17	2024/8/21	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.120	67.200	62.4	-7.14
SAR-16	2024/8/31	3500	50	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn699	3.450	67.200	69	2.68
SAR-21	2024/7/16	3700	50	D3700V2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.590	65.600	71.8	9.45
SAR-19	2024/7/23	3700	50	D3700V2-1006	EX3DV4 - SN7694	DAE4 Sn661	3.150	65.600	63	-3.96
SAR-18	2024/7/30	3700	50	D3700V2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	3.310	65.600	66.2	0.91
SAR-17	2024/8/3	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.470	65.600	69.4	5.79
SAR-21	2024/8/4	3700	50	D3700V2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.050	65.600	61	-7.01
SAR-17	2024/8/7	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.080	65.600	61.6	-6.10
SAR-19	2024/8/8	3700	50	D3700V2-1006	EX3DV4 - SN7694	DAE4 Sn661	3.210	65.600	64.2	-2.13
SAR-17	2024/8/8	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.060	65.600	61.2	-6.71
SAR-19	2024/8/9	3700	50	D3700V2-1006	EX3DV4 - SN7694	DAE4 Sn661	2.990	65.600	59.8	-8.84
SAR-17	2024/8/9	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.040	65.600	60.8	-7.32
SAR-17	2024/8/10	3700	50	D3700V2-1022	EX3DV4 - SN7625	DAE4ip Sn1800	3.450	68.100	69	1.32
SAR-17	2024/8/19	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.270	65.600	65.4	-0.30
SAR-17	2024/8/21	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.340	65.600	66.8	1.83
SAR-16	2024/8/31	3700	50	D3700V2-1006	EX3DV4 - SN3931	DAE4 Sn699	3.310	65.600	66.2	0.91
SAR-19	2024/7/23	3900	50	D3900V2-1092	EX3DV4 - SN7694	DAE4 Sn661	3.020	67.000	60.4	-9.85
SAR-18	2024/7/30	3900	50	D3900V2-1092	EX3DV4 - SN7785	DAE4ip Sn1800	3.190	67.000	63.8	-4.78
SAR-17	2024/8/3	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.350	67.000	67	0.00
SAR-21	2024/8/4	3900	50	D3900V2-1092	EX3DV4 - SN7813	DAE4 Sn1805	3.400	67.000	68	1.49
SAR-17	2024/8/7	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.390	67.000	67.8	1.19
SAR-17	2024/8/8	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.390	67.000	67.8	1.19
SAR-17	2024/8/9	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.360	67.000	67.2	0.30
SAR-17	2024/8/10	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.310	67.000	66.2	-1.19
SAR-16	2024/8/31	3900	50	D3900V2-1092	EX3DV4 - SN3931	DAE4 Sn699	3.380	67.000	67.6	0.90
SAR-21	2024/7/18	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.800	36.900	36	-2.44
SAR-21	2024/7/27	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.790	36.900	35.8	-2.98
SAR-21	2024/7/29	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.920	36.900	38.4	4.07
SAR-21	2024/7/30	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.900	36.900	38	2.98
SAR-18	2024/8/1	1750	50	D1750V2-1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.880	36.900	37.6	1.90
SAR-21	2024/8/2	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.930	36.900	38.6	4.61
SAR-19	2024/8/2	1750	50	D1750V2-1112	EX3DV4 - SN7694	DAE4 Sn661	1.730	36.900	34.6	-6.23
SAR-21	2024/8/5	1750	50	D1750V2-1112	EX3DV4 - SN7813	DAE4 Sn1805	1.880	36.900	37.6	1.90
SAR-18	2024/8/7	1750	50	D1750V2-1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.750	36.900	35	-5.15
SAR-18	2024/8/31	1750	50	D1750V2-1112	EX3DV4 - SN7625	DAE4 Sn1794	1.710	36.900	34.2	-7.32
SAR-21	2024/7/27	1900	50	D1900V2-5d185	EX3DV4 - SN7813	DAE4 Sn1805	1.950	39.000	39	0.00
SAR-21	2024/7/29	1900	50	D1900V2-5d185	EX3DV4 - SN7813	DAE4 Sn1805	2.080	39.000	41.6	6.67
SAR-18	2024/8/1	1900	50	D1900V2-5d185	EX3DV4 - SN7625	DAE4ip Sn1800	1.960	39.000	39.2	0.51
SAR-19	2024/8/2	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn661	1.800	39.000	36	-7.69
SAR-21	2024/8/5	1900	50	D1900V2-5d185	EX3DV4 - SN7813	DAE4 Sn1805	2.050	39.000	41	5.13
SAR-18	2024/8/7	1900	50	D1900V2-5d185	EX3DV4 - SN7625	DAE4ip Sn1800	1.830	39.000	36.6	-6.15
SAR-18	2024/8/31	1900	50	D1900V2-5d185	EX3DV4 - SN7625	DAE4 Sn1794	1.880	39.000	37.6	-3.59
SAR-18	2024/7/30	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.400	67.200	68	1.19
SAR-18	2024/8/8	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.450	67.200	69	2.68
SAR-18	2024/8/31	3500	50	D3500V2-1014	EX3DV4 - SN7625	DAE4 Sn1794	3.310	67.200	66.2	-1.49
SAR-18	2024/7/30	3700	50	D3700V2-1022	EX3DV4 - SN7625	DAE4ip Sn1800	3.450	68.100	69	1.32
SAR-18	2024/8/8	3700	50	D3700V2-1022	EX3DV4 - SN7625	DAE4ip Sn1800	3.550	68.100	71	4.26
SAR-18	2024/8/31	3700	50	D3700V2-1006	EX3DV4 - SN7625	DAE4 Sn1794	3.020	65.600	60.4	-7.93
SAR-18	2024/7/30	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.290	67.000	65.8	-1.79
SAR-18	2024/8/8	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.390	67.000	67.8	1.19
SAR-18	2024/8/31	3900	50	D3900V2-1092	EX3DV4 - SN7625	DAE4 Sn1794	3.040	67.000	60.8	-9.25



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Report No. : FA451607B

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 (%)
SAR-21	2024/8/1	2450	50	D2450V2-929	EX3DV4 - SN7813	DAE4 Sn1805	2.660	52.400	53.2	1.53	1.260	24.700	25.2	2.02
SAR-21	2024/8/6	2450	50	D2450V2-929	EX3DV4 - SN7813	DAE4 Sn1805	2.740	52.400	54.8	4.58	1.300	24.700	26	5.26
SAR-20	2024/8/7	2450	50	D2450V2-929	EX3DV4 - SN7590	DAE4 Sn1776	2.530	52.400	50.6	-3.44	1.190	24.700	23.8	-3.64
SAR-20	2024/8/9	2450	50	D2450V2-929	EX3DV4 - SN7590	DAE4 Sn1776	2.470	52.400	49.4	-5.73	1.180	24.700	23.6	-4.45
SAR-21	2024/8/14	2450	50	D2450V2-929	EX3DV4 - SN7813	DAE4 Sn1805	2.500	52.400	50	-4.58	1.190	24.700	23.8	-3.64
SAR-18	2024/7/26	5250	50	D5GHZV2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	3.790	81.200	75.8	-6.65	1.070	23.200	21.4	-7.76
SAR-18	2024/7/27	5250	50	D5GHZV2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	3.720	81.200	74.4	-8.37	1.060	23.200	21.2	-8.62
SAR-21	2024/8/2	5250	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.830	81.200	76.6	-5.67	1.110	23.200	22.2	-4.31
SAR-21	2024/8/4	5250	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.730	81.200	74.6	-8.13	1.080	23.200	21.6	-6.90
SAR-21	2024/8/9	5250	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.780	81.200	75.6	-6.90	1.090	23.200	21.8	-6.03
SAR-21	2024/8/10	5250	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.880	81.200	77.6	-4.43	1.130	23.200	22.6	-2.59
SAR-20	2024/8/10	5250	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	4.040	81.200	80.8	-0.49	1.160	23.200	23.2	0.00
SAR-20	2024/8/11	5250	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	3.840	81.200	76.8	-5.42	1.140	23.200	22.8	-1.72
SAR-21	2024/8/12	5250	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.920	81.200	78.4	-3.45	1.140	23.200	22.8	-1.72
SAR-20	2024/8/12	5250	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	3.880	81.200	77.6	-4.43	1.130	23.200	22.6	-2.59
SAR-21	2024/8/13	5250	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	3.940	81.200	78.8	-2.96	1.140	23.200	22.8	-1.72
SAR-20	2024/8/15	5250	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	3.780	81.200	75.6	-6.90	1.110	23.200	22.2	-4.31
SAR-18	2024/7/26	5600	50	D5GHZV2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	4.090	84.700	81.8	-3.42	1.140	24.200	22.8	-5.79
SAR-18	2024/7/27	5600	50	D5GHZV2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	4.050	84.700	81	-4.37	1.140	24.200	22.8	-5.79
SAR-21	2024/8/3	5600	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	4.190	84.700	83.8	-1.06	1.190	24.200	23.8	-1.65
SAR-21	2024/8/5	5600	100	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	9.190	84.700	91.9	8.50	2.650	24.200	26.5	9.50
SAR-21	2024/8/8	5600	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	4.140	84.700	82.8	-2.24	1.180	24.200	23.6	-2.48
SAR-21	2024/8/9	5600	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	4.150	84.700	83	-2.01	1.180	24.200	23.6	-2.48
SAR-21	2024/8/10	5600	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	4.290	84.700	85.8	1.30	1.230	24.200	24.6	1.65
SAR-20	2024/8/10	5600	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	4.530	84.700	90.6	6.97	1.290	24.200	25.8	6.61
SAR-20	2024/8/11	5600	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	3.990	84.700	79.8	-5.79	1.150	24.200	23	-4.96
SAR-21	2024/8/12	5600	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	4.300	84.700	86	1.53	1.240	24.200	24.8	2.48
SAR-20	2024/8/12	5600	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	4.270	84.700	85.4	0.83	1.230	24.200	24.6	1.65
SAR-21	2024/8/13	5600	50	D5GHZV2-1006	EX3DV4 - SN7813	DAE4 Sn1805	4.430	84.700	88.6	4.60	1.250	24.200	25	3.31
SAR-20	2024/8/15	5600	50	D5GHZV2-1006	EX3DV4 - SN7590	DAE4 Sn1776	3.940	84.700	78.8	-6.97	1.160	24.200	23.2	-4.13
SAR-18	2024/7/26	5750	50	D5GHZV2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	3.750	80.900	75	-7.29	1.050	22.900	21	-8.30
SAR-18	2024/7/27	5750	50	D5GHZV2-1006	EX3DV4 - SN7785	DAE4ip Sn1800	3.690	80.900	73.8	-8.78	1.040	22.900	20.8	-9.17
SAR-21	2024/7/29	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	4.100	78.700	82	4.19	1.180	22.200	23.6	6.31
SAR-21	2024/8/4	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.670	78.700	73.4	-6.73	1.050	22.200	21	-5.41
SAR-21	2024/8/5	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.860	78.700	77.2	-1.91	1.100	22.200	22	-0.90
SAR-21	2024/8/8	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.940	78.700	78.8	0.13	1.140	22.200	22.8	2.70
SAR-21	2024/8/9	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.680	78.700	73.6	-6.48	1.050	22.200	21	-5.41
SAR-21	2024/8/10	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.820	78.700	76.4	-2.92	1.100	22.200	22	-0.90
SAR-20	2024/8/10	5800	50	D5GHZV2-1128	EX3DV4 - SN7590	DAE4 Sn1776	3.560	78.700	71.2	-9.53	1.030	22.200	20.6	-7.21
SAR-20	2024/8/11	5800	50	D5GHZV2-1128	EX3DV4 - SN7590	DAE4 Sn1776	3.660	78.700	73.2	-6.99	1.060	22.200	21.2	-4.50
SAR-21	2024/8/12	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.840	78.700	76.8	-2.41	1.090	22.200	21.8	-1.80
SAR-20	2024/8/12	5800	50	D5GHZV2-1128	EX3DV4 - SN7590	DAE4 Sn1776	3.710	78.700	74.2	-5.72	1.070	22.200	21.4	-3.60
SAR-21	2024/8/13	5800	50	D5GHZV2-1128	EX3DV4 - SN7813	DAE4 Sn1805	3.850	78.700	77	-2.16	1.100	22.200	22	-0.90
SAR-20	2024/8/15	5800	50	D5GHZV2-1128	EX3DV4 - SN7590	DAE4 Sn1776	4.160	78.700	83.2	5.72	1.170	22.200	23.4	5.41

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 (%)
SAR-21	2024/7/25	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7813	DAE4 Sn1805	31.200	292.000	312	6.85	5.810	54.000	58.1	7.59
SAR-21	2024/7/28	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7813	DAE4 Sn1805	31.700	292.000	317	8.56	5.890	54.000	58.9	9.07
SAR-21	2024/8/3	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7813	DAE4 Sn1805	31.600	292.000	316	8.22	5.890	54.000	58.9	9.07
SAR-20	2024/8/19	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7590	DAE4 Sn1776	29.300	292.000	293	0.34	5.420	54.000	54.2	0.37
SAR-21	2024/8/21	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7813	DAE4 Sn1805	31.100	292.000	311	6.51	5.780	54.000	57.8	7.04
SAR-21	2024/8/22	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7813	DAE4 Sn1805	31.500	292.000	315	7.88	5.860	54.000	58.6	8.52
SAR-20	2024/8/20	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7590	DAE4 Sn1776	31.300	292.000	313	7.19	5.880	54.000	58.8	8.89
SAR-21	2024/8/25	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7813	DAE4 Sn1805	28.400	292.000	284	-2.74	5.230	54.000	52.3	-3.15
SAR-11	2024/8/20	13	1000	CLA13-1022	EX3DV4 - SN3931	DAE4 Sn699					0.329	0.349	0.329	-6.00

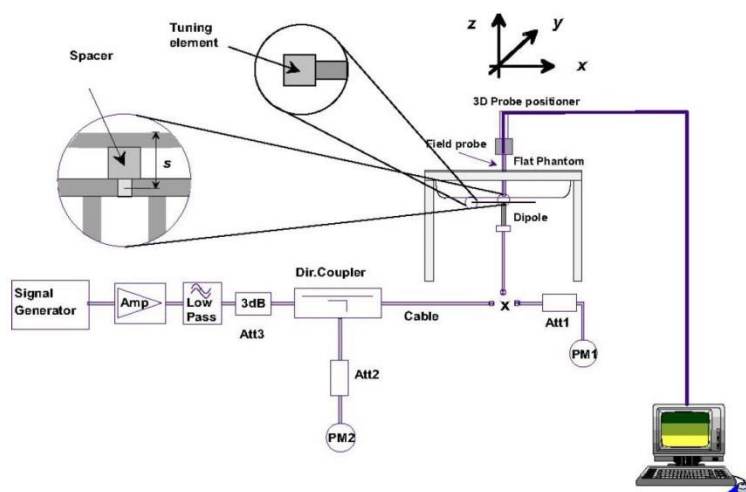

Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

10.3 PD System Performance Check Results

The system was verified to be within ± 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 ² (W/m ²)	Targeted 4 cm ² (W/m ²)	Deviation (dB)	Date
SAR13	10G	10GHz_1052	EUmmWV4 - 9461	1697	10	63.7	56.8	0.50	2024/8/10
SAR13	10G	10GHz_1052	EUmmWV4 - 9461	1697	10	62.1	56.8	0.39	2024/8/17

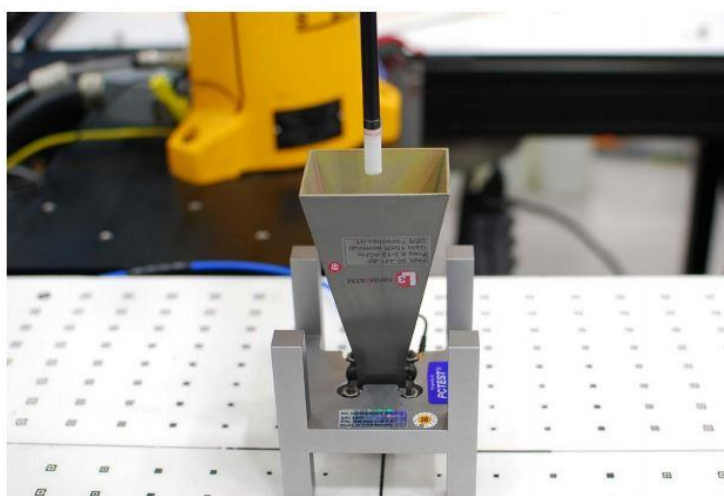


Figure 4-3
System Verification Setup Photo

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.

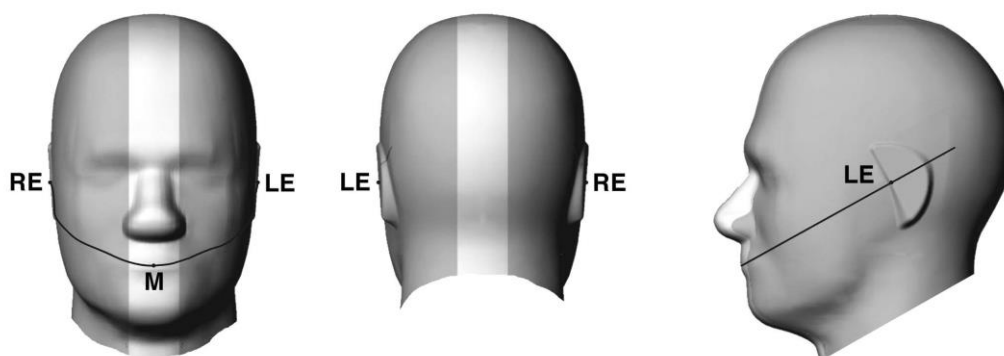


Fig 9.1.1 Front, back, and side views of SAM twin phantom

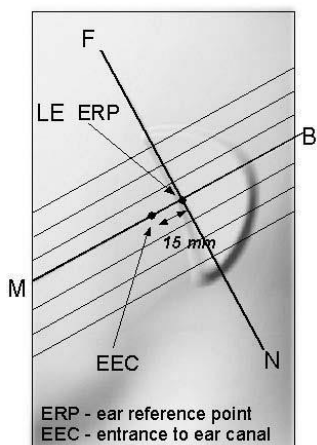


Fig 9.1.2 Close-up side view of phantom showing the ear region.

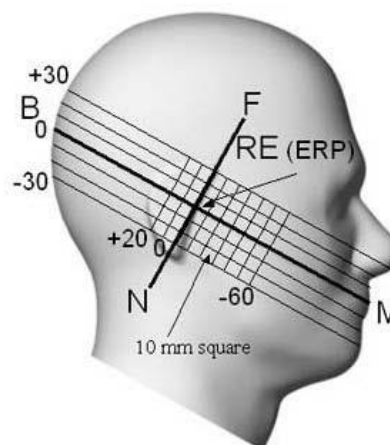


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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.

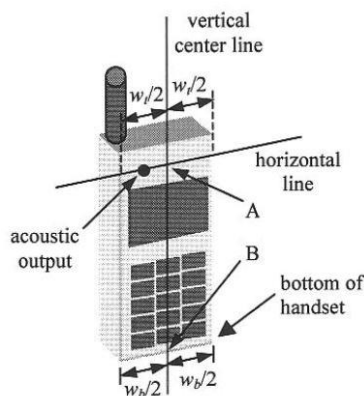


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case"

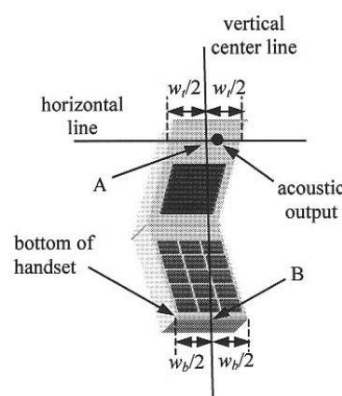


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

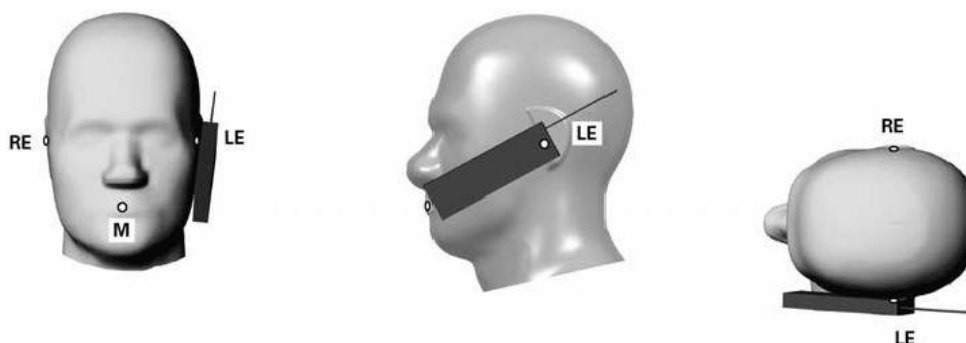


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

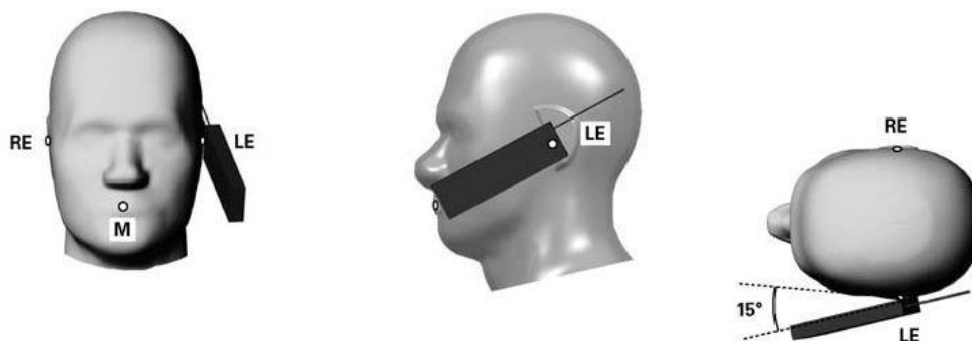


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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 $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components 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.

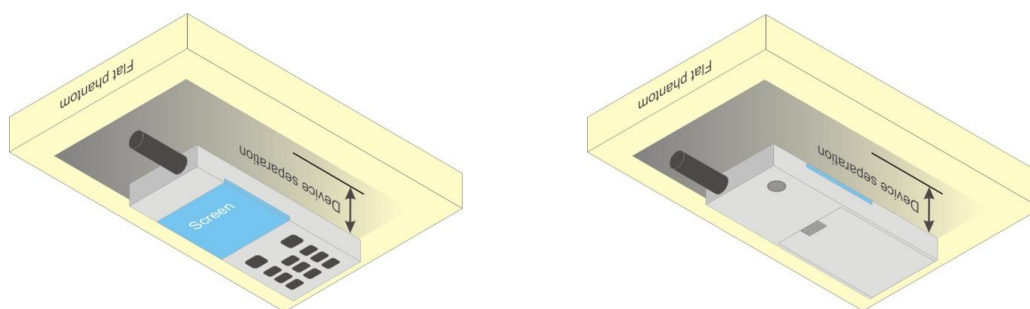


Fig 9.4 Body Worn Position

11.5 Product Specific Exposure

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

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

11.6 Wireless Router

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

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

12. DL/UL carrier aggregation

<LTE Carrier Aggregation combinations>

General Note:

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

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation			4CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2C	90	37	CA_41D	107	80	CA_41E	107
2	CA_4C	93	38	CA_66D	108	81	CA_41A-41A-41C	107
3	CA_5B	108	39	CA_2A-2A-2A	90	82	CA_41A-41D	107
4	CA_5C	108	40	CA_41A-41A-41A	107	83	CA_41C-41C	107
5	CA_7B	74	41	CA_41A-41C	107	84	CA_66B-66C	108
6	CA_7C	74	42	CA_41C-41A	107	85	CA_2A-2A-2A-5A	90
7	CA_12B	105	43	CA_66A-66A-66A	108	86	CA_2A-2A-2A-12A	89
8	CA_38C	66	44	CA_66A-66B	108	87	CA_2A-2A-5A-5A	90
9	CA_41C	107	45	CA_66A-66C	108	88	CA_2A-2A-5B	90
10	CA_66B	108	46	CA_66B-66A	108	89	CA_2A-2A-12B	
11	CA_66C	108	47	CA_2A-2A-5A	90	90	CA_2C-5B	
12	CA_2A-2A	90	48	CA_2A-2A-12A	89	91	CA_4A-4A-5A-5A	92
13	CA_4A-4A	93	49	CA_2A-5A-5A	90	92	CA_4A-4A-5B	
14	CA_5A-5A	108	50	CA_2A-5B	90	93	CA_4A-4A-12B	
15	CA_7A-7A	74	51	CA_2C-5A	90	94	CA_5A-5A-66A-66A	108
16	CA_12A-12A	105	52	CA_2A-12A-12A	89	95	CA_5A-5A-66B	108
17	CA_38A-38A	66	53	CA_2A-12B	89	96	CA_5A-5A-66C	108
18	CA_41A-41A	107	54	CA_2C-12A	89	97	CA_5A-66A-66A-66A	108
19	CA_66A-66A	108	55	CA_4A-4A-5A	92	98	CA_5A-66A-66B	108
20	CA_2A-5A	90	56	CA_4A-4A-12A	93	99	CA_5A-66A-66C	108
21	CA_2A-12A	89	57	CA_4A-5A-5A	92	100	CA_5B-66A-66A	108
22	CA_2A-17A		58	CA_4A-5B	92	101	CA_5A-66D	108
23	CA_2A-26A		59	CA_4C-5A	92	102	CA_5B-66B	108
24	CA_4A-5A	92	60	CA_4A-12A-12A	93	103	CA_5B-66C	108
25	CA_4A-12A	93	61	CA_4A-12B	93	104	CA_12A-66A-66A-66A	105
26	CA_4A-17A		62	CA_4C-12A	93	105	CA_12B-66A-66A	
27	CA_5A-7A	65	63	CA_5A-5A-66A	108			
28	CA_5A-38A	66	64	CA_5A-7A-7A	65			
29	CA_5A-41A		65	CA_5A-7C				
30	CA_5A-66A	108	66	CA_5B-38A		5CC Downlink Carrier Aggregation		
31	CA_7A-12A	73	67	CA_5A-66A-66A	108	Number	Combination	Covered by Measurement Superset
32	CA_7A-26A	74	68	CA_5A-66B	108			
33	CA_12A-66A	105	69	CA_5A-66C	108	106	CA_41F	107
34	CA_26A-7A	74	70	CA_5B-66A	108	107	CA_41C-41D	
35	CA_26A-41A	79	71	CA_7A-7A-12A	73	108	CA_5B-66A-66B	
36	CA_26A-66A		72	CA_7A-7A-26A	74			
			73	CA_7A-12B				
			74	CA_7C-26A				
			75	CA_12A-12A-66A	105			
			76	CA_12A-66A-66A	105			
			77	CA_12A-66C	105			
			78	CA_12B-66A	105			
			79	CA_26A-41C				

<Power verification when LTE Carrier Aggregation Active>
General Note:

- 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.
- 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.
- 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.
- 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.
- For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

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

<Two Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-17A	2	10	18900	1880	QPSK	1	0	17	10	740	5790	23.24	23.28
	CA_2A-26A	2	20	18900	1880	QPSK	1	0	26	15	876.5	8865	23.19	23.32
	CA_4A-17A	4	10	20175	1732.5	QPSK	1	0	17	10	740	5790	24.21	24.27
	CA_5A-41A	5	10	836.5	20525	QPSK	1	0	41	20	2593	40620	24.63	24.72
	CA_26A-66A	26	15	26865	831.5	QPSK	1	0	66	20	2145	66786	24.51	24.67

<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_5A-7C	5	10	831.6	20476	QPSK	1	0	7	20	2655	3100	7	20	2674.8	3298	24.69	24.72
	CA_5B-38A	5	10	831.6	20476	QPSK	1	0	5	10	886.5	2575	38	20	2595	38000	24.53	24.72
	CA_7A-12B	7	20	2535	21100	QPSK	1	0	12	10	740	5120	12	5	732.8	5048	24.39	24.45
	CA_7C-26A	7	20	2535	21100	QPSK	1	0	7	20	2674.8	3298	26	15	876.5	8865	24.35	24.45
	CA_26A-41C	26	15	26865	831.5	QPSK	1	0	41	20	2593	40620	41	20	2573.2	40422	24.63	24.67

<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-12B	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	12	10	740	5120	12	5	732.8	5048	23.29	23.32
	CA_2C-5B	2	20	1880	18900	QPSK	1	0	2	20	1979.8	1098	5	10	876.6	2476	5	10	886.5	2575	23.20	23.32
	CA_4A-4A-5B	4	20	1732.5	20175	QPSK	1	0	4	5	2112.5	1975	5	10	876.6	2476	5	10	886.5	2575	24.30	24.36
	CA_4A-4A-12B	4	20	1732.5	20175	QPSK	1	0	4	5	2112.5	1975	12	10	740	5120	12	5	732.8	5048	24.28	24.36
	CA_12B-66A-66A	12	10	710	23120	QPSK	1	0	12	5	732.8	5048	66	20	2145	66786	66	5	2112.5	66461	24.60	24.66

<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_41C-41D	41	20	2549.5	40185	QPSK	1	0	41	20	2529.7	39987	41	5	2687.5	41565	41	20	2675.8	41448	41	20	2656	41250	24.53	24.60
	CA_5B-66A-66B	5	10	831.6	20476	QPSK	1	0	5	10	886.5	2575	66	20	2593	40620	66	5	2112.5	66461	66	15	2121.8	66554	24.56	24.72

<LTE Uplink carrier aggregation>

2CC Uplink Carrier Aggregation	
Number	Combination
1	CA_7C
2	CA_38C
3	CA_41C

<Intra-band>

General Note:

- 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.
- 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.
- 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.
- 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.

Ant 2_Index 1/2								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.25	23.70
21100	20902	QPSK	1	0	1	99	22.44	23.70
21350	21152	QPSK	1	0	1	99	22.50	23.70

Ant 2_Index 3								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.29	21.70
21100	20902	QPSK	1	0	1	99	20.36	21.70
21350	21152	QPSK	1	0	1	99	20.44	21.70

Ant 2_Index 4								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	18.80	19.30
21100	20902	QPSK	1	0	1	99	18.97	19.30
21350	21152	QPSK	1	0	1	99	18.98	19.30

Ant 2_Index 5/6								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	18.80	19.60
21100	20902	QPSK	1	0	1	99	18.97	19.60
21350	21152	QPSK	1	0	1	99	18.98	19.60

Ant 0_Index 1/2								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.81	23.70
21100	20902	QPSK	1	0	1	99	22.46	23.70
21350	21152	QPSK	1	0	1	99	22.51	23.70

Ant 0_Index 3								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.81	23.40
21100	20902	QPSK	1	0	1	99	22.46	23.40
21350	21152	QPSK	1	0	1	99	22.51	23.40

Ant 0_Index 4/6								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	18.81	19.50
21100	20902	QPSK	1	0	1	99	18.91	19.50
21350	21152	QPSK	1	0	1	99	18.72	19.50

Ant 0_Index 5								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.50	22.10
21100	20902	QPSK	1	0	1	99	20.63	22.10
21350	21152	QPSK	1	0	1	99	20.45	22.10

Ant 2_Index 1/2/3								
CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.13	23.00
38000	37802	QPSK	1	0	1	99	22.44	23.00
38150	37952	QPSK	1	0	1	99	22.49	23.00

Ant 2_Index 4								
CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	20.67	20.90
38000	37802	QPSK	1	0	1	99	20.87	20.90
38150	37952	QPSK	1	0	1	99	20.80	20.90

Ant 2_Index 5/6								
CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	20.87	21.30
38000	37802	QPSK	1	0	1	99	21.07	21.30
38150	37952	QPSK	1	0	1	99	21.00	21.30

Ant 0_Index 1/2/3/5								
CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.44	23.00
38000	37802	QPSK	1	0	1	99	22.51	23.00
38150	37952	QPSK	1	0	1	99	22.50	23.00

Ant 0_Index 4/6								
CA_38C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	20.31	21.40
38000	37802	QPSK	1	0	1	99	20.39	21.40
38150	37952	QPSK	1	0	1	99	20.34	21.40



Ant 2_Index 1/2/3								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39790	39988	QPSK	1	0	0	0	22.11	23.00
40185	39987	QPSK	1	0	0	0	22.41	23.00
40620	40422	QPSK	1	0	0	0	22.46	23.00
41055	40857	QPSK	1	0	0	0	22.38	23.00
41490	41292	QPSK	1	0	0	0	22.70	23.00

Ant 2_Index 4								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39790	39988	QPSK	1	0	0	0	20.66	20.90
40185	39987	QPSK	1	0	0	0	20.76	20.90
40620	40422	QPSK	1	0	0	0	20.84	20.90
41055	40857	QPSK	1	0	0	0	20.88	20.90
41490	41292	QPSK	1	0	0	0	20.89	20.90

Ant 2_Index 5/6								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39790	39988	QPSK	1	0	0	0	20.66	21.30
40185	39987	QPSK	1	0	0	0	20.76	21.30
40620	40422	QPSK	1	0	0	0	20.84	21.30
41055	40857	QPSK	1	0	0	0	20.88	21.30
41490	41292	QPSK	1	0	0	0	20.89	21.30

Ant 0_Index 1/2/3/5								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39790	39988	QPSK	1	0	0	0	22.24	23.00
40185	39987	QPSK	1	0	0	0	22.57	23.00
40620	40422	QPSK	1	0	0	0	22.64	23.00
41055	40857	QPSK	1	0	0	0	22.63	23.00
41490	41292	QPSK	1	0	0	0	22.73	23.00

Ant 0_Index 4/6								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39790	39988	QPSK	1	0	0	0	20.23	21.40
40185	39987	QPSK	1	0	0	0	20.47	21.40
40620	40422	QPSK	1	0	0	0	20.60	21.40
41055	40857	QPSK	1	0	0	0	20.60	21.40
41490	41292	QPSK	1	0	0	0	20.70	21.40



13. Data Reuse Approach

FCC ID: A4RGXQ96 (reference model) and FCC ID: A4RGTF7P (variant model)

- **PCB:** The PCB layout is identical with parent model.
- **Component Positions:** The position of the components on the PCB is not changed
- **Enclosure, Materials, and From Factor:** the Enclosure, Materials, and From Factor are exactly the same

Due to the same design are identical between parent model and variant model, SAR data reuse is requested and spot check data in this report is used to justify the SAR data reuse.

For variant model 1g SAR and 10g spot check SAR result does not exceed 3dB and 1g SAR < 1.2W/kg, 10g SAR < 3.0W/kg of the reference model, the max SAR summary are identical with parent model.

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: A4RGTF7P

<Model Difference Information>

A4RGXQ96 and A4RGTF7P use the identical internal printed circuit board layout, and the major differences which may relate to RF are listed below:

- Depopulated LTE B13/14/25/30/71 and NR n4/14/25/30/70/71 filters.
- Populates n79 module for non-US carriers.

The details of similarity and difference can be found in the confidential documents.

<Reference detail Section>

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	FCC ID (Reference)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Test on the variant
Part 2.1093 SAR	DXX	NFC	13.56	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Full Test
	DSS	Bluetooth	2400~2483.5	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check
	DTS	BLE WiFi	2400~2483.5	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check
	NII	Wi-Fi	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850 5850 ~ 5895	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check
	6CD	Wi-Fi	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check 6E SAR, Full Test on 6E PD, per KDB 484596.
	PCB CBE	GSM	850/1900	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check
		WCDMA	B2/4/5	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check / Full Test on B2/4
		LTE	B2/4/5/7/12/17/26/38/41/66	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check / Full Test on B2/66
		5G FR1	n2/5/7/12/26/38/41/66/77/78	A4RGXQ96	Original Grant	FA451606B	A4RGTF7P	Spot check / Full Test on n2/66/77



<Spot Check SAR Results>

General Note:

1. SAR spot check verification on the worst cases from the original model was performed to demonstrate the test data from original model remains representative for the variant model.
2. If the 1-g SAR spot check result "does not exceed 3dB, but larger than 1.2 W/kg for 1g SAR, 3.0W/kg for 10 SAR, more spot check on the next-higher exposure position until the spot check result does not exceed 1.2 W/kg for 1g SAR, 3.0W/kg for 10 SAR.

1st as parent model

2nd as variant model

13.1 Head SAR

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	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)	Deviation (dB)
	1st	GSM850_Ant 0	GPRS (3 Tx slots)	Left Cheek	0mm	2	189	836.4	30.53	31.50	1.250			-0.15	0.431	0.539	-0.05
	2nd	GSM850_Ant 0	GPRS (3 Tx slots)	Left Cheek	0mm	2	189	836.4	30.50	31.50	1.259			0.07	0.423	0.533	
	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	3	189	836.4	27.52	28.80	1.343			0.03	0.284	0.381	-0.22
	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	3	189	836.4	27.50	28.80	1.349			-0.08	0.268	0.362	
	1st	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	189	836.4	23.90	25.00	1.288			-0.14	0.768	0.989	-0.56
79	2nd	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	189	836.4	23.80	25.00	1.318			-0.09	0.660	0.870	
	1st	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	22.00	22.90	1.230			0.1	0.486	0.598	-0.50
	2nd	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	21.98	22.90	1.236			0.08	0.431	0.533	
	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	661	1880	26.75	28.00	1.334			0.15	0.358	0.477	-0.02
80	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	661	1880	26.72	28.00	1.343			0.18	0.354	0.475	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	661	1880	26.36	27.50	1.300			-0.05	0.349	0.454	-0.54
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	661	1880	26.72	27.50	1.197			-0.08	0.335	0.401	
	1st	WCDMA_V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2	4182	836.4	24.77	25.70	1.239			0.05	0.344	0.426	-0.72
	2nd	WCDMA_V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2	4182	836.4	24.50	25.00	1.122			0.06	0.322	0.361	
	1st	WCDMA_V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	3	4182	836.4	24.77	25.00	1.054			0.05	0.344	0.363	-0.02
	2nd	WCDMA_V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	3	4182	836.4	24.50	25.00	1.122			0.06	0.322	0.361	
	1st	WCDMA_V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4182	836.4	20.30	21.60	1.349			-0.01	0.730	0.985	-0.57
81	2nd	WCDMA_V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4182	836.4	20.30	21.60	1.349			-0.11	0.640	0.863	
	1st	WCDMA_V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4182	836.4	18.41	19.50	1.285			-0.17	0.464	0.596	-0.40
	2nd	WCDMA_V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4182	836.4	18.25	19.50	1.334			-0.05	0.407	0.543	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21350	2560	24.35	25.70	1.365			0.01	0.699	0.954	-0.05
82	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21350	2560	24.15	25.70	1.429			0.12	0.661	0.944	
		LTE ULCA_7C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21350+21152	2560	22.50	23.70	1.318			0.08	0.500	0.659	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21100	2535	22.60	23.70	1.288			0.04	0.451	0.581	-0.17
	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21350	2560	22.48	23.70	1.324			0.03	0.422	0.559	
		LTE ULCA_7C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21350+21152	2560	20.44	21.70	1.337			0.12	0.296	0.396	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2	21100	2535	24.44	25.20	1.191			0.15	0.489	0.583	-0.04
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2	21100	2535	24.10	25.20	1.288			-0.04	0.448	0.577	
		LTE ULCA_7C_Ant 0	20M_QPSK_1_99	Left Cheek	0mm	2	20850+21048	2510	22.81	23.70	1.227			0.01	0.295	0.362	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	3	21100	2535	24.44	24.90	1.112			0.15	0.489	0.544	-0.04
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	3	21100	2535	24.10	24.90	1.202			-0.04	0.448	0.539	
		LTE ULCA_7C_Ant 0	20M_QPSK_1_99	Left Cheek	0mm	3	20850+21048	2510	22.81	23.40	1.146			0.01	0.295	0.338	
	1st	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23095	707.5	24.66	25.70	1.271			-0.12	0.190	0.241	-0.07
	2nd	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23095	707.5	24.23	25.70	1.403			0.04	0.169	0.237	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23095	707.5	20.63	22.40	1.503			0.01	0.550	0.827	-0.27
83	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23095	707.5	20.68	22.40	1.486			-0.01	0.523	0.777	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23095	707.5	20.63	21.00	1.089			0.01	0.550	0.599	-0.27
	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23095	707.5	20.68	21.00	1.076			-0.01	0.523	0.563	
	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	2	26865	831.5	24.67	25.70	1.268			0.12	0.316	0.401	-0.08
	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	2	26865	831.5	24.62	25.70	1.282			-0.02	0.307	0.394	
	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	3	26865	831.5	24.67	25.40	1.183			0.12	0.316	0.374	-0.08



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	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	3	26865	831.5	24.62	25.40	1.197			-0.02	0.307	0.367	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	2	26865	831.5	20.06	21.40	1.361			0.03	0.718	0.978	-0.44
84	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	2	26865	831.5	20.11	21.40	1.346			0.02	0.657	0.884	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	3	26865	831.5	17.85	19.30	1.396			-0.13	0.427	0.596	-0.11
	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	3	26865	831.5	17.80	19.30	1.413			-0.12	0.411	0.581	
	1st	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	41055	2636.5	24.41	25.70	1.346	62.9	1.006	-0.1	0.526	0.712	-0.20
85	2nd	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	41055	2636.5	24.14	25.70	1.432	62.9	1.006	-0.01	0.472	0.680	
	1st	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	41055	2636.5	24.41	25.00	1.146	62.9	1.006	-0.1	0.526	0.606	-0.20
	2nd	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	41055	2636.5	24.14	25.00	1.219	62.9	1.006	-0.01	0.472	0.579	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	40620	2593	24.56	25.20	1.159	62.9	1.006	-0.11	0.210	0.245	-0.90
	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	40620	2593	24.23	25.20	1.250	62.9	1.006	0.1	0.158	0.199	
	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Right Cheek	0mm	2	507000	2535	23.73	25.40	1.469			-0.11	0.581	0.853	-0.19
86	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Right Cheek	0mm	2	507000	2535	23.82	25.40	1.439			-0.12	0.568	0.817	
	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Right Cheek	0mm	3	507000	2535	23.73	23.90	1.040			-0.11	0.581	0.604	-0.18
	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Right Cheek	0mm	3	507000	2535	23.82	23.90	1.019			-0.12	0.568	0.579	
	1st	FR1 n7_Ant 0	50M_BPSK_1_1	Left Cheek	0mm	2	507000	2535	24.47	25.20	1.183			0.08	0.508	0.601	-0.64
	2nd	FR1 n7_Ant 0	50M_BPSK_1_1	Left Cheek	0mm	2	507000	2535	24.25	25.20	1.245			0.13	0.417	0.519	
	1st	FR1 n7_Ant 0	50M_BPSK_1_1	Left Cheek	0mm	3	507000	2535	24.47	24.80	1.079			0.08	0.508	0.548	-0.64
	2nd	FR1 n7_Ant 0	50M_BPSK_1_1	Left Cheek	0mm	3	507000	2535	24.25	24.80	1.135			0.13	0.417	0.473	
	1st	FR1 n12_Ant 0	15M_BPSK_36_22	Left Cheek	0mm	2/3	141500	707.5	24.80	25.70	1.230			-0.05	0.238	0.293	-0.04
	2nd	FR1 n12_Ant 0	15M_BPSK_36_22	Left Cheek	0mm	2/3	141500	707.5	24.75	25.70	1.245			0.04	0.233	0.290	
	1st	FR1 n12_Ant 1	15M_BPSK_36_22	Right Cheek	0mm	2	141500	707.5	20.46	22.10	1.459			-0.12	0.594	0.867	-0.34
87	2nd	FR1 n12_Ant 1	15M_BPSK_36_22	Right Cheek	0mm	2	141500	707.5	20.50	22.10	1.445			-0.15	0.554	0.801	
	1st	FR1 n12_Ant 1	15M_BPSK_36_22	Right Cheek	0mm	3	141500	707.5	20.46	20.50	1.009			-0.12	0.594	0.599	-0.34
	2nd	FR1 n12_Ant 1	15M_BPSK_36_22	Right Cheek	0mm	3	141500	707.5	20.50	20.50	1.000			-0.15	0.554	0.554	
	1st	FR1 n26_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	2	166300	831.5	25.03	25.70	1.167			-0.11	0.355	0.414	-0.56
	2nd	FR1 n26_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	2	166300	831.5	25.00	25.70	1.175			0	0.310	0.364	
	1st	FR1 n26_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	3	166300	831.5	25.03	25.50	1.114			-0.11	0.355	0.396	-0.56
	2nd	FR1 n26_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	3	166300	831.5	25.00	25.50	1.122			0	0.310	0.348	
	1st	FR1 n26_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	2	166300	831.5	19.85	21.50	1.462			0	0.604	0.883	-0.66
88	2nd	FR1 n26_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	2	166300	831.5	19.79	21.50	1.483			-0.02	0.512	0.759	
	1st	FR1 n26_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	3	166300	831.5	18.46	19.80	1.361			0.05	0.432	0.588	-0.20
	2nd	FR1 n26_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	3	166300	831.5	18.31	19.80	1.409			0.13	0.399	0.562	
	1st	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	2	518598	2592.99	23.95	25.50	1.429			-0.04	0.664	0.949	-0.84
89	2nd	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	2	518598	2592.99	24.66	25.50	1.213			-0.03	0.645	0.783	
	1st	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	3	518598	2592.99	21.85	23.50	1.462			-0.01	0.401	0.586	-0.04
	2nd	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	3	518598	2592.99	21.75	23.50	1.496			-0.04	0.388	0.581	
	1st	FR1 n41_Ant 0	100M_BPSK_1_1	Left Cheek	0mm	2/3	518598	2592.99	24.80	25.20	1.096			-0.18	0.491	0.538	-0.95
	2nd	FR1 n41_Ant 0	100M_BPSK_1_1	Left Cheek	0mm	2/3	518598	2592.99	24.52	25.20	1.169			-0.18	0.369	0.432	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	2	656000	3840	24.58	25.70	1.294			0.09	0.593	0.767	-0.50
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	2	656000	3840	24.18	25.70	1.419			-0.04	0.482	0.684	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	3	656000	3840	23.16	24.30	1.300			0.13	0.460	0.598	-0.72
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	3	656000	3840	23.01	24.30	1.346			-0.16	0.377	0.507	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	2	633332	3499.98	24.44	25.70	1.337			0.02	0.453	0.605	-0.44
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	2	633332	3499.98	24.20	25.70	1.413			-0.12	0.387	0.547	
	1st	FR1 n77_Ant 6	100M_BPSK_1_1	Left Cheek	0mm	3	633332	3499.98	23.74	24.30	1.138			0.1	0.414	0.471	-0.59
	2nd	FR1 n77_Ant 6	100M_BPSK_1_1	Left Cheek	0mm	3	633332	3499.98	23.55	24.30	1.189			0.08	0.346	0.411	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	2	656000	3840	23.50	25.10	1.445			-0.04	0.630	0.911	-1.33
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	2	656000	3840	23.46	25.10	1.459			0.19	0.460	0.671	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	3	656000	3840	21.73	23.00	1.340			-0.17	0.410	0.549	-0.49
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	3	656000	3840	21.59	23.00	1.384			0.13	0.354	0.490	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	2	633332	3499.98	23.64	25.10	1.400			-0.18	0.702	0.983	-1.18
90	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	2	633332	3499.98	23.48	25.10	1.452			0.17	0.516	0.749	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	3	633332	3499.98	21.85	23.00	1.303			0.03	0.454	0.592	-1.38
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	3	633332	3499.98	21.89	23.00	1.291			0.12	0.334	0.431	



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Plot No.	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)	Measured APD (W/m^2)	Reported APD (W/m^2)	Deviation (%)
	1st	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	-0.1	0.449	0.584			-14.55%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	0.1	0.384	0.499			
	1st	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	-0.18	0.122	0.126			-3.97%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	0.1	0.117	0.121			
	1st	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.08	0.863	1.143			-9.27%
91	2nd	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.07	0.783	1.037			
	1st	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	-0.14	0.269	0.283			-5.30%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	-0.07	0.255	0.268			
	1st	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	6	2437	14.50	15.00	1.122	93.19	1.073	-0.05	0.152	0.183			
		WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	6	2437	13.32	15.00	1.472	93.19	1.073	-0.05	0.741	1.171			-14.77%
	2nd	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	6	2437	14.50	15.00	1.122	93.19	1.073	-0.12	0.136	0.164			
		WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	6	2437	13.32	15.00	1.472	93.19	1.073	-0.12	0.632	0.998			
	1st	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	0.01	0.056	0.061			
		WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	0.01	0.250	0.336			-19.05%
	2nd	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	-0.07	0.050	0.055			
		WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	-0.07	0.202	0.272			
	1st	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	-0.04	0.883	1.069			-16.28%
	2nd	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	0.07	0.739	0.895			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	0.03	0.340	0.405			-12.59%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	-0.03	0.297	0.354			
	1st	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	64	5320	13.00	13.00	1.000	93.46	1.070	0.04	0.270	0.289			
		WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	64	5320	12.23	13.00	1.194	93.46	1.070	0.04	0.895	1.143			-5.25%
92	2nd	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	64	5320	13.00	13.00	1.000	93.46	1.070	-0.02	0.305	0.326			
		WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	64	5320	12.23	13.00	1.194	93.46	1.070	-0.02	0.848	1.083			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	0.05	0.143	0.196			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	0.05	0.388	0.438			-25.80%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	0.11	0.155	0.212			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	0.11	0.288	0.325			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	0.04	0.966	1.125			-1.42%
93	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	-0.01	0.952	1.109			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	0.06	0.331	0.385			-15.32%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	0.05	0.280	0.326			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	138	5690	13.50	13.50	1.000	89.9	1.112	-0.02	0.401	0.446			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	138	5690	12.93	13.50	1.140	89.9	1.112	-0.02	0.882	1.118			-1.52%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	138	5690	13.50	13.50	1.000	89.9	1.112	0.05	0.489	0.544			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	138	5690	12.93	13.50	1.140	89.9	1.112	0.05	0.868	1.101			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	106	5530	9.40	9.50	1.023	89.9	1.112	0.05	0.131	0.149			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	106	5530	9.33	9.50	1.040	89.9	1.112	0.05	0.232	0.268			-29.85%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	106	5530	9.50	9.50	1.000	89.9	1.112	0.07	0.149	0.166			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	106	5530	9.10	9.50	1.096	89.9	1.112	0.07	0.154	0.188			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	0.07	0.623	1.025			-21.07%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	-0.14	0.492	0.809			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	0.18	0.265	0.316			-10.13%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	-0.13	0.238	0.284			
	1st	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	151	5755	12.90	13.50	1.148	92.7	1.079	0.19	0.298	0.369			
		WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	151	5755	11.83	13.50	1.469	92.7	1.079	0.19	0.722	1.144			-26.31%
94	2nd	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	151	5755	12.90	13.50	1.148	92.7	1.079	-0.12	0.251	0.311			
		WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	151	5755	11.83	13.50	1.469	92.7	1.079	-0.12	0.532	0.843			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	0.04	0.101	0.123			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	0.04	0.232	0.301			-0.33%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	0.04	0.117	0.143			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	0.04	0.231	0.300			



FCC SAR TEST REPORT

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	1st	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	167	5835	13.10	14.50	1.380	92.7	1.079	-0.1	0.757	1.128			
	2nd	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	167	5835	13.10	14.50	1.380	92.7	1.079	0.03	0.673	1.002			-11.17%
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	0.18	0.272	0.335			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	0.13	0.261	0.322			-3.88%
95	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	-0.02	0.391	0.445			-4.17%
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	-0.02	0.856	1.176			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	-0.04	0.457	0.520			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	-0.04	0.820	1.127			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	-0.09	0.119	0.134			-3.99%
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	-0.09	0.249	0.326			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	0.03	0.150	0.169			
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	0.03	0.239	0.313			
96	1st	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	167	6785	14.48	14.50	1.005	88.24	1.133	-0.1	0.988	1.125	5.860	6.670	-12.36%
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	167	6785	14.48	14.50	1.005	88.24	1.133	-0.11	0.866	0.986	5.320	6.055	
	1st	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	167	6785	9.65	11.50	1.531	88.24	1.133	0.17	0.233	0.404	1.580	2.741	-2.48%
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	167	6785	9.65	11.50	1.531	88.24	1.133	-0.03	0.227	0.394	1.520	2.637	
	1st	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	215	7025	14.18	14.50	1.076	88.24	1.133	-0.02	0.198	0.241	1.240	1.512	-29.49%
		WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	215	7025	13.47	14.50	1.268	88.24	1.133	-0.02	0.302	0.434	2.000	2.872	
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	215	7025	14.00	14.50	1.122	88.24	1.133	-0.11	0.134	0.170	0.783	0.995	
		WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	215	7025	13.30	14.50	1.318	88.24	1.133	-0.11	0.205	0.306	1.080	1.613	
	1st	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	0.19	0.034	0.038			-10.53%
	2nd	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	-0.12	0.030	0.034			
	1st	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	-0.09	0.202	0.238			-22.27%
97	2nd	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	0.07	0.157	0.185			

**13.2 Hotspot SAR**

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	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)	Deviation (dB)
98	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	189	836.4	28.16	29.20	1.271			-0.05	0.454	0.577	-0.05
	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	189	836.4	28.10	29.20	1.288			0.15	0.443	0.571	
	1st	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	4	189	836.4	25.49	26.20	1.178			0.11	0.363	0.427	-0.96
	2nd	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	4	189	836.4	25.35	26.20	1.216			-0.01	0.281	0.342	
99	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.24	25.80	1.432			-0.14	0.516	0.739	-0.36
	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.24	25.80	1.432			-0.16	0.475	0.680	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.75	25.50	1.189			-0.03	0.379	0.450	-0.18
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.72	25.50	1.197			-0.03	0.361	0.432	
100	1st	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	4182	836.4	24.77	25.50	1.183			0	0.539	0.638	-0.35
	2nd	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	4182	836.4	24.50	25.00	1.122			-0.03	0.524	0.588	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4182	836.4	20.65	22.50	1.531			0	0.232	0.355	-0.52
	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4182	836.4	20.59	22.50	1.552			-0.04	0.203	0.315	
101	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21350	2560	19.72	21.30	1.439			-0.03	0.574	0.826	-0.26
	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21350	2560	19.82	21.30	1.406			-0.07	0.553	0.778	
		LTE ULCA_7C_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21350+21152	2560	18.98	19.30	1.076			0.08	0.490	0.527	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	21100	2535	20.19	21.00	1.205			0.04	0.364	0.439	-0.86
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	21100	2535	20.22	21.00	1.197			-0.03	0.301	0.360	
		LTE ULCA_7C_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	21100+20902	2535	18.91	19.50	1.146			-0.17	0.330	0.378	
102	1st	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23095	707.5	24.66	25.70	1.271			0.01	0.359	0.456	-0.06
	2nd	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23095	707.5	24.23	25.70	1.403			-0.02	0.321	0.450	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	4	23095	707.5	23.72	25.10	1.374			0	0.325	0.447	-0.02
	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	4	23095	707.5	23.57	25.10	1.422			0	0.313	0.445	
103	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Side	10mm	4	26865	831.5	24.67	25.50	1.211			0	0.536	0.649	-0.03
	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Side	10mm	4	26865	831.5	24.62	25.50	1.225			-0.04	0.526	0.644	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	4	26865	831.5	21.81	22.70	1.227			0.03	0.314	0.385	-0.60
	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	4	26865	831.5	21.75	22.70	1.245			0.01	0.269	0.335	
104	1st	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	41055	2636.5	22.31	23.30	1.256	62.9	1.006	-0.13	0.651	0.823	-0.23
	2nd	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	41055	2636.5	22.25	23.30	1.274	62.9	1.006	-0.16	0.609	0.780	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Back	10mm	4	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.03	0.360	0.453	-0.28
	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Back	10mm	4	41055	2636.5	22.55	23.60	1.274	62.9	1.006	0.09	0.332	0.425	
105	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Right Side	10mm	4	507000	2535	21.09	21.30	1.050			-0.01	0.709	0.744	-0.37
	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Right Side	10mm	4	507000	2535	21.11	21.30	1.045			-0.04	0.654	0.683	
	1st	FR1 n7_Ant 0	50M_BPSK_1_1	Front	10mm	4	507000	2535	19.96	20.60	1.159			-0.08	0.389	0.451	-0.79
	2nd	FR1 n7_Ant 0	50M_BPSK_1_1	Front	10mm	4	507000	2535	20.01	20.60	1.146			-0.07	0.328	0.376	
106	1st	FR1 n12_Ant 0	15M_BPSK_1_1	Left Side	10mm	4	141500	707.5	24.81	25.70	1.227			0.02	0.385	0.473	-0.27
	2nd	FR1 n12_Ant 0	15M_BPSK_1_1	Left Side	10mm	4	141500	707.5	24.39	25.70	1.352			-0.02	0.329	0.445	
	1st	FR1 n12_Ant 1	15M_BPSK_1_1	Back	10mm	4	141500	707.5	24.02	25.20	1.312			-0.02	0.284	0.373	-0.57
	2nd	FR1 n12_Ant 1	15M_BPSK_1_1	Back	10mm	4	141500	707.5	23.62	25.20	1.439			0.16	0.227	0.327	
107	1st	FR1 n26_Ant 0	20M_BPSK_50_28	Left Side	10mm	4	166300	831.5	25.03	25.70	1.167			-0.03	0.554	0.646	-0.16
	2nd	FR1 n26_Ant 0	20M_BPSK_50_28	Left Side	10mm	4	166300	831.5	25.00	25.70	1.175			-0.03	0.530	0.623	
	1st	FR1 n26_Ant 1	20M_BPSK_1_1	Back	10mm	4	166300	831.5	22.02	23.10	1.282			-0.04	0.317	0.406	-0.36
	2nd	FR1 n26_Ant 1	20M_BPSK_1_1	Back	10mm	4	166300	831.5	21.90	23.10	1.318			-0.03	0.284	0.374	
108	1st	FR1 n41_Ant 2	100M_BPSK_1_1	Right Side	10mm	4	518598	2592.99	20.22	21.60	1.374			0.02	0.613	0.842	-0.32
	2nd	FR1 n41_Ant 2	100M_BPSK_1_1	Right Side	10mm	4	518598	2592.99	20.31	21.60	1.346			-0.05	0.582	0.783	
	1st	FR1 n41_Ant 0	100M_BPSK_1_1	Left Side	10mm	4	518598	2592.99	21.13	21.90	1.194			-0.06	0.393	0.469	-0.01
	2nd	FR1 n41_Ant 0	100M_BPSK_1_1	Left Side	10mm	4	518598	2592.99	21.15	21.90	1.189			0	0.394	0.468	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Side	10mm	4	656000	3840	19.90	20.80	1.230			-0.07	0.492	0.605	-0.11
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Side	10mm	4	656000	3840	19.85	20.80	1.245			-0.08	0.474	0.590	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Side	10mm	4	633332	3499.98	19.91	20.80	1.227			-0.08	0.493	0.605	-1.43
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Side	10mm	4	633332	3499.98	19.60	20.80	1.318			-0.06	0.330	0.435	
109	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Side	10mm	4	656000	3840	17.99	19.50	1.416			-0.04	0.573	0.811	-0.73
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Side	10mm	4	656000	3840	17.90	19.50	1.445			-0.08	0.474	0.685	



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	1st	FR1 n77_Ant 2	100M_BPSK_135_69	Right Side	10mm	4	633332	3499.98	18.70	19.50	1.202			-0.09	0.462	0.555	-0.48
	2nd	FR1 n77_Ant 2	100M_BPSK_135_69	Right Side	10mm	4	633332	3499.98	18.50	19.50	1.259			0.14	0.395	0.497	

Plot No.	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)	Measured APD (W/m^2)	Reported APD (W/m^2)	Deviation (%)
	1st	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.092	0.097			-14.43%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.079	0.083			
	1st	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.07	0.300	0.308			-21.43%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	0	0.235	0.242			
110	1st	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.05	0.001	0.001			-17.63%
		WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.05	0.205	0.295			
	2nd	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.05	0.001	0.001			
		WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.05	0.169	0.243			
111	1st	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.08	0.350	0.411			-2.43%
	2nd	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.05	0.342	0.401			
	1st	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	0.04	0.327	0.366			-0.82%
		WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	0.04	0.001	0.001			
	2nd	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	-0.02	0.324	0.363			
		WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	-0.02	0.001	0.001			
	1st	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	-0.05	0.376	0.445			-29.21%
	2nd	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	8	151	5755	17.50	18.00	1.122	92.7	1.079	-0.14	0.260	0.315			
112	1st	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	-0.14	0.457	0.493			-21.10%
		WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	-0.14	0.001	0.002			
	2nd	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (4)	7	151	5755	17.30	18.00	1.175	92.7	1.079	0.1	0.307	0.389			
		WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (3)	7	151	5755	16.70	18.00	1.349	92.7	1.079	0.1	0.001	0.001			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	-0.18	0.252	0.287			-20.56%
		WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	-0.18	0.001	0.001			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	-0.12	0.200	0.228			
		WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	-0.12	0.001	0.001			
113	1st	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	8	7	5985	11.35	11.5	1.035	88.24	1.133	-0.11	0.121	0.142	0.977	1.146	-19.72%
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	8	7	5985	11.35	11.5	1.035	88.24	1.133	-0.06	0.097	0.114	0.693	0.813	
	1st	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	7/9	7	5985	11.35	11.5	1.035	88.24	1.133	0.09	0.067	0.079	0.457	0.536	-25.32%
		WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	7/9	7	5985	10.80	11.5	1.175	88.24	1.133	0.09	0.033	0.044	0.185	0.246	
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	7/9	7	5985	11.35	11.5	1.035	88.24	1.133	0.06	0.050	0.059	0.295	0.346	
		WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	7/9	7	5985	10.80	11.5	1.175	88.24	1.133	0.06	0.030	0.040	0.137	0.182	
	1st	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.17	0.055	0.064			-7.81%
	2nd	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.11	0.051	0.059			
	1st	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.09	0.207	0.228			-2.63%
114	2nd	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.16	0.202	0.222			

**13.3 Body-Worn SAR**

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	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)	Deviation (dB)
	1st	GSM850_Ant 0	GPRS (3 Tx slots)	Back	10mm	5	189	836.4	30.53	31.50	1.250			-0.01	0.471	0.589	-0.14
	2nd	GSM850_Ant 0	GPRS (3 Tx slots)	Back	10mm	5	189	836.4	30.50	31.50	1.259			-0.04	0.453	0.570	
	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	28.16	29.20	1.271			-0.02	0.351	0.446	-0.08
	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	28.10	29.20	1.288			0.02	0.340	0.438	
	1st	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5	189	836.4	31.16	32.30	1.300			-0.03	0.695	0.904	-0.72
115	2nd	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5	189	836.4	31.16	32.30	1.300			-0.06	0.589	0.766	
	1st	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	25.49	26.20	1.178			0.11	0.363	0.427	-0.96
	2nd	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	25.35	26.20	1.216			-0.01	0.281	0.342	
	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5/6	661	1880	24.24	25.80	1.432			-0.14	0.516	0.739	-0.66
116	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5/6	661	1880	24.24	25.50	1.337			-0.16	0.475	0.635	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	661	1880	26.01	27.30	1.346			-0.04	0.468	0.630	-0.59
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	661	1880	26.01	27.30	1.346			0.01	0.409	0.550	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	661	1880	24.75	25.50	1.189			-0.03	0.379	0.450	-0.18
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	661	1880	24.72	25.50	1.197			-0.03	0.361	0.432	
	1st	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5	4182	836.4	24.77	25.70	1.239			-0.03	0.384	0.476	-0.71
	2nd	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5	4182	836.4	24.50	25.00	1.122			-0.03	0.360	0.404	
	1st	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	6	4182	836.4	24.77	25.50	1.183			-0.03	0.384	0.454	-0.51
	2nd	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	6	4182	836.4	24.50	25.00	1.122			-0.03	0.360	0.404	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5	4182	836.4	24.19	25.20	1.262			0.13	0.652	0.823	-0.01
117	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5	4182	836.4	23.75	25.20	1.396			-0.02	0.588	0.821	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	6	4182	836.4	20.65	22.50	1.531			0	0.232	0.355	-0.52
	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	6	4182	836.4	20.59	22.50	1.552			-0.04	0.203	0.315	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21100	2535	19.82	21.60	1.507			-0.05	0.462	0.696	-0.11
118	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21100	2535	19.82	21.60	1.507			0.01	0.450	0.678	
		LTE ULCA_7C_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21350+21152	2560	18.98	19.60	1.153			0.14	0.379	0.437	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Front	10mm	5	21100	2535	22.27	23.60	1.358			-0.03	0.649	0.882	-1.23
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Front	10mm	5	21100	2535	22.22	23.60	1.374			-0.04	0.483	0.664	
		LTE ULCA_7C_Ant 0	20M_QPSK_1_0	Front	10mm	5	21100+20902	2535	20.63	22.10	1.403			0.18	0.469	0.658	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Front	10mm	6	21100	2535	20.19	21.00	1.205			0.08	0.337	0.406	-0.19
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Front	10mm	6	21100	2535	20.22	21.00	1.197			0	0.325	0.389	
		LTE ULCA_7C_Ant 0	20M_QPSK_1_0	Front	10mm	6	21100+20902	2535	18.91	19.50	1.146			0.11	0.306	0.351	
	1st	LTE Band 12_Ant 0	10M_QPSK_1_0	Back	10mm	5/6	23095	707.5	24.66	25.70	1.271			0.01	0.289	0.367	-0.22
	2nd	LTE Band 12_Ant 0	10M_QPSK_1_0	Back	10mm	5/6	23095	707.5	24.23	25.70	1.403			-0.02	0.249	0.349	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	5	23095	707.5	23.72	25.20	1.406			0	0.325	0.457	-0.01
119	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	5	23095	707.5	23.57	25.20	1.455			0	0.313	0.456	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	6	23095	707.5	23.72	25.10	1.374			0	0.325	0.447	-0.02
	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	6	23095	707.5	23.57	25.10	1.422			0	0.313	0.445	
	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Back	10mm	5/6	26865	831.5	24.67	25.70	1.268			0.01	0.348	0.441	-0.02
	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Back	10mm	5/6	26865	831.5	24.62	25.70	1.282			0.01	0.342	0.439	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	5	26865	831.5	24.07	25.20	1.297			-0.02	0.604	0.783	-1.20
120	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	5	26865	831.5	23.86	25.20	1.361			-0.04	0.436	0.594	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	6	26865	831.5	21.81	22.70	1.227			0.03	0.314	0.385	-0.60
	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	6	26865	831.5	21.75	22.70	1.245			0.01	0.269	0.335	
	1st	LTE Band 41_Ant 2	20M_QPSK_50_0	Back	10mm	5/6	40185	2549.5	22.45	23.70	1.334	62.9	1.006	-0.04	0.522	0.700	-0.35
	2nd	LTE Band 41_Ant 2	20M_QPSK_50_0	Back	10mm	5/6	40185	2549.5	22.40	23.70	1.349	62.9	1.006	-0.02	0.476	0.646	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Back	10mm	5	40185	2549.5	24.52	25.20	1.169	62.9	1.006	-0.15	0.562	0.661	-0.01
121	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Back	10mm	5	41490	2680	24.36	25.20	1.213	62.9	1.006	-0.1	0.541	0.660	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Back	10mm	6	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.03	0.293	0.369	-0.16
	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Back	10mm	6	41055	2636.5	22.55	23.60	1.274	62.9	1.006	0.11	0.278	0.356	
	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Back	10mm	5	507000	2535	21.09	22.00	1.233			0.05	0.657	0.810	-0.11
	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Back	10mm	5	507000	2535	21.11	22.00	1.227			-0.03	0.644	0.790	
	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Back	10mm	6	507000	2535	21.09	21.30	1.050			0.05	0.657	0.690	-0.11



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	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Back	10mm	6	507000	2535	21.11	21.30	1.045			-0.03	0.644	0.673		
	1st	FR1 n7_Ant 0	50M_BPSK_1_1	Front	10mm	5	507000	2535	22.18	23.60	1.387			0.01	0.710	0.985		-0.59
122	2nd	FR1 n7_Ant 0	50M_BPSK_1_1	Front	10mm	5	507000	2535	22.11	23.60	1.409			-0.08	0.610	0.860		
	1st	FR1 n7_Ant 0	50M_BPSK_1_1	Front	10mm	6	507000	2535	19.96	20.60	1.159			-0.08	0.389	0.451		-0.79
	2nd	FR1 n7_Ant 0	50M_BPSK_1_1	Front	10mm	6	507000	2535	20.01	20.60	1.146			-0.07	0.328	0.376		
	1st	FR1 n12_Ant 0	15M_BPSK_1_1	Back	10mm	5/6	141500	707.5	24.81	25.70	1.227			0.02	0.276	0.339		-0.03
123	2nd	FR1 n12_Ant 0	15M_BPSK_1_1	Back	10mm	5/6	141500	707.5	24.39	25.70	1.352			-0.02	0.249	0.337		
	1st	FR1 n12_Ant 1	15M_BPSK_1_1	Back	10mm	5/6	141500	707.5	24.02	25.20	1.312			-0.02	0.284	0.373		-0.57
	2nd	FR1 n12_Ant 1	15M_BPSK_1_1	Back	10mm	5/6	141500	707.5	23.62	25.20	1.439			0.16	0.227	0.327		
	1st	FR1 n26_Ant 0	20M_BPSK_50_28	Back	10mm	5/6	166300	831.5	25.03	25.70	1.167			0.1	0.374	0.436		-0.32
	2nd	FR1 n26_Ant 0	20M_BPSK_50_28	Back	10mm	5/6	166300	831.5	25.00	25.70	1.175			0.01	0.345	0.405		
	1st	FR1 n26_Ant 1	20M_BPSK_1_1	Back	10mm	5	166300	831.5	24.65	25.20	1.135			-0.02	0.640	0.726		-0.74
124	2nd	FR1 n26_Ant 1	20M_BPSK_1_1	Back	10mm	5	166300	831.5	24.70	25.20	1.122			0.02	0.545	0.612		
	1st	FR1 n26_Ant 1	20M_BPSK_1_1	Back	10mm	6	166300	831.5	22.02	23.10	1.282			-0.04	0.317	0.406		-0.36
	2nd	FR1 n26_Ant 1	20M_BPSK_1_1	Back	10mm	6	166300	831.5	21.90	23.10	1.318			-0.03	0.284	0.374		
	1st	FR1 n41_Ant 2	100M_BPSK_1_1	Back	10mm	5/6	518598	2592.99	20.22	21.70	1.406			0.08	0.477	0.671		-0.11
	2nd	FR1 n41_Ant 2	100M_BPSK_1_1	Back	10mm	5/6	518598	2592.99	20.31	21.70	1.377			-0.01	0.475	0.654		
	1st	FR1 n41_Ant 0	100M_BPSK_1_1	Back	10mm	5	518598	2592.99	22.70	24.40	1.479			0.1	0.599	0.886		-0.38
125	2nd	FR1 n41_Ant 0	100M_BPSK_1_1	Back	10mm	5	518598	2592.99	22.70	24.40	1.479			-0.1	0.548	0.811		
	1st	FR1 n41_Ant 0	100M_BPSK_1_1	Back	10mm	6	518598	2592.99	21.13	21.90	1.194			0.08	0.373	0.445		-0.41
	2nd	FR1 n41_Ant 0	100M_BPSK_1_1	Back	10mm	6	518598	2592.99	21.15	21.90	1.189			0.06	0.341	0.405		
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Back	10mm	5/6	656000	3840	19.90	20.80	1.230			-0.11	0.356	0.438		-0.02
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Back	10mm	5/6	656000	3840	19.85	20.80	1.245			-0.11	0.350	0.436		
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Back	10mm	5/6	633332	3499.98	19.91	20.80	1.227			-0.05	0.354	0.435		-1.47
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Back	10mm	5/6	633332	3499.98	19.60	20.80	1.318			-0.01	0.235	0.310		
	1st	FR1 n77_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	656000	3840	20.51	21.00	1.119			-0.06	0.462	0.517		-0.31
126	2nd	FR1 n77_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	656000	3840	20.61	21.00	1.094			-0.19	0.440	0.481		
	1st	FR1 n77_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	633332	3499.98	20.69	21.00	1.074			-0.09	0.359	0.386		-0.20
	2nd	FR1 n77_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	633332	3499.98	20.55	21.00	1.109			-0.04	0.333	0.369		

Plot No.	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)	Measured APD (W/m^2)	Reported APD (W/m^2)	Deviation (%)
	1st	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	5	6	2437	20.40	20.50	1.023	99.08	1.009	-0.1	0.312	0.322			-7.76%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	5	6	2437	20.40	20.50	1.023	99.08	1.009	-0.12	0.288	0.297			
	1st	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.092	0.097			-14.43%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.079	0.083			
	1st	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	5/6	6	2437	20.32	20.50	1.042	99.08	1.009	-0.01	0.667	0.701			-16.12%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	5/6	6	2437	20.32	20.50	1.042	99.08	1.009	-0.03	0.559	0.588			
	1st	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	0.04	0.196	0.201			-17.41%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.05	0.162	0.166			
	1st	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	5	6	2437	20.20	20.50	1.072	93.19	1.073	-0.03	0.359	0.413			-15.85%
		WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	5	6	2437	19.62	20.50	1.225	93.19	1.073	-0.03	0.557	0.732			
127	2nd	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	5	6	2437	20.20	20.50	1.072	93.19	1.073	0	0.269	0.309			
		WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	5	6	2437	19.62	20.50	1.225	93.19	1.073	0	0.469	0.616			
	1st	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.01	0.095	0.112			-7.25%
		WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.01	0.134	0.193			
	2nd	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.07	0.079	0.093			
		WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.07	0.124	0.179			
	1st	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.06	1.075	-0.07	0.273	0.322			-8.07%
128	2nd	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.06	1.075	0.09	0.251	0.296			
	1st	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	-0.15	0.154	0.173			-21.41%
		WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	-0.15	0.217	0.313			
	2nd	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.01	0.201	0.226			
		WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.01	0.171	0.246			



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	1st	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	-0.15	0.491	0.576			
	2nd	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	-0.11	0.432	0.507			-11.98%
	1st	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	-0.06	0.538	0.646			
		WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	-0.06	0.271	0.346			
129	2nd	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	0.01	0.522	0.627			-2.94%
		WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	0.01	0.238	0.304			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.07	0.359	0.448			
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.07	0.186	0.253			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.12	0.352	0.439			-2.01%
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.12	0.175	0.238			
	1st	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6	165	5825	19.60	20.00	1.096	93.46	1.070	-0.17	0.655	0.768			-29.56%
	2nd	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6	165	5825	19.50	20.00	1.122	93.46	1.070	-0.03	0.451	0.541			
	1st	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	-0.11	0.315	0.373			-27.61%
	2nd	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	8	151	5755	17.50	18.00	1.122	92.7	1.079	0.15	0.223	0.270			
	1st	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5	157	5785	19.90	20.00	1.023	93.46	1.070	0.01	0.688	0.753			
		WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5	157	5785	18.63	20.00	1.371	93.46	1.070	0.01	0.280	0.411			-18.59%
130	2nd	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5	157	5785	19.90	20.00	1.023	93.46	1.070	0.04	0.560	0.613			
		WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5	157	5785	18.63	20.00	1.371	93.46	1.070	0.04	0.193	0.283			
	1st	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	0.02	0.407	0.439			
		WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	0.02	0.169	0.256			-28.93%
	2nd	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	7	151	5755	17.30	18.00	1.175	92.7	1.079	0.02	0.246	0.312			
		WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (3)	7	151	5755	16.70	18.00	1.349	92.7	1.079	0.02	0.116	0.169			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.07	0.228	0.259			
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.07	0.102	0.135			-25.48%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.06	0.170	0.193			
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.06	0.077	0.102			
	1st	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	-0.15	0.455	0.565			-29.38%
	2nd	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	177	5885	18.10	19.50	1.380	93.46	1.070	-0.07	0.270	0.399			
	1st	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	-0.12	0.682	0.764			
		WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	-0.12	0.250	0.330			-23.56%
131	2nd	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	0.02	0.521	0.584			
		WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	0.02	0.186	0.245			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.14	0.306	0.352			
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.14	0.144	0.197			-15.91%
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.04	0.257	0.296			
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.04	0.109	0.149			
	1st	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	-0.15	0.121	0.139	0.878	1.006	-22.30%
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108	0.653	0.748	
	1st	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.13	0.056	0.065	0.429	0.500	
		WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.13	0.156	0.209	1.170	1.568	-24.88%
132	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	-0.04	0.052	0.061	0.384	0.447	
		WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	-0.04	0.117	0.157	0.855	1.146	
	1st	Bluetooth	1Mbps	Back	10mm	Ant 4	2/3	39	2441	20.21	20.50	1.069	77.13	1.080	-0.12	0.182	0.210			-0.95%
	2nd	Bluetooth	1Mbps	Back	10mm	Ant 4	2/3	39	2441	20.21	20.50	1.069	77.13	1.080	-0.18	0.180	0.208			
	1st	Bluetooth	1Mbps	Back	10mm	Ant 3	2/3	78	2480	19.79	20.00	1.050	77.13	1.080	-0.05	0.462	0.524			-12.98%
133	2nd	Bluetooth	1Mbps	Back	10mm	Ant 3	2/3	78	2480	19.79	20.00	1.050	77.13	1.080	-0.11	0.402	0.456			
	1st	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.17	0.055	0.064			-7.81%
	2nd	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.11	0.051	0.059			
	1st	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.03	0.150	0.165			0.00%
	2nd	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.04	0.150	0.165			

**13.4 Product Specific SAR**

Plot No.	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)	Measured APD (W/m ²)	Reported APD (W/m ²)	Deviation (%)
134	1st	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	0.17	1.680	1.980			-20.81%
	2nd	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	0.07	1.330	1.568			
	1st	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.09	1.390	1.565			-20.65%
		WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.09	1.190	1.714			
	2nd	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.13	0.932	1.049			
		WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.13	0.944	1.360			
	1st	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.1	2.340	2.745			-24.34%
	2nd	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.08	1.770	2.077			
135	1st	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	124	5620	18.60	19.00	1.096	93.46	1.070	0.12	2.300	2.698			-15.20%
		WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	124	5620	18.43	19.00	1.140	93.46	1.070	0.12	1.850	2.257			
	2nd	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	124	5620	18.60	19.00	1.096	93.46	1.070	0.11	1.950	2.288			
		WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	124	5620	18.43	19.00	1.140	93.46	1.070	0.11	1.920	2.343			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.04	1.110	1.385			-4.21%
		WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.04	1.190	1.617			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.03	1.240	1.547			
		WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.03	1.140	1.549			
	1st	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	169	5845	18.85	19.50	1.161	93.46	1.070	0.09	2.090	2.597			-26.80%
	2nd	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	169	5845	18.85	19.50	1.161	93.46	1.070	0.01	1.530	1.901			
136	1st	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.14	2.490	2.790			-22.51%
		WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.14	1.180	1.747			
	2nd	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.15	1.930	2.162			
		WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.15	1.060	1.569			
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.15	1.290	1.485			-24.65%
		WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.15	0.915	1.255			
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.18	0.972	1.119			
		WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.18	0.637	0.873			
137	1st	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	7	5985	12.25	14.00	1.496	88.24	1.133	0.04	0.287	0.487	6.870	11.646	-8.01%
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	7	5985	12.25	14.00	1.496	88.24	1.133	0.09	0.264	0.448	6.310	10.697	
	1st	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.03	0.137	0.160	3.290	3.832	-1.63%
		WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.03	0.274	0.367	6.640	8.900	
	2nd	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.13	0.162	0.189	3.950	4.601	
		WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.13	0.269	0.361	6.490	8.699	

Conclusion:

The spot check results don't show the SAR increase more than 3dB, and all below 1.2W/kg for 1-g SAR, below 3W/kg for 10-g SAR. Referring to the guidance in the KDB inquiry, SAR data reuse is justified.

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 3 / 4 / 3+4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
NFC	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm

Positions for SAR / 6E PD test						
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 / 4 / 3+4	Yes	Yes	Yes	No	Yes	Yes
NFC	Yes	Yes	Yes	Yes	Yes	Yes

General Note:

- Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm. RF Exposure must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge
- The antenna location is illustrated in the Appendix H.

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB 648474 D04v01r03, for smart phones with a display diagonal dimension > 15 cm or an overall diagonal dimension > 16 cm, when hotspot mode applies, 10-g product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, in this report all the hotspot mode results are < 1.2 W/kg.
6. For 5.3GHz, 5.5GHz, 5.9GHz and 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 $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA 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 ≤ 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.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE 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 4/5/17/38 SAR test was covered by Band 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 ≤ 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 ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. Due to test setup limitations, SAR testing for NR TDD 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.
 - g. For NR FDD was establishing connections via a base station simulator to use for output power measurement and SAR testing

WLAN Note:

1. The SISO mode support only when the Antenna 3 and 4 is transmitting on 802.11b mode, other support MIMO mode.
2. Per KDB 248227 D01v02r02, For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test position when 802.11 DSS mode is active at transmit antenna 3 and 4
3. Per KDB 248227 D01v02r02, for 2.4GHz WLAN MIMO operation for 802.11g/n, when the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured, so 802.11g mode is selected to be tested.
4. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required for hotspot and body-worn condition when the WLAN5.3GHz band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for WLAN5.2GHz band.
5. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
6. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
7. 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.
8. 4+3(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3
9. 4+3(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4
10. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

WLAN PD Note:

1. The WiFi 6E PD was performed according 2020 TCB workshop RF Exposure 5G RFX Policies Interim Procedures.
2. First, evaluate SAR using 6-7 GHz parameters per IEC/IEEE 62209-1528:2020 and evaluate incident PD using the mmw near-field probe and total-field/power-density reconstruction method.
3. Per Interim Procedures. The 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
4. 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.
5. The WiFi 6E RF Exposure results are used for simultaneous transmission analysis with the other transmitters and total exposure ratio, the analysis can be found in this report appendix F
6. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
7. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
8. 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.
9. The measurement procedure consists of measuring the PD_{inc} 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 iPD_n fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

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

NFC Note:

1. NFC mainly operate in hand-held extremity exposure conditions, therefore Standalone 10-g extremity SAR testing for NFC will be performed with active mode, with 100% duty cycle at 0mm separation distance.
2. NFC SAR is measured for all surface edges of the device with a transmitting antenna located within 25 mm from that surface or edge.

15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (3 Tx slots)	Right Cheek	0mm	2	189	836.4	30.53	31.50	1.250	-0.02	0.334	0.418
	GSM850_Ant 0	GPRS (3 Tx slots)	Right Tilted	0mm	2	189	836.4	30.53	31.50	1.250	0.06	0.183	0.229
	GSM850_Ant 0	GPRS (3 Tx slots)	Left Cheek	0mm	2	189	836.4	30.53	31.50	1.250	-0.15	0.431	0.539
	GSM850_Ant 0	GPRS (3 Tx slots)	Left Tilted	0mm	2	189	836.4	30.53	31.50	1.250	-0.09	0.249	0.311
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	27.52	28.80	1.343	0.08	0.220	0.295
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	3	189	836.4	27.52	28.80	1.343	0.01	0.121	0.162
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	3	189	836.4	27.52	28.80	1.343	0.03	0.284	0.381
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	3	189	836.4	27.52	28.80	1.343	-0.08	0.164	0.220
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	189	836.4	23.90	25.00	1.288	-0.14	0.768	0.989
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	128	824.2	23.83	25.00	1.309	0.08	0.740	0.969
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	251	848.8	23.55	25.00	1.396	0.01	0.705	0.984
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2	189	836.4	23.90	25.00	1.288	0.02	0.692	0.891
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2	128	824.2	23.83	25.00	1.309	0.03	0.653	0.855
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2	251	848.8	23.55	25.00	1.396	-0.08	0.632	0.883
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	2	189	836.4	23.90	25.00	1.288	0.02	0.488	0.629
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	2	189	836.4	23.90	25.00	1.288	-0.02	0.431	0.555
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	22.00	22.90	1.230	0.1	0.486	0.598
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	3	189	836.4	22.00	22.90	1.230	-0.18	0.444	0.546
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	3	189	836.4	22.00	22.90	1.230	0.1	0.308	0.379
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	3	189	836.4	22.00	22.90	1.230	0.12	0.274	0.337
02	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	661	1880	26.75	28.00	1.334	0.15	0.358	0.477
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	661	1880	26.75	28.00	1.334	0.08	0.132	0.176
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	661	1880	26.75	28.00	1.334	0.03	0.190	0.253
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	661	1880	26.75	28.00	1.334	0.03	0.109	0.145
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	661	1880	26.36	27.50	1.300	-0.12	0.149	0.194
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	661	1880	26.36	27.50	1.300	0.1	0.112	0.146
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	661	1880	26.36	27.50	1.300	-0.05	0.349	0.454
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	661	1880	26.36	27.50	1.300	0.1	0.127	0.165

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	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	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2	9400	1880	24.19	25.00	1.205	0.04	0.557	0.671
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	2	9400	1880	24.19	25.00	1.205	0.08	0.197	0.237
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	2	9400	1880	24.19	25.00	1.205	-0.03	0.270	0.325
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	2	9400	1880	24.19	25.00	1.205	-0.06	0.194	0.234
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	3	9400	1880	24.19	24.50	1.074	0.04	0.557	0.598
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	3	9400	1880	24.19	24.50	1.074	0.08	0.197	0.212
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	3	9400	1880	24.19	24.50	1.074	-0.03	0.270	0.290
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	3	9400	1880	24.19	24.50	1.074	-0.06	0.194	0.208
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	9400	1880	24.08	24.50	1.102	-0.05	0.178	0.196
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	9400	1880	24.08	24.50	1.102	-0.02	0.129	0.142
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	9400	1880	24.08	24.50	1.102	0.13	0.437	0.481
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	9400	1880	24.08	24.50	1.102	-0.08	0.110	0.121
04	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2	1413	1732.6	24.25	25.70	1.396	-0.02	0.549	0.767
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2	1312	1712.4	24.18	25.70	1.419	0.08	0.528	0.749
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2	1513	1752.6	24.24	25.70	1.400	0.01	0.532	0.745
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	2	1413	1732.6	24.25	25.70	1.396	0.1	0.209	0.292
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	2	1413	1732.6	24.25	25.70	1.396	-0.07	0.225	0.314
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	2	1413	1732.6	24.25	25.70	1.396	0.15	0.236	0.330
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	3	1413	1732.6	24.25	24.70	1.109	-0.02	0.549	0.609
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	3	1413	1732.6	24.25	24.70	1.109	0.1	0.209	0.232
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	3	1413	1732.6	24.25	24.70	1.109	-0.07	0.225	0.250
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	3	1413	1732.6	24.25	24.70	1.109	0.15	0.236	0.262
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	1413	1732.6	24.06	25.20	1.300	-0.03	0.154	0.200
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	1413	1732.6	24.06	25.20	1.300	0.01	0.154	0.200
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	1413	1732.6	24.06	25.20	1.300	-0.03	0.359	0.467
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	1413	1732.6	24.06	25.20	1.300	0.1	0.143	0.186
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2	4182	836.4	24.77	25.70	1.239	0.07	0.279	0.346
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2	4182	836.4	24.77	25.70	1.239	0.01	0.165	0.204
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2	4182	836.4	24.77	25.70	1.239	0.05	0.344	0.426
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2	4182	836.4	24.77	25.70	1.239	0.03	0.212	0.263
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	3	4182	836.4	24.77	25.00	1.054	0.07	0.279	0.294
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	3	4182	836.4	24.77	25.00	1.054	0.01	0.165	0.174
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	3	4182	836.4	24.77	25.00	1.054	0.05	0.344	0.363
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	3	4182	836.4	24.77	25.00	1.054	0.03	0.212	0.224
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4182	836.4	20.30	21.60	1.349	-0.01	0.730	0.985
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4132	826.4	20.29	21.60	1.352	0.05	0.699	0.945
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4233	846.6	20.26	21.60	1.361	-0.04	0.634	0.863
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	2	4182	836.4	20.30	21.60	1.349	0.03	0.720	0.971
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	2	4132	826.4	20.29	21.60	1.352	0.12	0.665	0.899
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	2	4233	846.6	20.26	21.60	1.361	0.15	0.613	0.835
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	2	4182	836.4	20.30	21.60	1.349	-0.01	0.516	0.696
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	2	4182	836.4	20.30	21.60	1.349	0.01	0.464	0.626
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4182	836.4	18.41	19.50	1.285	-0.17	0.464	0.596
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	3	4182	836.4	18.41	19.50	1.285	-0.03	0.459	0.590
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	3	4182	836.4	18.41	19.50	1.285	0.14	0.331	0.425
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	3	4182	836.4	18.41	19.50	1.285	0.11	0.296	0.380



<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 2_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	18900	1880	23.32	25.00	1.472	-0.15	0.420	0.618
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2	18900	1880	22.31	24.00	1.476	0.02	0.337	0.497
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2	18900	1880	23.32	25.00	1.472	0.06	0.169	0.249
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2	18900	1880	22.31	24.00	1.476	0.05	0.135	0.199
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2	18900	1880	23.32	25.00	1.472	0.18	0.243	0.358
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2	18900	1880	22.31	24.00	1.476	-0.1	0.194	0.286
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2	18900	1880	23.32	25.00	1.472	-0.11	0.158	0.233
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2	18900	1880	22.31	24.00	1.476	-0.09	0.126	0.186
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	18900	1880	23.32	24.90	1.439	-0.15	0.420	0.604
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	3	18900	1880	22.31	24.00	1.476	0.02	0.337	0.497
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	3	18900	1880	23.32	24.90	1.439	0.06	0.169	0.243
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	3	18900	1880	22.31	24.00	1.476	0.05	0.135	0.199
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	3	18900	1880	23.32	24.90	1.439	0.18	0.243	0.350
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	3	18900	1880	22.31	24.00	1.476	-0.1	0.194	0.286
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	3	18900	1880	23.32	24.90	1.439	-0.11	0.158	0.227
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	3	18900	1880	22.31	24.00	1.476	-0.09	0.126	0.186
	LTE Band 2_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	18900	1880	23.34	24.50	1.306	0.02	0.210	0.274
	LTE Band 2_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	18900	1880	22.36	23.50	1.300	0.05	0.168	0.218
	LTE Band 2_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	18900	1880	23.34	24.50	1.306	-0.12	0.198	0.259
	LTE Band 2_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	18900	1880	22.36	23.50	1.300	0.1	0.158	0.205
	LTE Band 2_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	18900	1880	23.34	24.50	1.306	-0.14	0.420	0.549
	LTE Band 2_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	18900	1880	22.36	23.50	1.300	-0.08	0.336	0.437
	LTE Band 2_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	18900	1880	23.34	24.50	1.306	-0.06	0.160	0.209
	LTE Band 2_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	18900	1880	22.36	23.50	1.300	-0.11	0.128	0.166



FCC SAR TEST REPORT

Report No. : FA451607B

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
07	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	21100	2535	24.45	25.70	1.334	0.17	0.706	0.941
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	20850	2510	24.40	25.70	1.349	-0.05	0.639	0.862
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	21350	2560	24.35	25.70	1.365	0.01	0.699	0.954
	LTE ULCA_7C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	21350+21152	2560	22.50	23.70	1.318	0.08	0.500	0.659
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2	21100	2535	23.42	24.70	1.343	0.01	0.545	0.732
	LTE Band 7_Ant 2	20M	QPSK	100	0	Right Cheek	0mm	2	21100	2535	23.41	24.70	1.346	0.04	0.500	0.673
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2	21100	2535	24.45	25.70	1.334	-0.01	0.217	0.289
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2	21100	2535	23.42	24.70	1.343	-0.08	0.165	0.222
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2	21100	2535	24.45	25.70	1.334	-0.15	0.372	0.496
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2	21100	2535	23.42	24.70	1.343	0.06	0.295	0.396
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2	21100	2535	24.45	25.70	1.334	-0.09	0.198	0.264
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2	21100	2535	23.42	24.70	1.343	-0.08	0.171	0.230
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	21100	2535	22.60	23.70	1.288	0.04	0.451	0.581
	LTE ULCA_7C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	21350+21152	2560	20.44	21.70	1.337	0.12	0.296	0.396
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	3	21100	2535	22.60	23.70	1.288	-0.01	0.444	0.572
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	3	21100	2535	22.60	23.70	1.288	-0.08	0.141	0.182
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	3	21100	2535	22.60	23.70	1.288	0.05	0.127	0.164
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	3	21100	2535	22.60	23.70	1.288	0.06	0.240	0.309
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	3	21100	2535	22.60	23.70	1.288	-0.09	0.239	0.308
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	3	21100	2535	22.60	23.70	1.288	-0.08	0.129	0.166
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	3	21100	2535	22.60	23.70	1.288	0.13	0.141	0.182
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2	21100	2535	24.44	25.20	1.191	-0.01	0.187	0.223
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2	21100	2535	23.28	24.20	1.236	0.08	0.176	0.218
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2	21100	2535	24.44	25.20	1.191	-0.1	0.164	0.195
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2	21100	2535	23.28	24.20	1.236	-0.06	0.136	0.168
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2	21100	2535	24.44	25.20	1.191	0.15	0.489	0.583
	LTE ULCA_7C_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2	20850+21048	2510	22.81	23.70	1.227	0.01	0.295	0.362
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2	21100	2535	23.28	24.20	1.236	0.04	0.395	0.488
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2	21100	2535	24.44	25.20	1.191	-0.03	0.150	0.179
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2	21100	2535	23.28	24.20	1.236	0.07	0.132	0.163
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	3	21100	2535	24.44	24.90	1.112	-0.01	0.187	0.208
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	3	21100	2535	23.28	24.20	1.236	0.08	0.176	0.218
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	3	21100	2535	24.44	24.90	1.112	-0.1	0.164	0.182
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	3	21100	2535	23.28	24.20	1.236	-0.06	0.136	0.168
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	3	21100	2535	24.44	24.90	1.112	0.15	0.489	0.544
	LTE ULCA_7C_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	3	20850+21048	2510	22.81	23.40	1.146	0.01	0.295	0.338
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	3	21100	2535	23.28	24.20	1.236	0.04	0.395	0.488
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	3	21100	2535	24.44	24.90	1.112	-0.03	0.150	0.167
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	3	21100	2535	23.28	24.20	1.236	0.07	0.132	0.163



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	2/3	23095	707.5	24.66	25.70	1.271	-0.13	0.166	0.211
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	2/3	23095	707.5	23.81	24.70	1.227	0.17	0.119	0.146
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	2/3	23095	707.5	24.66	25.70	1.271	-0.05	0.090	0.114
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	2/3	23095	707.5	23.81	24.70	1.227	0.01	0.067	0.082
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	23095	707.5	24.66	25.70	1.271	-0.12	0.190	0.241
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	2/3	23095	707.5	23.81	24.70	1.227	0.1	0.154	0.189
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	2/3	23095	707.5	24.66	25.70	1.271	-0.17	0.113	0.144
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	2/3	23095	707.5	23.81	24.70	1.227	0.04	0.108	0.133
08	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23095	707.5	20.63	22.40	1.503	0.01	0.550	0.827
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23095	707.5	20.75	22.40	1.462	0.11	0.560	0.819
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23095	707.5	20.70	22.40	1.479	-0.05	0.548	0.811
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23095	707.5	20.63	22.40	1.503	-0.02	0.528	0.794
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23095	707.5	20.75	22.40	1.462	0.18	0.524	0.766
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23095	707.5	20.63	22.40	1.503	-0.02	0.310	0.466
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23095	707.5	20.75	22.40	1.462	0.14	0.312	0.456
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23095	707.5	20.63	22.40	1.503	-0.09	0.345	0.519
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23095	707.5	20.75	22.40	1.462	0.17	0.340	0.497
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23095	707.5	20.63	21.00	1.089	0.01	0.550	0.599
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23095	707.5	20.75	21.00	1.059	0.11	0.560	0.593
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23095	707.5	20.63	21.00	1.089	-0.02	0.528	0.575
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23095	707.5	20.75	21.00	1.059	0.18	0.524	0.555
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23095	707.5	20.63	21.00	1.089	-0.02	0.310	0.338
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23095	707.5	20.75	21.00	1.059	0.14	0.312	0.330
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23095	707.5	20.63	21.00	1.089	-0.09	0.345	0.376
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23095	707.5	20.75	21.00	1.059	0.17	0.340	0.360



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Cheek	0mm	2	26865	831.5	24.67	25.70	1.268	0.1	0.249	0.316
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Cheek	0mm	2	26865	831.5	23.77	24.70	1.239	-0.01	0.167	0.207
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	2	26865	831.5	24.67	25.70	1.268	-0.08	0.145	0.184
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Tilted	0mm	2	26865	831.5	23.77	24.70	1.239	0.05	0.111	0.138
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	2	26865	831.5	24.67	25.70	1.268	0.12	0.316	0.401
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Cheek	0mm	2	26865	831.5	23.77	24.70	1.239	0.06	0.241	0.299
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	2	26865	831.5	24.67	25.70	1.268	-0.08	0.205	0.260
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Tilted	0mm	2	26865	831.5	23.77	24.70	1.239	0.13	0.162	0.201
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Cheek	0mm	3	26865	831.5	24.67	25.40	1.183	0.1	0.249	0.295
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Cheek	0mm	3	26865	831.5	23.77	24.70	1.239	-0.01	0.167	0.207
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	3	26865	831.5	24.67	25.40	1.183	-0.08	0.145	0.172
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Tilted	0mm	3	26865	831.5	23.77	24.70	1.239	0.05	0.111	0.138
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	3	26865	831.5	24.67	25.40	1.183	0.12	0.316	0.374
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Cheek	0mm	3	26865	831.5	23.77	24.70	1.239	0.06	0.241	0.299
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	3	26865	831.5	24.67	25.40	1.183	-0.08	0.205	0.243
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Tilted	0mm	3	26865	831.5	23.77	24.70	1.239	0.13	0.162	0.201
09	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	2	26865	831.5	20.06	21.40	1.361	0.03	0.718	0.978
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	2	26865	831.5	20.08	21.40	1.355	0.04	0.715	0.969
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	2	26865	831.5	20.08	21.40	1.355	0.08	0.713	0.966
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	2	26865	831.5	20.06	21.40	1.361	0.05	0.651	0.886
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	2	26865	831.5	20.08	21.40	1.355	-0.05	0.650	0.881
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Tilted	0mm	2	26865	831.5	20.08	21.40	1.355	-0.03	0.649	0.880
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	2	26865	831.5	20.06	21.40	1.361	0	0.486	0.662
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	2	26865	831.5	20.08	21.40	1.355	0.09	0.484	0.656
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	2	26865	831.5	20.06	21.40	1.361	-0.01	0.450	0.613
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	2	26865	831.5	20.08	21.40	1.355	-0.12	0.441	0.598
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	3	26865	831.5	17.85	19.30	1.396	-0.13	0.427	0.596
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	3	26865	831.5	17.88	19.30	1.387	-0.13	0.423	0.587
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	3	26865	831.5	17.85	19.30	1.396	0.06	0.386	0.539
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	3	26865	831.5	17.88	19.30	1.387	-0.03	0.381	0.528
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	3	26865	831.5	17.85	19.30	1.396	-0.03	0.286	0.399
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	3	26865	831.5	17.88	19.30	1.387	0.08	0.284	0.394
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	3	26865	831.5	17.85	19.30	1.396	-0.07	0.261	0.364
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	3	26865	831.5	17.88	19.30	1.387	0.05	0.261	0.362
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	3	26865	831.5	17.80	19.30	1.413	-0.12	0.411	0.581



FCC SAR TEST REPORT

Report No. : FA451607B

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
10	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	40185	2549.5	24.60	25.70	1.288	62.9	1.006	0.08	0.478	0.619
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	39750	2506	24.48	25.70	1.324	62.9	1.006	0.03	0.439	0.585
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	40620	2593	24.40	25.70	1.349	62.9	1.006	-0.08	0.501	0.680
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	41055	2636.5	24.41	25.70	1.346	62.9	1.006	-0.1	0.526	0.712
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	41490	2680	24.53	25.70	1.309	62.9	1.006	-0.08	0.442	0.582
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2	40185	2549.5	23.64	24.70	1.276	62.9	1.006	0.1	0.394	0.506
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2	40185	2549.5	24.60	25.70	1.288	62.9	1.006	-0.18	0.148	0.192
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2	40185	2549.5	23.64	24.70	1.276	62.9	1.006	0.1	0.118	0.152
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2	40185	2549.5	24.60	25.70	1.288	62.9	1.006	0	0.230	0.298
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2	40185	2549.5	23.64	24.70	1.276	62.9	1.006	0.08	0.193	0.248
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2	40185	2549.5	24.60	25.70	1.288	62.9	1.006	-0.17	0.148	0.192
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2	40185	2549.5	23.64	24.70	1.276	62.9	1.006	-0.03	0.118	0.152
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	40185	2549.5	26.48	27.50	1.265	42.9	1.009	0.14	0.475	0.606
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	39750	2506	26.30	27.50	1.318	42.9	1.009	-0.05	0.404	0.537
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	40620	2593	26.29	27.50	1.321	42.9	1.009	0.18	0.519	0.692
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	41055	2636.5	26.25	27.50	1.334	42.9	1.009	0.14	0.490	0.659
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	41490	2680	26.31	27.50	1.315	42.9	1.009	-0.17	0.400	0.531
	LTE ULCA_41C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	41490+41292	2680	22.41	23.70	1.346	62.9	1.006	0.08	0.336	0.455
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	40185	2549.5	24.60	25.00	1.096	62.9	1.006	0.08	0.478	0.527
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	39750	2506	24.48	25.00	1.127	62.9	1.006	0.03	0.439	0.498
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	40620	2593	24.40	25.00	1.148	62.9	1.006	-0.08	0.501	0.579
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	41055	2636.5	24.41	25.00	1.146	62.9	1.006	-0.1	0.526	0.606
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	41490	2680	24.53	25.00	1.114	62.9	1.006	-0.08	0.442	0.495
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	3	40185	2549.5	23.64	24.70	1.276	62.9	1.006	0.1	0.394	0.506
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	3	40185	2549.5	24.60	25.00	1.096	62.9	1.006	-0.18	0.148	0.163
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	3	40185	2549.5	23.64	24.70	1.276	62.9	1.006	0.1	0.118	0.152
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	3	40185	2549.5	24.60	25.00	1.096	62.9	1.006	0	0.230	0.254
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	3	40185	2549.5	23.64	24.70	1.276	62.9	1.006	0.08	0.193	0.248
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	3	40185	2549.5	24.60	25.00	1.096	62.9	1.006	-0.17	0.148	0.163
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	3	40185	2549.5	23.64	24.70	1.276	62.9	1.006	-0.03	0.118	0.152
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	40185	2549.5	26.48	26.60	1.028	42.9	1.009	0.14	0.475	0.493
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	39750	2506	26.30	26.60	1.072	42.9	1.009	-0.05	0.404	0.437
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	40620	2593	26.29	26.60	1.074	42.9	1.009	0.18	0.519	0.562
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	41055	2636.5	26.25	26.60	1.084	42.9	1.009	0.14	0.490	0.536
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	41490	2680	26.31	26.60	1.069	42.9	1.009	-0.17	0.400	0.431
	LTE ULCA_41C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	41490+41292	2680	22.41	23.00	1.146	62.9	1.006	0.08	0.336	0.387
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	40620	2593	24.56	25.20	1.159	62.9	1.006	-0.01	0.078	0.091
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	40620	2593	23.54	24.20	1.164	62.9	1.006	0.01	0.074	0.087
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	40620	2593	24.56	25.20	1.159	62.9	1.006	0.03	0.079	0.092
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	40620	2593	23.54	24.20	1.164	62.9	1.006	-0.08	0.076	0.089
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	40620	2593	24.56	25.20	1.159	62.9	1.006	-0.11	0.210	0.245
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	40620	2593	23.54	24.20	1.164	62.9	1.006	-0.08	0.178	0.208
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	40620	2593	24.56	25.20	1.159	62.9	1.006	0.1	0.077	0.090
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	40620	2593	23.54	24.20	1.164	62.9	1.006	-0.18	0.065	0.076
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	40620	2593	26.29	27.00	1.178	42.9	1.009	0.1	0.204	0.242
	LTE ULCA_41C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	41490+41292	2680	22.51	23.20	1.172	62.9	1.006	0.03	0.077	0.091



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
11	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2	132322	1745	24.36	25.70	1.361	0.02	0.490	0.667
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2	132322	1745	23.34	24.70	1.368	0.12	0.392	0.536
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2	132322	1745	24.36	25.70	1.361	0.08	0.201	0.274
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2	132322	1745	23.34	24.70	1.368	-0.17	0.165	0.226
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2	132322	1745	24.36	25.70	1.361	-0.05	0.211	0.287
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2	132322	1745	23.34	24.70	1.368	-0.03	0.169	0.231
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2	132322	1745	24.36	25.70	1.361	0.02	0.233	0.317
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2	132322	1745	23.34	24.70	1.368	0.14	0.186	0.254
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	3	132322	1745	24.36	25.30	1.242	0.02	0.490	0.608
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	3	132322	1745	23.34	24.70	1.368	0.12	0.392	0.536
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	3	132322	1745	24.36	25.30	1.242	0.08	0.201	0.250
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	3	132322	1745	23.34	24.70	1.368	-0.17	0.165	0.226
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	3	132322	1745	24.36	25.30	1.242	-0.05	0.211	0.262
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	3	132322	1745	23.34	24.70	1.368	-0.03	0.169	0.231
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	3	132322	1745	24.36	25.30	1.242	0.02	0.233	0.289
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	3	132322	1745	23.34	24.70	1.368	0.14	0.186	0.254
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	132322	1745	24.08	25.20	1.294	0.13	0.217	0.281
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	132322	1745	23.01	24.20	1.315	0.11	0.174	0.229
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	132322	1745	24.08	25.20	1.294	0.06	0.177	0.229
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	132322	1745	23.01	24.20	1.315	-0.05	0.141	0.185
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	132322	1745	24.08	25.20	1.294	-0.15	0.407	0.527
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	132322	1745	23.01	24.20	1.315	0.18	0.326	0.429
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	132322	1745	24.08	25.20	1.294	0.14	0.161	0.208
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	132322	1745	23.01	24.20	1.315	-0.17	0.129	0.170

**<5G NR SAR>**

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
12	FR1 n2_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	2	376000	1880	23.70	25.00	1.349	-0.08	0.454	0.612
	FR1 n2_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	2	376000	1880	23.63	25.00	1.371	0.08	0.431	0.591
	FR1 n2_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	2	376000	1880	23.70	25.00	1.349	0.03	0.155	0.209
	FR1 n2_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	2	376000	1880	23.63	25.00	1.371	0.01	0.141	0.193
	FR1 n2_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	2	376000	1880	23.70	25.00	1.349	0.18	0.220	0.297
	FR1 n2_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	2	376000	1880	23.63	25.00	1.371	-0.08	0.211	0.289
	FR1 n2_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	2	376000	1880	23.70	25.00	1.349	-0.08	0.142	0.192
	FR1 n2_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	2	376000	1880	23.63	25.00	1.371	0.1	0.135	0.185
	FR1 n2_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	3	376000	1880	23.70	24.90	1.318	-0.08	0.454	0.598
	FR1 n2_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	3	376000	1880	23.63	24.90	1.340	0.08	0.431	0.577
	FR1 n2_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	3	376000	1880	23.70	24.90	1.318	0.03	0.155	0.204
	FR1 n2_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	3	376000	1880	23.63	24.90	1.340	0.01	0.141	0.189
	FR1 n2_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	3	376000	1880	23.70	24.90	1.318	0.18	0.220	0.290
	FR1 n2_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	3	376000	1880	23.63	24.90	1.340	-0.08	0.211	0.283
	FR1 n2_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	3	376000	1880	23.70	24.90	1.318	-0.08	0.142	0.187
	FR1 n2_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	3	376000	1880	23.63	24.90	1.340	0.1	0.135	0.181
	FR1 n2_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	2/3	376000	1880	23.59	24.50	1.233	0.04	0.188	0.232
	FR1 n2_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	2/3	376000	1880	23.54	24.50	1.247	0.04	0.180	0.225
	FR1 n2_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	2/3	376000	1880	23.59	24.50	1.233	0.03	0.128	0.158
	FR1 n2_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	2/3	376000	1880	23.54	24.50	1.247	-0.03	0.136	0.170
	FR1 n2_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	2/3	376000	1880	23.59	24.50	1.233	-0.04	0.445	0.549
	FR1 n2_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	2/3	376000	1880	23.54	24.50	1.247	0.12	0.434	0.541
	FR1 n2_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	2/3	376000	1880	23.59	24.50	1.233	-0.08	0.101	0.125
	FR1 n2_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	2/3	376000	1880	23.54	24.50	1.247	-0.08	0.102	0.127



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
13	FR1 n7_Ant 2	50M	BPSK	1	1	Right Cheek	0mm	2	507000	2535	23.73	25.40	1.469	-0.11	0.581	0.853
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Cheek	0mm	2	507000	2535	23.63	25.40	1.503	-0.08	0.434	0.652
	FR1 n7_Ant 2	50M	BPSK	270	0	Right Cheek	0mm	2	507000	2535	23.68	25.20	1.419	-0.17	0.429	0.609
	FR1 n7_Ant 2	50M	BPSK	1	1	Right Tilted	0mm	2	507000	2535	23.73	25.40	1.469	0.12	0.164	0.241
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Tilted	0mm	2	507000	2535	23.63	25.40	1.503	0.18	0.120	0.180
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Cheek	0mm	2	507000	2535	23.73	25.40	1.469	0.01	0.269	0.395
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Cheek	0mm	2	507000	2535	23.63	25.40	1.503	0	0.167	0.251
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Tilted	0mm	2	507000	2535	23.73	25.40	1.469	0.01	0.178	0.261
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Tilted	0mm	2	507000	2535	23.63	25.40	1.503	-0.06	0.119	0.179
	FR1 n7_Ant 2	50M	BPSK	1	1	Right Cheek	0mm	3	507000	2535	23.73	23.90	1.040	-0.11	0.581	0.604
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Cheek	0mm	3	507000	2535	23.63	23.90	1.064	-0.08	0.434	0.462
	FR1 n7_Ant 2	50M	BPSK	1	1	Right Tilted	0mm	3	507000	2535	23.73	23.90	1.040	0.12	0.164	0.171
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Tilted	0mm	3	507000	2535	23.63	23.90	1.064	0.18	0.120	0.128
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Cheek	0mm	3	507000	2535	23.73	23.90	1.040	0.01	0.269	0.280
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Cheek	0mm	3	507000	2535	23.63	23.90	1.064	0	0.167	0.178
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Tilted	0mm	3	507000	2535	23.73	23.90	1.040	0.01	0.178	0.185
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Tilted	0mm	3	507000	2535	23.63	23.90	1.064	-0.06	0.119	0.127
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Cheek	0mm	2	507000	2535	24.47	25.20	1.183	-0.07	0.210	0.248
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Cheek	0mm	2	507000	2535	24.33	25.20	1.222	0.08	0.199	0.243
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Tilted	0mm	2	507000	2535	24.47	25.20	1.183	0.01	0.161	0.190
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Tilted	0mm	2	507000	2535	24.33	25.20	1.222	0.03	0.180	0.220
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Cheek	0mm	2	507000	2535	24.47	25.20	1.183	0.08	0.508	0.601
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Cheek	0mm	2	507000	2535	24.33	25.20	1.222	-0.08	0.426	0.520
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Tilted	0mm	2	507000	2535	24.47	25.20	1.183	-0.08	0.152	0.180
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Tilted	0mm	2	507000	2535	24.33	25.20	1.222	0.1	0.159	0.194
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Cheek	0mm	3	507000	2535	24.47	24.80	1.079	-0.07	0.210	0.227
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Cheek	0mm	3	507000	2535	24.33	24.80	1.114	0.08	0.199	0.222
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Tilted	0mm	3	507000	2535	24.47	24.80	1.079	0.01	0.161	0.174
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Tilted	0mm	3	507000	2535	24.33	24.80	1.114	0.03	0.180	0.201
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Cheek	0mm	3	507000	2535	24.47	24.80	1.079	0.08	0.508	0.548
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Cheek	0mm	3	507000	2535	24.33	24.80	1.114	-0.08	0.426	0.475
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Tilted	0mm	3	507000	2535	24.47	24.80	1.079	-0.08	0.152	0.164
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Tilted	0mm	3	507000	2535	24.33	24.80	1.114	0.1	0.159	0.177



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n12_Ant 0	15M	BPSK	1	1	Right Cheek	0mm	2/3	141500	707.5	24.81	25.70	1.227	0.14	0.167	0.205
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	2/3	141500	707.5	24.80	25.70	1.230	0.02	0.209	0.257
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Tilted	0mm	2/3	141500	707.5	24.81	25.70	1.227	0.17	0.101	0.124
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	2/3	141500	707.5	24.80	25.70	1.230	-0.05	0.102	0.125
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Cheek	0mm	2/3	141500	707.5	24.81	25.70	1.227	0.01	0.207	0.254
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	2/3	141500	707.5	24.80	25.70	1.230	-0.05	0.238	0.293
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Tilted	0mm	2/3	141500	707.5	24.81	25.70	1.227	-0.05	0.150	0.184
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	2/3	141500	707.5	24.80	25.70	1.230	0.18	0.177	0.218
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	2	141500	707.5	20.47	22.10	1.455	0.05	0.589	0.857
14	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	2	141500	707.5	20.46	22.10	1.459	-0.12	0.594	0.867
	FR1 n12_Ant 1	15M	BPSK	75	0	Right Cheek	0mm	2	141500	707.5	20.46	22.10	1.459	0.06	0.593	0.865
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	2	141500	707.5	20.47	22.10	1.455	0.01	0.530	0.771
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	2	141500	707.5	20.46	22.10	1.459	-0.13	0.539	0.786
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	2	141500	707.5	20.47	22.10	1.455	-0.03	0.314	0.457
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	2	141500	707.5	20.46	22.10	1.459	-0.09	0.334	0.487
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	2	141500	707.5	20.47	22.10	1.455	0.08	0.386	0.562
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	2	141500	707.5	20.46	22.10	1.459	0.04	0.395	0.576
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	3	141500	707.5	20.47	20.50	1.007	0.05	0.589	0.593
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	3	141500	707.5	20.46	20.50	1.009	-0.12	0.594	0.599
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	3	141500	707.5	20.47	20.50	1.007	0.01	0.530	0.534
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	3	141500	707.5	20.46	20.50	1.009	-0.13	0.539	0.544
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	3	141500	707.5	20.47	20.50	1.007	-0.03	0.314	0.316
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	3	141500	707.5	20.46	20.50	1.009	-0.09	0.334	0.337
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	3	141500	707.5	20.47	20.50	1.007	0.08	0.386	0.389
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	3	141500	707.5	20.46	20.50	1.009	0.04	0.395	0.399



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n26_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	2	166300	831.5	25.12	25.70	1.143	0.08	0.248	0.283
	FR1 n26_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	2	166300	831.5	25.03	25.70	1.167	-0.16	0.266	0.310
	FR1 n26_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	2	166300	831.5	25.12	25.70	1.143	-0.03	0.158	0.181
	FR1 n26_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	2	166300	831.5	25.03	25.70	1.167	0.14	0.166	0.194
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	2	166300	831.5	25.12	25.70	1.143	0.11	0.351	0.401
	FR1 n26_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	2	166300	831.5	25.03	25.70	1.167	-0.11	0.355	0.414
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	2	166300	831.5	25.12	25.70	1.143	0.12	0.212	0.242
	FR1 n26_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	2	166300	831.5	25.03	25.70	1.167	0.1	0.235	0.274
	FR1 n26_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	3	166300	831.5	25.12	25.50	1.091	0.08	0.248	0.271
	FR1 n26_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	3	166300	831.5	25.03	25.50	1.114	-0.16	0.266	0.296
	FR1 n26_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	3	166300	831.5	25.12	25.50	1.091	-0.03	0.158	0.172
	FR1 n26_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	3	166300	831.5	25.03	25.50	1.114	0.14	0.166	0.185
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	3	166300	831.5	25.12	25.50	1.091	0.11	0.351	0.383
	FR1 n26_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	3	166300	831.5	25.03	25.50	1.114	-0.11	0.355	0.396
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	3	166300	831.5	25.12	25.50	1.091	0.12	0.212	0.231
	FR1 n26_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	3	166300	831.5	25.03	25.50	1.114	0.1	0.235	0.262
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	2	166300	831.5	19.90	21.50	1.445	0.08	0.580	0.838
15	FR1 n26_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	2	166300	831.5	19.85	21.50	1.462	0	0.604	0.883
	FR1 n26_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	2	166300	831.5	19.78	21.50	1.486	0.01	0.590	0.877
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	2	166300	831.5	19.90	21.50	1.445	0.03	0.435	0.629
	FR1 n26_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	2	166300	831.5	19.85	21.50	1.462	0.13	0.448	0.655
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	2	166300	831.5	19.90	21.50	1.445	-0.08	0.264	0.382
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	2	166300	831.5	19.85	21.50	1.462	0.01	0.285	0.417
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	2	166300	831.5	19.90	21.50	1.445	-0.18	0.338	0.489
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	2	166300	831.5	19.85	21.50	1.462	0	0.347	0.507
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	3	166300	831.5	18.59	19.80	1.321	0.16	0.428	0.566
	FR1 n26_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	3	166300	831.5	18.46	19.80	1.361	0.05	0.432	0.588
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	3	166300	831.5	18.59	19.80	1.321	0.05	0.313	0.414
	FR1 n26_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	3	166300	831.5	18.46	19.80	1.361	-0.03	0.323	0.440
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	3	166300	831.5	18.59	19.80	1.321	-0.15	0.185	0.244
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	3	166300	831.5	18.46	19.80	1.361	0.02	0.206	0.280
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	3	166300	831.5	18.59	19.80	1.321	0.07	0.248	0.328
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	3	166300	831.5	18.46	19.80	1.361	0.16	0.242	0.329



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
16	FR1 n41_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2	518598	2592.99	24.23	25.50	1.340	0.08	0.617	0.827
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	2	518598	2592.99	23.95	25.50	1.429	-0.04	0.664	0.949
	FR1 n41_Ant 2	100M	BPSK	270	0	Right Cheek	0mm	2	518598	2592.99	23.91	25.20	1.346	0.01	0.609	0.820
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	2	518598	2592.99	24.23	25.50	1.340	0.06	0.211	0.283
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	2	518598	2592.99	23.95	25.50	1.429	-0.08	0.190	0.271
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	2	518598	2592.99	24.23	25.50	1.340	-0.08	0.299	0.401
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	2	518598	2592.99	23.95	25.50	1.429	-0.18	0.353	0.504
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	2	518598	2592.99	24.23	25.50	1.340	0.1	0.207	0.277
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	2	518598	2592.99	23.95	25.50	1.429	-0.18	0.230	0.329
	FR1 n41_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2	518598	2592.99	26.73	27.50	1.194	0.1	0.588	0.702
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	3	518598	2592.99	22.18	23.50	1.355	-0.13	0.376	0.510
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	3	518598	2592.99	21.85	23.50	1.462	-0.01	0.401	0.586
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	3	518598	2592.99	22.18	23.50	1.355	-0.09	0.127	0.172
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	3	518598	2592.99	21.85	23.50	1.462	0.05	0.110	0.161
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	3	518598	2592.99	22.18	23.50	1.355	0.02	0.177	0.240
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	3	518598	2592.99	21.85	23.50	1.462	-0.13	0.216	0.316
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	3	518598	2592.99	22.18	23.50	1.355	0.17	0.121	0.164
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	3	518598	2592.99	21.85	23.50	1.462	0.06	0.132	0.193
	FR1 n41_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	3	518598	2592.99	25.22	26.50	1.343	0	0.415	0.557
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Cheek	0mm	2/3	518598	2592.99	24.80	25.20	1.096	0.05	0.199	0.218
	FR1 n41_Ant 0	100M	BPSK	135	69	Right Cheek	0mm	2/3	518598	2592.99	24.44	25.20	1.191	0.12	0.170	0.203
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Tilted	0mm	2/3	518598	2592.99	24.80	25.20	1.096	0.08	0.160	0.175
	FR1 n41_Ant 0	100M	BPSK	135	69	Right Tilted	0mm	2/3	518598	2592.99	24.44	25.20	1.191	-0.17	0.133	0.158
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Cheek	0mm	2/3	518598	2592.99	24.80	25.20	1.096	-0.18	0.491	0.538
	FR1 n41_Ant 0	100M	BPSK	135	69	Left Cheek	0mm	2/3	518598	2592.99	24.44	25.20	1.191	-0.03	0.447	0.532
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Tilted	0mm	2/3	518598	2592.99	24.80	25.20	1.096	0.14	0.200	0.219
	FR1 n41_Ant 0	100M	BPSK	135	69	Left Tilted	0mm	2/3	518598	2592.99	24.44	25.20	1.191	0.11	0.161	0.192
	FR1 n41_HPUE_Ant 0	100M	BPSK	1	1	Left Cheek	0mm	2/3	518598	2592.99	26.62	27.00	1.091	-0.05	0.390	0.426



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
17	FR1 n66_Ant 2	40M	BPSK	1	1	Right Cheek	0mm	2	349000	1745	24.41	25.70	1.346	0.1	0.414	0.557
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	2	349000	1745	24.33	25.70	1.371	-0.02	0.457	0.626
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Tilted	0mm	2	349000	1745	24.41	25.70	1.346	-0.18	0.177	0.238
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	2	349000	1745	24.33	25.70	1.371	-0.03	0.194	0.266
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Cheek	0mm	2	349000	1745	24.41	25.70	1.346	0.1	0.196	0.264
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	2	349000	1745	24.33	25.70	1.371	-0.09	0.215	0.295
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Tilted	0mm	2	349000	1745	24.41	25.70	1.346	0.08	0.199	0.268
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	2	349000	1745	24.33	25.70	1.371	-0.05	0.213	0.292
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Cheek	0mm	3	349000	1745	24.41	25.50	1.285	0.1	0.414	0.532
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	3	349000	1745	24.33	25.50	1.309	-0.02	0.457	0.598
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Tilted	0mm	3	349000	1745	24.41	25.50	1.285	-0.18	0.177	0.227
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	3	349000	1745	24.33	25.50	1.309	-0.03	0.194	0.254
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Cheek	0mm	3	349000	1745	24.41	25.50	1.285	0.1	0.196	0.252
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	3	349000	1745	24.33	25.50	1.309	-0.09	0.215	0.281
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Tilted	0mm	3	349000	1745	24.41	25.50	1.285	0.08	0.199	0.256
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	3	349000	1745	24.33	25.50	1.309	-0.05	0.213	0.279
	FR1 n66_Ant 0	40M	BPSK	1	1	Right Cheek	0mm	2/3	349000	1745	24.03	25.20	1.309	-0.03	0.163	0.213
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Cheek	0mm	2/3	349000	1745	23.89	25.20	1.352	0.03	0.172	0.233
	FR1 n66_Ant 0	40M	BPSK	1	1	Right Tilted	0mm	2/3	349000	1745	24.03	25.20	1.309	0.11	0.135	0.177
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Tilted	0mm	2/3	349000	1745	23.89	25.20	1.352	0.01	0.161	0.218
	FR1 n66_Ant 0	40M	BPSK	1	1	Left Cheek	0mm	2/3	349000	1745	24.03	25.20	1.309	0.18	0.379	0.496
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Cheek	0mm	2/3	349000	1745	23.89	25.20	1.352	0.04	0.395	0.534
	FR1 n66_Ant 0	40M	BPSK	1	1	Left Tilted	0mm	2/3	349000	1745	24.03	25.20	1.309	0.14	0.134	0.175
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Tilted	0mm	2/3	349000	1745	23.89	25.20	1.352	-0.17	0.143	0.193



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	24.24	25.70	1.400	-0.05	0.259	0.362
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	2	656000	3840	24.58	25.70	1.294	-0.03	0.316	0.409
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Tilted	0mm	2	656000	3840	24.24	25.70	1.400	-0.08	0.283	0.396
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	2	656000	3840	24.58	25.70	1.294	0.16	0.342	0.443
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	24.24	25.70	1.400	0.05	0.456	0.638
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	2	656000	3840	24.58	25.70	1.294	0.09	0.593	0.767
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Tilted	0mm	2	656000	3840	24.24	25.70	1.400	0.05	0.199	0.279
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	2	656000	3840	24.58	25.70	1.294	-0.03	0.240	0.311
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	25.44	27.30	1.535	-0.15	0.387	0.594
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	23.29	24.30	1.262	-0.15	0.203	0.256
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	3	656000	3840	23.16	24.30	1.300	0.11	0.224	0.291
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Tilted	0mm	3	656000	3840	23.29	24.30	1.262	-0.02	0.227	0.286
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	3	656000	3840	23.16	24.30	1.300	0.1	0.238	0.309
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	23.29	24.30	1.262	0.04	0.358	0.452
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	3	656000	3840	23.16	24.30	1.300	0.13	0.460	0.598
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Tilted	0mm	3	656000	3840	23.29	24.30	1.262	-0.18	0.158	0.199
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	3	656000	3840	23.16	24.30	1.300	-0.11	0.167	0.217
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	25.44	27.30	1.535	-0.15	0.387	0.594
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	24.17	25.70	1.422	0.18	0.254	0.361
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	2	633332	3499.98	24.44	25.70	1.337	0.05	0.301	0.402
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Tilted	0mm	2	633332	3499.98	24.17	25.70	1.422	0.14	0.187	0.266
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	2	633332	3499.98	24.44	25.70	1.337	-0.17	0.223	0.298
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	24.17	25.70	1.422	0.17	0.421	0.599
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	2	633332	3499.98	24.44	25.70	1.337	0.02	0.453	0.605
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Tilted	0mm	2	633332	3499.98	24.17	25.70	1.422	-0.05	0.106	0.151
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	2	633332	3499.98	24.44	25.70	1.337	0.01	0.136	0.182
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	25.44	27.30	1.535	0.1	0.306	0.470
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	23.74	24.30	1.138	0.01	0.224	0.255
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	3	633332	3499.98	23.31	24.30	1.256	0.03	0.229	0.288
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Tilted	0mm	3	633332	3499.98	23.74	24.30	1.138	-0.08	0.159	0.181
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	3	633332	3499.98	23.31	24.30	1.256	-0.08	0.163	0.205
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	23.74	24.30	1.138	0.1	0.414	0.471
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	3	633332	3499.98	23.31	24.30	1.256	-0.18	0.342	0.430
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Tilted	0mm	3	633332	3499.98	23.74	24.30	1.138	0.1	0.096	0.109
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	3	633332	3499.98	23.31	24.30	1.256	0.12	0.101	0.127
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	25.44	27.30	1.535	0.1	0.306	0.470
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	23.50	25.10	1.445	-0.04	0.630	0.911
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	2	656000	3840	24.05	25.10	1.274	-0.17	0.487	0.620
	FR1 n77_Ant 2	100M	BPSK	270	0	Right Cheek	0mm	2	656000	3840	23.61	24.70	1.285	0.14	0.480	0.617
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	2	656000	3840	23.50	25.10	1.445	0.04	0.177	0.256
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	2	656000	3840	24.05	25.10	1.274	-0.01	0.191	0.243
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	23.50	25.10	1.445	0.11	0.339	0.490
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	2	656000	3840	24.05	25.10	1.274	-0.08	0.348	0.443
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	2	656000	3840	23.50	25.10	1.445	0.05	0.259	0.374
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	2	656000	3840	24.05	25.10	1.274	0.06	0.304	0.387
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	25.23	26.70	1.403	-0.09	0.393	0.551
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	21.73	23.00	1.340	-0.17	0.410	0.549
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	3	656000	3840	22.10	23.00	1.230	0.04	0.305	0.375
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	3	656000	3840	21.73	23.00	1.340	-0.01	0.114	0.153
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	3	656000	3840	22.10	23.00	1.230	-0.08	0.117	0.144
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	21.73	23.00	1.340	0.05	0.221	0.296
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	3	656000	3840	22.10	23.00	1.230	0.06	0.216	0.266



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	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	3	656000	3840	21.73	23.00	1.340	-0.09	0.171	0.229
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	3	656000	3840	22.10	23.00	1.230	-0.08	0.185	0.228
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	25.23	26.00	1.194	-0.09	0.393	0.469
18	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	23.64	25.10	1.400	-0.18	0.702	0.983
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	2	633332	3499.98	24.11	25.10	1.256	-0.08	0.475	0.597
	FR1 n77_Ant 2	100M	BPSK	270	0	Right Cheek	0mm	2	633332	3499.98	23.58	23.97	1.094	0.04	0.470	0.514
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	2	633332	3499.98	23.64	25.10	1.400	0.13	0.186	0.260
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	2	633332	3499.98	24.11	25.10	1.256	0.12	0.211	0.265
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	23.64	25.10	1.400	0.03	0.333	0.466
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	2	633332	3499.98	24.11	25.10	1.256	0.16	0.400	0.502
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	2	633332	3499.98	23.64	25.10	1.400	0.18	0.258	0.361
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	2	633332	3499.98	24.11	25.10	1.256	0.16	0.334	0.420
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	25.29	26.70	1.384	-0.1	0.465	0.643
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	21.85	23.00	1.303	0.03	0.454	0.592
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	3	633332	3499.98	22.28	23.00	1.180	0.18	0.304	0.359
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	3	633332	3499.98	21.85	23.00	1.303	-0.1	0.119	0.155
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	3	633332	3499.98	22.28	23.00	1.180	0.07	0.131	0.155
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	21.85	23.00	1.303	0.18	0.213	0.278
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	3	633332	3499.98	22.28	23.00	1.180	-0.1	0.252	0.297
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	3	633332	3499.98	21.85	23.00	1.303	0.01	0.164	0.214
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	3	633332	3499.98	22.28	23.00	1.180	-0.15	0.216	0.255
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	25.29	26.00	1.178	-0.1	0.453	0.533
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	16.7	18.3	1.445	-0.02	0.599	0.866
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	2	656000	3840	16.57	18.3	1.489	0.03	0.577	0.859
	FR1 n77_HPUE_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	2	656000	3840	16.45	18.3	1.531	0.1	0.545	0.834
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	2	656000	3840	16.7	18.3	1.445	0.07	0.524	0.757
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	2	656000	3840	16.57	18.3	1.489	-0.05	0.425	0.633
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	16.7	18.3	1.445	-0.08	0.279	0.403
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	2	656000	3840	16.57	18.3	1.489	0.09	0.174	0.259
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	2	656000	3840	16.7	18.3	1.445	-0.01	0.259	0.374
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	2	656000	3840	16.57	18.3	1.489	0.04	0.153	0.228
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	16.7	16.7	1.000	-0.02	0.599	0.599
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	3	656000	3840	16.57	16.7	1.030	0.03	0.577	0.595
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	3	656000	3840	16.7	16.7	1.000	0.07	0.524	0.524
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	3	656000	3840	16.57	16.7	1.030	-0.05	0.425	0.438
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	16.7	16.7	1.000	-0.08	0.279	0.279
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	3	656000	3840	16.57	16.7	1.030	0.09	0.174	0.179
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	3	656000	3840	16.7	16.7	1.000	-0.01	0.259	0.259
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	3	656000	3840	16.57	16.7	1.030	0.04	0.153	0.158
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	16.49	18.3	1.517	0.08	0.389	0.590
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	2	633332	3499.98	16.42	18.3	1.542	0.08	0.340	0.524
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	2	633332	3499.98	16.49	18.3	1.517	0.04	0.349	0.529
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	2	633332	3499.98	16.42	18.3	1.542	0.01	0.338	0.521
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	16.49	18.3	1.517	0.03	0.164	0.249
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	2	633332	3499.98	16.42	18.3	1.542	0.14	0.188	0.290
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	2	633332	3499.98	16.49	18.3	1.517	-0.08	0.148	0.225
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	2	633332	3499.98	16.42	18.3	1.542	0.1	0.179	0.276
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	16.49	16.7	1.050	0.08	0.389	0.408
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	3	633332	3499.98	16.42	16.7	1.067	0.08	0.340	0.363
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	3	633332	3499.98	16.49	16.7	1.050	0.04	0.349	0.366
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	3	633332	3499.98	16.42	16.7	1.067	0.01	0.338	0.361
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	16.49	16.7	1.050	0.03	0.164	0.172
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	3	633332	3499.98	16.42	16.7	1.067	0.14	0.188	0.201
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	3	633332	3499.98	16.49	16.7	1.050	-0.08	0.148	0.155
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	3	633332	3499.98	16.42	16.7	1.067	0.1	0.179	0.191



FCC SAR TEST REPORT

Report No. : FA451607B

FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	17.13	18.20	1.279	0.03	0.171	0.219
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	2	656000	3840	17.05	18.20	1.303	0.18	0.120	0.156
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	2	656000	3840	17.13	18.20	1.279	0.14	0.098	0.125
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	2	656000	3840	17.05	18.20	1.303	-0.17	0.068	0.089
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	17.13	18.20	1.279	-0.07	0.644	0.824
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	2	656000	3840	17.05	18.20	1.303	0.01	0.466	0.607
FR1 n77_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	656000	3840	16.96	18.20	1.330	-0.03	0.454	0.604
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	2	656000	3840	17.13	18.20	1.279	-0.05	0.254	0.325
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	2	656000	3840	17.05	18.20	1.303	0.1	0.179	0.233
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	17.13	17.50	1.089	0.03	0.171	0.186
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	3	656000	3840	17.05	17.50	1.109	0.18	0.120	0.133
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	3	656000	3840	17.13	17.50	1.089	0.14	0.098	0.107
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	3	656000	3840	17.05	17.50	1.109	-0.17	0.068	0.075
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	17.13	17.50	1.089	-0.07	0.644	0.701
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	3	656000	3840	17.05	17.50	1.109	0.01	0.466	0.517
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	3	656000	3840	17.13	17.50	1.089	-0.05	0.254	0.277
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	3	656000	3840	17.05	17.50	1.109	0.1	0.179	0.199
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	16.48	18.20	1.486	0.04	0.109	0.162
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	2	633332	3499.98	16.41	18.20	1.510	0.1	0.077	0.116
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	2	633332	3499.98	16.48	18.20	1.486	0.12	0.055	0.082
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	2	633332	3499.98	16.41	18.20	1.510	0.08	0.041	0.062
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	16.48	18.20	1.486	0.01	0.489	0.727
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	2	633332	3499.98	16.41	18.20	1.510	-0.17	0.465	0.702
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	2	633332	3499.98	16.48	18.20	1.486	0.07	0.199	0.296
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	2	633332	3499.98	16.41	18.20	1.510	0.14	0.189	0.285
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	16.48	17.50	1.265	0.04	0.109	0.138
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	3	633332	3499.98	16.41	17.50	1.285	0.1	0.077	0.099
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	3	633332	3499.98	16.48	17.50	1.265	0.12	0.055	0.070
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	3	633332	3499.98	16.41	17.50	1.285	0.08	0.041	0.053
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	16.48	17.50	1.265	0.01	0.489	0.618
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	3	633332	3499.98	16.41	17.50	1.285	-0.17	0.465	0.598
FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	3	633332	3499.98	16.48	17.50	1.265	0.07	0.199	0.252
FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	3	633332	3499.98	16.41	17.50	1.285	0.14	0.189	0.243

**<WLAN SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	-0.06	0.105	0.136
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	-0.07	0.105	0.136
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	-0.1	0.449	0.584
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	-0.18	0.239	0.311
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	11	2462	13.90	15.00	1.288	99.08	1.009	0.1	0.384	0.499
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.08	0.863	1.143
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	1	2412	13.62	15.00	1.374	99.08	1.009	-0.05	0.519	0.720
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	6	2437	13.72	15.00	1.343	99.08	1.009	-0.04	0.596	0.807
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	11	2462	13.62	15.00	1.374	99.08	1.009	-0.07	0.754	1.045
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	13	2472	13.62	15.00	1.374	99.08	1.009	-0.12	0.658	0.912
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.02	0.153	0.203
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.04	0.265	0.351
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.07	0.058	0.077
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.07	0.783	1.037
19	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	1	2412	14.60	15.00	1.096	93.19	1.073	-0.13	0.113	0.133
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	1	2412	13.72	15.00	1.343	93.19	1.073	-0.13	0.556	0.801
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	6	2437	14.50	15.00	1.122	93.19	1.073	-0.05	0.152	0.183
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	6	2437	13.32	15.00	1.472	93.19	1.073	-0.05	0.741	1.171
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	11	2462	14.50	15.00	1.122	93.19	1.073	0.07	0.183	0.220
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	11	2462	13.72	15.00	1.343	93.19	1.073	0.07	0.685	0.987
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3 (4)	1	1	2412	14.60	15.00	1.096	93.19	1.073	0.05	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3 (3)	1	1	2412	13.72	15.00	1.343	93.19	1.073	0.05	0.198	0.285
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3 (4)	1	1	2412	14.60	15.00	1.096	93.19	1.073	-0.06	0.379	0.446
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3 (3)	1	1	2412	13.72	15.00	1.343	93.19	1.073	-0.06	0.242	0.349
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3 (4)	1	1	2412	14.60	15.00	1.096	93.19	1.073	-0.18	0.283	0.333
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3 (3)	1	1	2412	13.72	15.00	1.343	93.19	1.073	-0.18	0.161	0.232
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	6	2437	14.50	15.00	1.122	93.19	1.073	-0.12	0.136	0.164
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	6	2437	13.32	15.00	1.472	93.19	1.073	-0.12	0.632	0.998
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	-0.11	0.027	0.028
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	-0.1	0.027	0.028
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	-0.18	0.122	0.126
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	-0.15	0.107	0.110
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	3	1	2412	9.90	10.00	1.023	99.08	1.009	0.1	0.117	0.121
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	-0.14	0.269	0.283
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	-0.03	0.046	0.048
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	-0.06	0.110	0.116
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	0.07	0.041	0.043
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	3/4	6	2437	9.82	10.00	1.042	99.08	1.009	-0.07	0.255	0.268
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	0.01	0.056	0.061
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	0.01	0.250	0.336
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	0.03	0.065	0.071
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	0.03	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	-0.03	0.128	0.141
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	-0.03	0.068	0.091
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	-0.08	0.100	0.110
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	-0.08	0.014	0.019
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	3	6	2437	9.90	10.00	1.023	93.19	1.073	-0.07	0.050	0.055
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	3	6	2437	9.02	10.00	1.253	93.19	1.073	-0.07	0.202	0.272

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)
20	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	54	5270	13.30	13.50	1.047	92.7	1.079	-0.04	0.335	0.379
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	54	5270	12.93	13.50	1.140	92.7	1.079	-0.04	0.846	1.041
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	62	5310	10.60	11.50	1.230	92.7	1.079	0.01	0.143	0.190
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	62	5310	10.53	11.50	1.250	92.7	1.079	0.01	0.591	0.797
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	64	5320	13.50	13.50	1.000	93.46	1.070	0.04	0.270	0.289
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	64	5320	12.73	13.50	1.194	93.46	1.070	0.04	0.895	1.143
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3 (4)	1	54	5270	13.30	13.50	1.047	92.7	1.079	0.07	0.363	0.410
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3 (3)	1	54	5270	12.93	13.50	1.140	92.7	1.079	0.07	0.447	0.550
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	54	5270	13.30	13.50	1.047	92.7	1.079	0.19	0.753	0.851
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	54	5270	12.93	13.50	1.140	92.7	1.079	0.19	0.146	0.180
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	54	5270	13.30	13.50	1.047	92.7	1.079	-0.08	0.604	0.682
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	54	5270	12.93	13.50	1.140	92.7	1.079	-0.08	0.139	0.171
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (4)	1	64	5320	13.50	13.50	1.000	93.46	1.070	-0.02	0.305	0.326
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3 (3)	1	64	5320	12.73	13.50	1.194	93.46	1.070	-0.02	0.848	1.083
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	0.12	0.375	0.454
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	0.15	0.329	0.398
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	-0.04	0.883	1.069
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	62	5310	10.90	11.50	1.148	92.7	1.079	0.02	0.389	0.482
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4	2	60	5300	13.70	14.00	1.072	93.46	1.070	0.01	0.901	1.033
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	0.11	0.686	0.831
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4	2	62	5310	10.90	11.50	1.148	92.7	1.079	-0.07	0.355	0.440
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4	2	60	5300	13.70	14.00	1.072	93.46	1.070	-0.18	0.685	0.785
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	54	5270	13.50	14.00	1.122	92.7	1.079	0.07	0.739	0.895
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	0.05	0.143	0.196
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	0.05	0.388	0.438
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	-0.01	0.147	0.201
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	-0.01	0.106	0.120
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	0.01	0.260	0.356
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	0.01	0.046	0.052
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	-0.09	0.310	0.424
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	-0.09	0.026	0.029
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	58	5290	9.60	10.50	1.230	89.9	1.112	0.11	0.155	0.212
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	58	5290	10.43	10.50	1.016	89.9	1.112	0.11	0.288	0.325
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	0.05	0.125	0.149
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	-0.16	0.131	0.156
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	0.03	0.340	0.405
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	-0.09	0.211	0.251
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	58	5290	11.20	11.50	1.072	89.9	1.112	-0.03	0.297	0.354



FCC SAR TEST REPORT

Report No. : FA451607B

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	122	5610	13.50	13.50	1.000	89.9	1.112	0.06	0.521	0.579
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	122	5610	13.33	13.50	1.040	89.9	1.112	0.06	0.771	0.892
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	106	5530	11.30	11.50	1.047	89.9	1.112	0.05	0.205	0.239
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	106	5530	10.63	11.50	1.222	89.9	1.112	0.05	0.328	0.446
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	138	5690	13.50	13.50	1.000	89.9	1.112	-0.02	0.401	0.446
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	138	5690	12.93	13.50	1.140	89.9	1.112	-0.02	0.882	1.118
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	1	122	5610	13.50	13.50	1.000	89.9	1.112	0.01	0.527	0.586
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	1	122	5610	13.33	13.50	1.040	89.9	1.112	0.01	0.525	0.607
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	122	5610	13.50	13.50	1.000	89.9	1.112	0.01	0.938	1.043
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	122	5610	13.33	13.50	1.040	89.9	1.112	0.01	0.318	0.368
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	106	5530	11.30	11.50	1.047	89.9	1.112	0.01	0.432	0.503
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	106	5530	10.63	11.50	1.222	89.9	1.112	0.01	0.126	0.171
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	138	5690	13.50	13.50	1.000	89.9	1.112	0.07	0.926	1.030
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	138	5690	12.93	13.50	1.140	89.9	1.112	0.07	0.354	0.449
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	122	5610	13.50	13.50	1.000	89.9	1.112	0.01	0.845	0.940
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	122	5610	13.33	13.50	1.040	89.9	1.112	0.01	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	106	5530	11.30	11.50	1.047	89.9	1.112	0.16	0.296	0.345
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	106	5530	10.63	11.50	1.222	89.9	1.112	0.16	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	138	5690	13.50	13.50	1.000	89.9	1.112	-0.02	0.899	1.000
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	138	5690	12.93	13.50	1.140	89.9	1.112	-0.02	0.093	0.118
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	138	5690	13.50	13.50	1.000	89.9	1.112	0.05	0.489	0.544
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	138	5690	12.93	13.50	1.140	89.9	1.112	0.05	0.868	1.101
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	138	5690	13.90	14.00	1.023	89.9	1.112	-0.09	0.514	0.585
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	138	5690	13.90	14.00	1.023	89.9	1.112	0.1	0.502	0.571
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	138	5690	13.90	14.00	1.023	89.9	1.112	0.01	0.934	1.063
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	106	5530	11.30	11.50	1.047	89.9	1.112	-0.09	0.380	0.442
21	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	0.04	0.966	1.125
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	138	5690	13.90	14.00	1.023	89.9	1.112	-0.17	0.838	0.954
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	106	5530	11.30	11.50	1.047	89.9	1.112	-0.07	0.346	0.403
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	-0.12	0.805	0.937
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	-0.01	0.952	1.109
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	106	5530	9.40	9.50	1.023	89.9	1.112	0.05	0.131	0.149
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	106	5530	9.33	9.50	1.040	89.9	1.112	0.05	0.232	0.268
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	3	106	5530	9.40	9.50	1.023	89.9	1.112	0.07	0.131	0.149
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	3	106	5530	9.33	9.50	1.040	89.9	1.112	0.07	0.132	0.153
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	3	106	5530	9.40	9.50	1.023	89.9	1.112	0.09	0.205	0.233
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	3	106	5530	9.33	9.50	1.040	89.9	1.112	0.09	0.038	0.044
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	3	106	5530	9.40	9.50	1.023	89.9	1.112	0.1	0.232	0.264
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	3	106	5530	9.33	9.50	1.040	89.9	1.112	0.1	0.059	0.068
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	106	5530	9.50	9.50	1.000	89.9	1.112	0.07	0.149	0.166
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	106	5530	9.10	9.50	1.096	89.9	1.112	0.07	0.154	0.188
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	0.1	0.159	0.185
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	0.11	0.165	0.192
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	0.06	0.331	0.385
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	-0.18	0.289	0.337
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	106	5530	9.80	10.00	1.047	89.9	1.112	0.05	0.280	0.326



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)
22	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	155	5775	12.90	13.50	1.148	89.9	1.112	-0.16	0.305	0.389
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	155	5775	12.13	13.50	1.371	89.9	1.112	-0.16	0.743	1.133
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	151	5755	12.90	13.50	1.148	92.7	1.079	0.19	0.298	0.369
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	151	5755	11.83	13.50	1.469	92.7	1.079	0.19	0.722	1.144
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	1	155	5775	12.90	13.50	1.148	89.9	1.112	-0.16	0.287	0.366
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	1	155	5775	12.13	13.50	1.371	89.9	1.112	-0.16	0.394	0.601
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	155	5775	12.90	13.50	1.148	89.9	1.112	0.02	0.504	0.643
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	155	5775	12.13	13.50	1.371	89.9	1.112	0.02	0.246	0.375
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	155	5775	12.90	13.50	1.148	89.9	1.112	0.12	0.454	0.580
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	155	5775	12.13	13.50	1.371	89.9	1.112	0.12	0.237	0.361
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	151	5755	12.90	13.50	1.148	92.7	1.079	-0.12	0.251	0.311
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	151	5755	11.83	13.50	1.469	92.7	1.079	-0.12	0.532	0.843
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	0.19	0.298	0.490
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	0.1	0.302	0.497
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	0.07	0.623	1.025
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	159	5795	12.90	14.50	1.445	92.7	1.079	-0.03	0.583	0.909
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	-0.04	0.528	0.615
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	155	5775	12.80	14.50	1.479	89.9	1.112	-0.14	0.492	0.809
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	0.04	0.101	0.123
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	0.04	0.232	0.301
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	0.08	0.120	0.146
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	0.08	0.143	0.186
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	0.03	0.132	0.161
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	0.03	0.031	0.040
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	-0.13	0.182	0.222
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	-0.13	0.068	0.088
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	155	5775	8.60	9.00	1.096	89.9	1.112	0.04	0.117	0.143
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	155	5775	8.33	9.00	1.167	89.9	1.112	0.04	0.231	0.300
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	0.1	0.150	0.179
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	-0.16	0.157	0.187
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	0.18	0.265	0.316
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	0.16	0.238	0.284
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	155	5775	10.20	10.50	1.072	89.9	1.112	-0.13	0.238	0.284



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)
23	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	-0.02	0.391	0.445
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	-0.02	0.856	1.176
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	167	5835	13.20	13.50	1.072	92.7	1.079	0.09	0.388	0.449
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	167	5835	12.83	13.50	1.167	92.7	1.079	0.09	0.819	1.031
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	-0.02	0.460	0.523
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	-0.02	0.515	0.708
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	0.18	0.936	1.065
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	0.18	0.156	0.214
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	167	5835	13.20	13.50	1.072	92.7	1.079	0.1	0.714	0.826
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	167	5835	12.83	13.50	1.167	92.7	1.079	0.1	0.148	0.186
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	-0.07	0.816	0.929
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	-0.07	0.228	0.313
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1	167	5835	13.20	13.50	1.072	89.9	1.112	0.16	0.778	0.927
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1	167	5835	12.83	13.50	1.167	89.9	1.112	0.16	0.189	0.245
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	-0.04	0.457	0.520
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	-0.04	0.820	1.127
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	2	171	5855	13.30	14.50	1.318	89.9	1.112	-0.06	0.440	0.645
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	2	171	5855	13.30	14.50	1.318	89.9	1.112	0.05	0.435	0.638
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	171	5855	13.30	14.50	1.318	89.9	1.112	0.12	0.765	1.121
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	167	5835	13.10	14.50	1.380	92.7	1.079	-0.1	0.757	1.128
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	2	171	5855	13.30	14.50	1.318	89.9	1.112	0.02	0.740	1.085
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4	2	167	5835	13.10	14.50	1.380	92.7	1.079	0.03	0.712	1.060
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4	2	167	5835	13.10	14.50	1.380	92.7	1.079	0.03	0.673	1.002
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	-0.09	0.119	0.134
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	-0.09	0.249	0.326
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	-0.14	0.108	0.121
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	-0.14	0.150	0.196
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	-0.05	0.192	0.216
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	-0.05	0.100	0.131
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	0.03	0.184	0.207
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	0.03	0.094	0.123
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	3	171	5855	9.45	9.50	1.012	89.9	1.112	0.03	0.150	0.169
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	3	171	5855	8.79	9.50	1.178	89.9	1.112	0.03	0.239	0.313
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	0.14	0.158	0.195
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	-0.11	0.164	0.202
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	0.18	0.272	0.335
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	0.05	0.261	0.322
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	4	171	5855	10.55	11.00	1.109	89.9	1.112	0.13	0.261	0.322



FCC SAR TEST REPORT

Report No. : FA451607B

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)	Measured APD (W/m^2)	Reported APD (W/m^2)
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	215	7025	14.18	14.50	1.076	88.24	1.133	-0.02	0.198	0.241	1.240	1.512
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	215	7025	13.47	14.50	1.268	88.24	1.133	-0.02	0.302	0.434	2.000	2.872
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	7	5985	10.55	11.50	1.245	88.24	1.133	0.04	0.084	0.118	0.447	0.630
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	7	5985	10.10	11.50	1.380	88.24	1.133	0.04	0.266	0.416	1.670	2.612
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	71	6305	10.95	11.50	1.135	88.24	1.133	-0.04	0.155	0.199	1.050	1.350
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	71	6305	10.70	11.50	1.202	88.24	1.133	-0.04	0.125	0.170	0.832	1.133
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	119	6545	12.45	13.50	1.274	88.24	1.133	-0.14	0.295	0.426	2.040	2.943
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	119	6545	11.57	13.50	1.560	88.24	1.133	-0.14	0.245	0.433	1.480	2.615
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	167	6785	13.95	14.50	1.135	88.24	1.133	-0.1	0.324	0.417	1.900	2.443
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	167	6785	13.17	14.50	1.358	88.24	1.133	-0.1	0.210	0.323	1.390	2.139
	WLAN6GHz	802.11ax-HE80 MCS0	Right Tilted	0mm	Ant 4+3 (4)	1/3	215	7025	14.18	14.50	1.076	88.24	1.133	0.13	0.161	0.196	1.000	1.220
	WLAN6GHz	802.11ax-HE80 MCS0	Right Tilted	0mm	Ant 4+3 (3)	1/3	215	7025	13.47	14.50	1.268	88.24	1.133	0.01	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1/3	215	7025	14.18	14.50	1.076	88.24	1.133	0.13	0.280	0.341	1.950	2.378
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1/3	215	7025	13.47	14.50	1.268	88.24	1.133	0.13	0.203	0.292	1.290	1.853
	WLAN6GHz	802.11ax-HE80 MCS0	Left Tilted	0mm	Ant 4+3 (4)	1/3	215	7025	14.18	14.50	1.076	88.24	1.133	0.14	0.246	0.300	1.630	1.988
	WLAN6GHz	802.11ax-HE80 MCS0	Left Tilted	0mm	Ant 4+3 (3)	1/3	215	7025	13.47	14.50	1.268	88.24	1.133	0.14	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (4)	1/3	215	7025	14.00	14.50	1.122	88.24	1.133	-0.11	0.134	0.170	0.783	0.995
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3 (3)	1/3	215	7025	13.30	14.50	1.318	88.24	1.133	-0.11	0.205	0.306	1.080	1.613
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4	2	215	7025	14.48	14.50	1.005	88.24	1.133	0.01	0.105	0.120	0.552	0.628
	WLAN6GHz	802.11ax-HE80 MCS0	Right Tilted	0mm	Ant 4	2	215	7025	14.48	14.50	1.005	88.24	1.133	0.16	0.108	0.123	0.568	0.647
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	215	7025	14.48	14.50	1.005	88.24	1.133	-0.09	0.209	0.238	1.230	1.400
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	7	5985	12.25	12.50	1.059	88.24	1.133	0.12	0.561	0.673	3.650	4.380
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	71	6305	12.45	12.50	1.012	88.24	1.133	0.01	0.410	0.470	2.670	3.060
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	119	6545	12.75	13.50	1.189	88.24	1.133	0.01	0.650	0.875	4.000	5.386
24	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	167	6785	14.48	14.50	1.005	88.24	1.133	-0.1	0.988	1.125	5.860	6.670
	WLAN6GHz	802.11ax-HE80 MCS0	Left Tilted	0mm	Ant 4	2	215	7025	14.48	14.50	1.005	88.24	1.133	0.01	0.156	0.178	0.894	1.018
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	167	6785	14.48	14.50	1.005	88.24	1.133	-0.11	0.866	0.986	5.320	6.055
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4	4	215	7025	14.48	14.50	1.005	88.24	1.133	0.01	0.105	0.120	0.552	0.628
	WLAN6GHz	802.11ax-HE80 MCS0	Right Tilted	0mm	Ant 4	4	215	7025	14.48	14.50	1.005	88.24	1.133	0.16	0.108	0.123	0.568	0.647
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	215	7025	14.48	14.50	1.005	88.24	1.133	-0.09	0.209	0.238	1.230	1.400
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	7	5985	9.75	10.50	1.189	88.24	1.133	0.14	0.293	0.395	2.200	2.962
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	71	6305	9.85	10.50	1.161	88.24	1.133	0.05	0.217	0.286	1.330	1.750
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	119	6545	10.51	12.50	1.581	88.24	1.133	0.08	0.213	0.382	1.490	2.669
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	167	6785	9.65	11.50	1.531	88.24	1.133	0.17	0.233	0.404	1.580	2.741
	WLAN6GHz	802.11ax-HE80 MCS0	Left Tilted	0mm	Ant 4	4	215	7025	14.48	14.50	1.005	88.24	1.133	0.01	0.156	0.178	0.894	1.018
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	4	167	6785	9.65	11.50	1.531	88.24	1.133	-0.03	0.227	0.394	1.520	2.637

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	0.19	0.034	0.038
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	0.04	0.031	0.035
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	1	39	2441	9.30	9.50	1.047	77.13	1.080	-0.12	0.030	0.034
25	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	-0.09	0.202	0.238
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	-0.14	0.031	0.037
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	-0.08	0.074	0.087
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	0.08	0.025	0.029
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	9.12	9.50	1.091	77.13	1.080	0.07	0.157	0.185

15.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	4	189	836.4	28.16	29.20	1.271	-0.02	0.338	0.429
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	189	836.4	28.16	29.20	1.271	-0.02	0.351	0.446
26	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	189	836.4	28.16	29.20	1.271	-0.05	0.454	0.577
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	4	189	836.4	28.16	29.20	1.271	-0.08	0.232	0.295
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	4	189	836.4	28.16	29.20	1.271	-0.04	0.272	0.346
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	4	189	836.4	25.49	26.20	1.178	-0.02	0.263	0.310
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	4	189	836.4	25.49	26.20	1.178	0.11	0.363	0.427
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	4	189	836.4	25.49	26.20	1.178	0.19	0.113	0.133
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	4	189	836.4	25.49	26.20	1.178	0.06	0.097	0.114
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	4	189	836.4	25.49	26.20	1.178	0	0.187	0.220
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	4	661	1880	24.24	25.80	1.432	-0.01	0.344	0.493
27	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.24	25.80	1.432	-0.14	0.516	0.739
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	4	661	1880	24.24	25.80	1.432	0.05	0.001	0.001
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	4	661	1880	24.24	25.80	1.432	-0.08	0.479	0.686
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	4	661	1880	24.24	25.80	1.432	0.03	0.217	0.311
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	4	661	1880	24.75	25.50	1.189	-0.18	0.256	0.304
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.75	25.50	1.189	-0.03	0.379	0.450
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	661	1880	24.75	25.50	1.189	0.12	0.326	0.387
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	4	661	1880	24.75	25.50	1.189	0.08	0.001	0.001
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	4	661	1880	24.75	25.50	1.189	-0.17	0.251	0.298

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	4	9262	1852.4	20.57	21.70	1.297	-0.16	0.391	0.507
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	4	9262	1852.4	20.57	21.70	1.297	-0.14	0.465	0.603
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	4	9262	1852.4	20.57	21.70	1.297	0.06	0.001	0.001
28	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	9262	1852.4	20.57	21.70	1.297	0	0.484	0.628
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	4	9262	1852.4	20.57	21.70	1.297	-0.09	0.239	0.310
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	4	9400	1880	22.49	23.10	1.151	0.08	0.245	0.282
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	4	9400	1880	22.49	23.10	1.151	0.09	0.390	0.449
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	9400	1880	22.49	23.10	1.151	0.03	0.299	0.344
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	4	9400	1880	22.49	23.10	1.151	-0.08	0.024	0.028
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	9400	1880	22.49	23.10	1.151	-0.08	0.388	0.447
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	4	1312	1712.4	20.98	22.40	1.387	-0.09	0.337	0.467
29	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	4	1312	1712.4	20.98	22.40	1.387	-0.12	0.412	0.571
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	4	1312	1712.4	20.98	22.40	1.387	0.08	0.038	0.053
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	1312	1712.4	20.98	22.40	1.387	-0.04	0.349	0.484
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	4	1312	1712.4	20.98	22.40	1.387	-0.17	0.215	0.298
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	4	1413	1732.6	24.06	24.30	1.057	0.05	0.384	0.406
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	4	1413	1732.6	24.06	24.30	1.057	-0.08	0.430	0.454
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	1413	1732.6	24.06	24.30	1.057	-0.05	0.364	0.385
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	4	1413	1732.6	24.06	24.30	1.057	0.08	0.065	0.069
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	1413	1732.6	24.06	24.30	1.057	-0.02	0.488	0.516
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	4	4182	836.4	24.77	25.50	1.183	-0.04	0.378	0.447
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	4	4182	836.4	24.77	25.50	1.183	-0.03	0.384	0.454
30	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	4182	836.4	24.77	25.50	1.183	0	0.539	0.638
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	4	4182	836.4	24.77	25.50	1.183	0.15	0.264	0.312
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	4182	836.4	24.77	25.50	1.183	-0.08	0.341	0.403
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	4	4182	836.4	20.65	22.50	1.531	0.08	0.150	0.230
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4182	836.4	20.65	22.50	1.531	0	0.232	0.355
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	4	4182	836.4	20.65	22.50	1.531	0.03	0.054	0.083
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	4	4182	836.4	20.65	22.50	1.531	-0.08	0.058	0.089
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	4	4182	836.4	20.65	22.50	1.531	-0.08	0.113	0.173



<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
31	LTE Band 2_Ant 2	20M	QPSK	1	0	Front	10mm	4	18900	1880	20.65	21.90	1.334	-0.05	0.494	0.659
	LTE Band 2_Ant 2	20M	QPSK	50	0	Front	10mm	4	18900	1880	20.64	21.90	1.337	-0.17	0.474	0.634
	LTE Band 2_Ant 2	20M	QPSK	1	0	Back	10mm	4	18900	1880	20.65	21.90	1.334	-0.15	0.531	0.708
	LTE Band 2_Ant 2	20M	QPSK	50	0	Back	10mm	4	18900	1880	20.64	21.90	1.337	0.18	0.511	0.683
	LTE Band 2_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	18900	1880	20.65	21.90	1.334	0.17	0.041	0.055
	LTE Band 2_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	18900	1880	20.64	21.90	1.337	-0.05	0.039	0.052
	LTE Band 2_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	18900	1880	20.65	21.90	1.334	-0.02	0.487	0.649
	LTE Band 2_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	18900	1880	20.64	21.90	1.337	-0.17	0.452	0.604
	LTE Band 2_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	18900	1880	20.65	21.90	1.334	-0.08	0.228	0.304
	LTE Band 2_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	18900	1880	20.64	21.90	1.337	0.05	0.240	0.321
	LTE Band 2_Ant 0	20M	QPSK	1	0	Front	10mm	4	18900	1880	20.99	22.00	1.262	0.08	0.218	0.275
	LTE Band 2_Ant 0	20M	QPSK	50	0	Front	10mm	4	18900	1880	21.03	22.00	1.250	0.01	0.219	0.274
	LTE Band 2_Ant 0	20M	QPSK	1	0	Back	10mm	4	18900	1880	20.99	22.00	1.262	-0.01	0.301	0.380
	LTE Band 2_Ant 0	20M	QPSK	50	0	Back	10mm	4	18900	1880	21.03	22.00	1.250	-0.08	0.298	0.373
	LTE Band 2_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	18900	1880	20.99	22.00	1.262	-0.08	0.231	0.291
	LTE Band 2_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	18900	1880	21.03	22.00	1.250	0.1	0.232	0.290
	LTE Band 2_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	18900	1880	20.99	22.00	1.262	-0.18	0.037	0.047
	LTE Band 2_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	18900	1880	21.03	22.00	1.250	0.1	0.036	0.045
32	LTE Band 2_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	18900	1880	20.99	22.00	1.262	0.12	0.291	0.367
	LTE Band 2_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	18900	1880	21.03	22.00	1.250	0.08	0.292	0.365
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	4	21100	2535	19.82	21.30	1.406	-0.01	0.370	0.520
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	4	21100	2535	19.91	21.30	1.377	0.08	0.364	0.501
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	4	21100	2535	19.82	21.30	1.406	-0.05	0.462	0.650
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	4	21100	2535	19.91	21.30	1.377	-0.08	0.469	0.646
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	21100	2535	19.82	21.30	1.406	0.12	0.041	0.058
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	21100	2535	19.91	21.30	1.377	0.08	0.038	0.052
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	21100	2535	19.82	21.30	1.406	-0.17	0.574	0.807
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	20850	2510	19.77	21.30	1.422	-0.03	0.548	0.779
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	21350	2560	19.72	21.30	1.439	-0.03	0.574	0.826
	LTE ULCA_7C_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	21350+21152	2560	18.98	19.30	1.076	0.08	0.490	0.527
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	21100	2535	19.91	21.30	1.377	0.14	0.566	0.780
	LTE Band 7_Ant 2	20M	QPSK	100	0	Right Side	10mm	4	21100	2535	19.87	21.30	1.390	0.18	0.556	0.773
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	21100	2535	19.82	21.30	1.406	-0.08	0.397	0.558
	LTE Band 7_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	21100	2535	19.91	21.30	1.377	0.1	0.366	0.504
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	4	21100	2535	20.19	21.00	1.205	0.08	0.337	0.406
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	4	21100	2535	20.20	21.00	1.202	0.01	0.319	0.384
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	4	21100	2535	20.19	21.00	1.205	-0.18	0.320	0.386
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	4	21100	2535	20.20	21.00	1.202	-0.08	0.320	0.385
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	21100	2535	20.19	21.00	1.205	0.04	0.364	0.439
	LTE ULCA_7C_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	21100+20902	2535	18.91	19.50	1.146	-0.17	0.330	0.378
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	21100	2535	20.20	21.00	1.202	0.1	0.357	0.429
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	21100	2535	20.19	21.00	1.205	-0.18	0.030	0.036
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	21100	2535	20.20	21.00	1.202	0.1	0.030	0.036
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	21100	2535	20.19	21.00	1.205	0.12	0.095	0.114
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	21100	2535	20.20	21.00	1.202	0.08	0.096	0.115



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	4	23095	707.5	24.66	25.70	1.271	0.01	0.261	0.332
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	4	23095	707.5	23.81	24.70	1.227	0.1	0.213	0.261
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	4	23095	707.5	24.66	25.70	1.271	0.01	0.289	0.367
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	4	23095	707.5	23.81	24.70	1.227	-0.17	0.224	0.275
33	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	4	23095	707.5	24.66	25.70	1.271	0.01	0.359	0.456
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Side	10mm	4	23095	707.5	23.81	24.70	1.227	0.04	0.340	0.417
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	4	23095	707.5	24.66	25.70	1.271	0	0.208	0.264
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Side	10mm	4	23095	707.5	23.81	24.70	1.227	0.05	0.173	0.212
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	4	23095	707.5	24.66	25.70	1.271	-0.01	0.133	0.169
	LTE Band 12_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	4	23095	707.5	23.81	24.70	1.227	-0.08	0.110	0.135
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	4	23095	707.5	23.72	25.10	1.374	0	0.227	0.312
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	4	23095	707.5	22.80	24.20	1.380	0.11	0.183	0.253
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	4	23095	707.5	23.72	25.10	1.374	0	0.325	0.447
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	4	23095	707.5	22.80	24.20	1.380	-0.05	0.257	0.355
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	4	23095	707.5	23.72	25.10	1.374	-0.02	0.272	0.374
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Side	10mm	4	23095	707.5	22.80	24.20	1.380	0.18	0.199	0.275
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Side	10mm	4	23095	707.5	23.72	25.10	1.374	0.14	0.190	0.261
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Side	10mm	4	23095	707.5	22.80	24.20	1.380	-0.17	0.153	0.211
	LTE Band 12_Ant 1	10M	QPSK	1	0	Top Side	10mm	4	23095	707.5	23.72	25.10	1.374	0.17	0.173	0.238
	LTE Band 12_Ant 1	10M	QPSK	25	0	Top Side	10mm	4	23095	707.5	22.80	24.20	1.380	-0.05	0.209	0.289
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	4	26865	831.5	24.67	25.50	1.211	-0.01	0.333	0.403
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	4	26865	831.5	23.77	24.70	1.239	-0.17	0.268	0.332
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	4	26865	831.5	24.67	25.50	1.211	0.01	0.348	0.421
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	4	26865	831.5	23.77	24.70	1.239	-0.03	0.294	0.364
34	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	4	26865	831.5	24.67	25.50	1.211	0	0.536	0.649
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Side	10mm	4	26865	831.5	23.77	24.70	1.239	0.14	0.437	0.541
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	4	26865	831.5	24.67	25.50	1.211	0.11	0.246	0.298
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Side	10mm	4	26865	831.5	23.77	24.70	1.239	-0.05	0.213	0.264
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	4	26865	831.5	24.67	25.50	1.211	-0.01	0.315	0.381
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	10mm	4	26865	831.5	23.77	24.70	1.239	0.14	0.276	0.342
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	4	26865	831.5	21.81	22.70	1.227	0.08	0.213	0.261
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	4	26865	831.5	21.85	22.70	1.216	0.01	0.197	0.240
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	4	26865	831.5	21.81	22.70	1.227	0.03	0.314	0.385
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	4	26865	831.5	21.85	22.70	1.216	0.03	0.298	0.362
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	4	26865	831.5	21.81	22.70	1.227	-0.08	0.111	0.136
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Side	10mm	4	26865	831.5	21.85	22.70	1.216	-0.08	0.103	0.125
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Side	10mm	4	26865	831.5	21.81	22.70	1.227	0.1	0.096	0.118
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Side	10mm	4	26865	831.5	21.85	22.70	1.216	-0.18	0.085	0.103
	LTE Band 26_Ant 1	15M	QPSK	1	0	Top Side	10mm	4	26865	831.5	21.81	22.70	1.227	0.1	0.162	0.199
	LTE Band 26_Ant 1	15M	QPSK	36	0	Top Side	10mm	4	26865	831.5	21.85	22.70	1.216	0.12	0.152	0.185



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	4	40185	2549.5	22.40	23.30	1.230	62.9	1.006	0.02	0.406	0.502
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	4	40185	2549.5	22.45	23.30	1.216	62.9	1.006	-0.08	0.390	0.477
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	40185	2549.5	22.40	23.30	1.230	62.9	1.006	0.02	0.499	0.618
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	39750	2506	22.26	23.30	1.271	62.9	1.006	0.16	0.477	0.610
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	40620	2593	22.22	23.30	1.282	62.9	1.006	0.13	0.462	0.596
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	41055	2636.5	22.31	23.30	1.256	62.9	1.006	-0.18	0.430	0.543
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	41490	2680	22.39	23.30	1.233	62.9	1.006	0.02	0.352	0.437
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	4	40185	2549.5	22.45	23.30	1.216	62.9	1.006	-0.04	0.522	0.639
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	4	39750	2506	22.28	23.30	1.265	62.9	1.006	-0.02	0.500	0.636
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	4	40620	2593	22.21	23.30	1.285	62.9	1.006	-0.03	0.456	0.590
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	4	41055	2636.5	22.34	23.30	1.247	62.9	1.006	-0.03	0.431	0.541
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	4	41490	2680	22.44	23.30	1.219	62.9	1.006	0.08	0.346	0.424
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	40185	2549.5	22.40	23.30	1.230	62.9	1.006	0.05	0.048	0.059
	LTE Band 41_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	40185	2549.5	22.45	23.30	1.216	62.9	1.006	-0.11	0.045	0.055
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40185	2549.5	22.40	23.30	1.230	62.9	1.006	-0.12	0.634	0.785
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	39750	2506	22.26	23.30	1.271	62.9	1.006	-0.16	0.618	0.790
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40620	2593	22.22	23.30	1.282	62.9	1.006	-0.02	0.616	0.795
35	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41055	2636.5	22.31	23.30	1.256	62.9	1.006	-0.13	0.651	0.823
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41490	2680	22.39	23.30	1.233	62.9	1.006	-0.15	0.603	0.748
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	40185	2549.5	22.45	23.30	1.216	62.9	1.006	-0.15	0.591	0.723
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	39750	2506	22.28	23.30	1.265	62.9	1.006	-0.08	0.594	0.756
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	40620	2593	22.21	23.30	1.285	62.9	1.006	-0.17	0.593	0.767
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	41055	2636.5	22.34	23.30	1.247	62.9	1.006	-0.08	0.649	0.814
	LTE Band 41_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	41490	2680	22.44	23.30	1.219	62.9	1.006	-0.04	0.620	0.760
	LTE Band 41_Ant 2	20M	QPSK	100	0	Right Side	10mm	4	40185	2549.5	22.42	23.30	1.225	62.9	1.006	-0.08	0.584	0.719
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	40185	2549.5	22.40	23.30	1.230	62.9	1.006	-0.02	0.489	0.605
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	39750	2506	22.26	23.30	1.271	62.9	1.006	-0.04	0.470	0.601
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	40620	2593	22.22	23.30	1.282	62.9	1.006	-0.08	0.425	0.548
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	41055	2636.5	22.31	23.30	1.256	62.9	1.006	-0.13	0.385	0.486
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	41490	2680	22.39	23.30	1.233	62.9	1.006	-0.13	0.311	0.386
	LTE Band 41_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	40185	2549.5	22.45	23.30	1.216	62.9	1.006	0.06	0.472	0.577
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40185	2549.5	23.87	24.90	1.268	42.9	1.009	0.01	0.527	0.674
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	39750	2506	23.70	24.90	1.318	42.9	1.009	0.19	0.506	0.673
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40620	2593	23.70	24.90	1.318	42.9	1.009	0.07	0.490	0.652
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41055	2636.5	23.75	24.90	1.303	42.9	1.009	-0.18	0.561	0.738
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41490	2680	23.86	24.90	1.271	42.9	1.009	0.03	0.475	0.609
	LTE ULCA_41C_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41490+41292	2680	21.24	21.30	1.014	62.9	1.006	0.03	0.374	0.381
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	4	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.08	0.312	0.392
	LTE Band 41_Ant 0	20M	QPSK	50	0	Front	10mm	4	41055	2636.5	22.61	23.60	1.256	62.9	1.006	0.01	0.307	0.388
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	4	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.03	0.360	0.453
	LTE Band 41_Ant 0	20M	QPSK	50	0	Back	10mm	4	41055	2636.5	22.61	23.60	1.256	62.9	1.006	0.03	0.313	0.395
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	41055	2636.5	22.63	23.60	1.250	62.9	1.006	-0.08	0.315	0.396
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	41055	2636.5	22.61	23.60	1.256	62.9	1.006	0.10	0.330	0.417
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	41055	2636.5	22.63	23.60	1.250	62.9	1.006	-0.18	0.020	0.025
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	41055	2636.5	22.61	23.60	1.256	62.9	1.006	0.10	0.001	0.001
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.12	0.077	0.097
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	41055	2636.5	22.61	23.60	1.256	62.9	1.006	0.08	0.079	0.100
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	4	41055	2636.5	24.58	25.20	1.153	42.9	1.009	-0.17	0.349	0.406
	LTE ULCA_41C_Ant 0	20M	QPSK	1	0	Back	10mm	4	41490+41292	2680	20.44	21.60	1.306	62.9	1.006	-0.03	0.199	0.261



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	4	132322	1745	20.85	22.10	1.334	0.08	0.370	0.493
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	4	132322	1745	20.93	22.10	1.309	-0.11	0.392	0.513
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	4	132322	1745	20.85	22.10	1.334	0.01	0.426	0.568
36	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	4	132322	1745	20.93	22.10	1.309	-0.12	0.441	0.577
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	132322	1745	20.85	22.10	1.334	0.03	0.054	0.072
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	132322	1745	20.93	22.10	1.309	-0.08	0.044	0.058
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	132322	1745	20.85	22.10	1.334	-0.08	0.415	0.553
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	132322	1745	20.93	22.10	1.309	-0.02	0.430	0.563
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	132322	1745	20.85	22.10	1.334	0.1	0.217	0.289
	LTE Band 66_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	132322	1745	20.93	22.10	1.309	-0.18	0.228	0.298
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	4	132322	1745	22.76	23.70	1.242	0.04	0.334	0.415
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	4	132322	1745	22.82	23.70	1.225	-0.03	0.337	0.413
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	4	132322	1745	22.76	23.70	1.242	0.02	0.364	0.452
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	4	132322	1745	22.82	23.70	1.225	0.11	0.357	0.437
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	132322	1745	22.76	23.70	1.242	-0.05	0.317	0.394
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	132322	1745	22.82	23.70	1.225	0.18	0.310	0.380
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	132322	1745	22.76	23.70	1.242	0.14	0.053	0.066
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	132322	1745	22.82	23.70	1.225	-0.17	0.052	0.064
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	132322	1745	22.76	23.70	1.242	0.17	0.363	0.451
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	132322	1745	22.82	23.70	1.225	-0.05	0.360	0.441



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n2_Ant 2	20M	BPSK	1	1	Front	10mm	4	376000	1880	21.43	21.80	1.089	0.05	0.585	0.637
	FR1 n2_Ant 2	20M	BPSK	50	28	Front	10mm	4	376000	1880	21.42	21.80	1.091	-0.09	0.599	0.654
37	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	4	376000	1880	21.43	21.80	1.089	-0.13	0.737	0.803
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	4	372000	1860	21.38	21.80	1.102	0.1	0.726	0.800
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	4	380000	1900	21.36	21.80	1.107	0.12	0.715	0.791
	FR1 n2_Ant 2	20M	BPSK	50	28	Back	10mm	4	376000	1880	21.42	21.80	1.091	0.08	0.729	0.796
	FR1 n2_Ant 2	20M	BPSK	100	0	Back	10mm	4	376000	1880	21.35	21.80	1.109	-0.17	0.709	0.786
	FR1 n2_Ant 2	20M	BPSK	1	1	Left Side	10mm	4	376000	1880	21.43	21.80	1.089	-0.03	0.048	0.052
	FR1 n2_Ant 2	20M	BPSK	50	28	Left Side	10mm	4	376000	1880	21.42	21.80	1.091	0.14	0.043	0.047
	FR1 n2_Ant 2	20M	BPSK	1	1	Right Side	10mm	4	376000	1880	21.43	21.80	1.089	-0.06	0.611	0.665
	FR1 n2_Ant 2	20M	BPSK	50	28	Right Side	10mm	4	376000	1880	21.42	21.80	1.091	-0.01	0.548	0.598
	FR1 n2_Ant 2	20M	BPSK	1	1	Bottom Side	10mm	4	376000	1880	21.43	21.80	1.089	0.11	0.252	0.274
	FR1 n2_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	4	376000	1880	21.42	21.80	1.091	-0.05	0.241	0.263
	FR1 n2_Ant 0	20M	BPSK	1	1	Front	10mm	4	376000	1880	20.96	22.00	1.271	0.01	0.181	0.230
	FR1 n2_Ant 0	20M	BPSK	50	28	Front	10mm	4	376000	1880	21.02	22.00	1.253	0.1	0.191	0.239
	FR1 n2_Ant 0	20M	BPSK	1	1	Back	10mm	4	376000	1880	20.96	22.00	1.271	-0.17	0.247	0.314
	FR1 n2_Ant 0	20M	BPSK	50	28	Back	10mm	4	376000	1880	21.02	22.00	1.253	0.08	0.314	0.393
	FR1 n2_Ant 0	20M	BPSK	1	1	Left Side	10mm	4	376000	1880	20.96	22.00	1.271	-0.01	0.220	0.280
	FR1 n2_Ant 0	20M	BPSK	50	28	Left Side	10mm	4	376000	1880	21.02	22.00	1.253	-0.08	0.222	0.278
	FR1 n2_Ant 0	20M	BPSK	1	1	Right Side	10mm	4	376000	1880	20.96	22.00	1.271	0.05	0.018	0.023
	FR1 n2_Ant 0	20M	BPSK	50	28	Right Side	10mm	4	376000	1880	21.02	22.00	1.253	0.06	0.001	0.001
	FR1 n2_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	4	376000	1880	20.96	22.00	1.271	-0.09	0.263	0.334
	FR1 n2_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	4	376000	1880	21.02	22.00	1.253	-0.08	0.265	0.332
	FR1 n7_Ant 2	50M	BPSK	1	1	Front	10mm	4	507000	2535	21.09	21.30	1.050	0.01	0.491	0.515
	FR1 n7_Ant 2	50M	BPSK	135	68	Front	10mm	4	507000	2535	20.82	21.30	1.117	0.08	0.455	0.508
	FR1 n7_Ant 2	50M	BPSK	1	1	Back	10mm	4	507000	2535	21.09	21.30	1.050	0.05	0.657	0.690
	FR1 n7_Ant 2	50M	BPSK	135	68	Back	10mm	4	507000	2535	20.82	21.30	1.117	0.01	0.615	0.687
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Side	10mm	4	507000	2535	21.09	21.30	1.050	-0.08	0.041	0.043
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Side	10mm	4	507000	2535	20.82	21.30	1.117	-0.08	0.037	0.041
38	FR1 n7_Ant 2	50M	BPSK	1	1	Right Side	10mm	4	507000	2535	21.09	21.30	1.050	-0.01	0.709	0.744
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Side	10mm	4	507000	2535	20.82	21.30	1.117	0.1	0.665	0.743
	FR1 n7_Ant 2	50M	BPSK	1	1	Bottom Side	10mm	4	507000	2535	21.09	21.30	1.050	-0.03	0.462	0.485
	FR1 n7_Ant 2	50M	BPSK	135	68	Bottom Side	10mm	4	507000	2535	20.82	21.30	1.117	0.1	0.424	0.474
	FR1 n7_Ant 0	50M	BPSK	1	1	Front	10mm	4	507000	2535	19.96	20.60	1.159	-0.08	0.389	0.451
	FR1 n7_Ant 0	50M	BPSK	135	68	Front	10mm	4	507000	2535	19.85	20.60	1.189	0.08	0.356	0.423
	FR1 n7_Ant 0	50M	BPSK	1	1	Back	10mm	4	507000	2535	19.96	20.60	1.159	0.01	0.361	0.418
	FR1 n7_Ant 0	50M	BPSK	135	68	Back	10mm	4	507000	2535	19.85	20.60	1.189	0.03	0.344	0.409
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Side	10mm	4	507000	2535	19.96	20.60	1.159	0	0.381	0.441
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Side	10mm	4	507000	2535	19.85	20.60	1.189	-0.08	0.368	0.437
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Side	10mm	4	507000	2535	19.96	20.60	1.159	-0.08	0.022	0.025
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Side	10mm	4	507000	2535	19.85	20.60	1.189	0.1	0.022	0.026
	FR1 n7_Ant 0	50M	BPSK	1	1	Bottom Side	10mm	4	507000	2535	19.96	20.60	1.159	-0.18	0.093	0.108
	FR1 n7_Ant 0	50M	BPSK	135	68	Bottom Side	10mm	4	507000	2535	19.85	20.60	1.189	0.1	0.081	0.096



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n12_Ant 0	15M	BPSK	1	1	Front	10mm	4	141500	707.5	24.81	25.70	1.227	0.01	0.263	0.323
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	4	141500	707.5	24.80	25.70	1.230	-0.08	0.244	0.300
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	4	141500	707.5	24.81	25.70	1.227	0.02	0.276	0.339
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	4	141500	707.5	24.80	25.70	1.230	-0.08	0.270	0.332
39	FR1 n12_Ant 0	15M	BPSK	1	1	Left Side	10mm	4	141500	707.5	24.81	25.70	1.227	0.02	0.385	0.473
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	4	141500	707.5	24.80	25.70	1.230	0.17	0.365	0.449
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Side	10mm	4	141500	707.5	24.81	25.70	1.227	-0.01	0.243	0.298
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	4	141500	707.5	24.80	25.70	1.230	-0.04	0.212	0.261
	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	10mm	4	141500	707.5	24.81	25.70	1.227	-0.08	0.150	0.184
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	4	141500	707.5	24.80	25.70	1.230	-0.13	0.143	0.176
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	4	141500	707.5	24.02	25.20	1.312	-0.03	0.190	0.249
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	4	141500	707.5	23.98	25.20	1.324	0.12	0.179	0.237
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	4	141500	707.5	24.02	25.20	1.312	-0.02	0.284	0.373
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	4	141500	707.5	23.98	25.20	1.324	0.03	0.226	0.299
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	4	141500	707.5	24.02	25.20	1.312	-0.03	0.217	0.285
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	4	141500	707.5	23.98	25.20	1.324	0.18	0.174	0.230
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Side	10mm	4	141500	707.5	24.02	25.20	1.312	-0.13	0.166	0.218
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Side	10mm	4	141500	707.5	23.98	25.20	1.324	0.06	0.149	0.197
	FR1 n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	4	141500	707.5	24.02	25.20	1.312	-0.03	0.161	0.211
	FR1 n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	4	141500	707.5	23.98	25.20	1.324	-0.03	0.136	0.180
	FR1 n26_Ant 0	20M	BPSK	1	1	Front	10mm	4	166300	831.5	25.12	25.70	1.143	0.08	0.347	0.397
	FR1 n26_Ant 0	20M	BPSK	50	28	Front	10mm	4	166300	831.5	25.03	25.70	1.167	-0.02	0.348	0.406
	FR1 n26_Ant 0	20M	BPSK	1	1	Back	10mm	4	166300	831.5	25.12	25.70	1.143	0.03	0.349	0.399
	FR1 n26_Ant 0	20M	BPSK	50	28	Back	10mm	4	166300	831.5	25.03	25.70	1.167	0.1	0.374	0.436
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Side	10mm	4	166300	831.5	25.12	25.70	1.143	-0.08	0.537	0.614
40	FR1 n26_Ant 0	20M	BPSK	50	28	Left Side	10mm	4	166300	831.5	25.03	25.70	1.167	-0.03	0.554	0.646
	FR1 n26_Ant 0	20M	BPSK	1	1	Right Side	10mm	4	166300	831.5	25.12	25.70	1.143	0.1	0.251	0.287
	FR1 n26_Ant 0	20M	BPSK	50	28	Right Side	10mm	4	166300	831.5	25.03	25.70	1.167	-0.18	0.247	0.288
	FR1 n26_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	4	166300	831.5	25.12	25.70	1.143	0.1	0.280	0.320
	FR1 n26_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	4	166300	831.5	25.03	25.70	1.167	-0.02	0.296	0.345
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	10mm	4	166300	831.5	22.02	23.10	1.282	0.01	0.189	0.242
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	10mm	4	166300	831.5	21.99	23.10	1.291	0.1	0.181	0.234
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	4	166300	831.5	22.02	23.10	1.282	-0.04	0.317	0.406
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	10mm	4	166300	831.5	21.99	23.10	1.291	0.04	0.311	0.402
	FR1 n26_Ant 1	20M	BPSK	1	1	Left Side	10mm	4	166300	831.5	22.02	23.10	1.282	-0.01	0.089	0.114
	FR1 n26_Ant 1	20M	BPSK	50	28	Left Side	10mm	4	166300	831.5	21.99	23.10	1.291	-0.08	0.076	0.098
	FR1 n26_Ant 1	20M	BPSK	1	1	Right Side	10mm	4	166300	831.5	22.02	23.10	1.282	0.05	0.085	0.109
	FR1 n26_Ant 1	20M	BPSK	50	28	Right Side	10mm	4	166300	831.5	21.99	23.10	1.291	0.06	0.096	0.124
	FR1 n26_Ant 1	20M	BPSK	1	1	Top Side	10mm	4	166300	831.5	22.02	23.10	1.282	-0.09	0.137	0.176
	FR1 n26_Ant 1	20M	BPSK	50	28	Top Side	10mm	4	166300	831.5	21.99	23.10	1.291	-0.08	0.153	0.198



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 2	100M	BPSK	1	1	Front	10mm	4	518598	2592.99	20.22	21.60	1.374	-0.05	0.414	0.569
	FR1 n41_Ant 2	100M	BPSK	135	69	Front	10mm	4	518598	2592.99	19.92	21.60	1.472	0.01	0.352	0.518
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	4	518598	2592.99	20.22	21.60	1.374	0.08	0.477	0.655
	FR1 n41_Ant 2	100M	BPSK	135	69	Back	10mm	4	518598	2592.99	19.92	21.60	1.472	0.09	0.411	0.605
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Side	10mm	4	518598	2592.99	20.22	21.60	1.374	0	0.001	0.001
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Side	10mm	4	518598	2592.99	19.92	21.60	1.472	0.19	0.001	0.001
41	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	518598	2592.99	20.22	21.60	1.374	0.02	0.613	0.842
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Side	10mm	4	518598	2592.99	19.92	21.60	1.472	-0.17	0.549	0.808
	FR1 n41_Ant 2	100M	BPSK	270	0	Right Side	10mm	4	518598	2592.99	19.92	21.60	1.472	-0.05	0.550	0.810
	FR1 n41_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	4	518598	2592.99	20.22	21.60	1.374	0	0.387	0.532
	FR1 n41_Ant 2	100M	BPSK	135	69	Bottom Side	10mm	4	518598	2592.99	19.92	21.60	1.472	-0.04	0.318	0.468
	FR1 n41_HPUE_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	518598	2592.99	23.30	24.60	1.349	-0.15	0.611	0.824
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	518598	2592.99	20.22	21.60	1.374	-0.05	0.582	0.800
	FR1 n41_Ant 0	100M	BPSK	1	1	Front	10mm	4	518598	2592.99	21.13	21.90	1.194	0	0.349	0.417
	FR1 n41_Ant 0	100M	BPSK	135	69	Front	10mm	4	518598	2592.99	20.79	21.90	1.291	0.18	0.341	0.440
	FR1 n41_Ant 0	100M	BPSK	1	1	Back	10mm	4	518598	2592.99	21.13	21.90	1.194	0.08	0.373	0.445
	FR1 n41_Ant 0	100M	BPSK	135	69	Back	10mm	4	518598	2592.99	20.79	21.90	1.291	-0.17	0.342	0.442
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Side	10mm	4	518598	2592.99	21.13	21.90	1.194	-0.06	0.393	0.469
	FR1 n41_Ant 0	100M	BPSK	135	69	Left Side	10mm	4	518598	2592.99	20.79	21.90	1.291	-0.05	0.346	0.447
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Side	10mm	4	518598	2592.99	21.13	21.90	1.194	0.01	0.001	0.001
	FR1 n41_Ant 0	100M	BPSK	135	69	Right Side	10mm	4	518598	2592.99	20.79	21.90	1.291	0.1	0.001	0.001
	FR1 n41_Ant 0	100M	BPSK	1	1	Bottom Side	10mm	4	518598	2592.99	21.13	21.90	1.194	-0.17	0.100	0.119
	FR1 n41_Ant 0	100M	BPSK	135	69	Bottom Side	10mm	4	518598	2592.99	20.79	21.90	1.291	0.04	0.090	0.116
	FR1 n41_HPUE_Ant 0	100M	BPSK	1	1	Left Side	10mm	4	518598	2592.99	24.18	24.90	1.180	-0.01	0.366	0.432
	FR1 n66_Ant 2	40M	BPSK	1	1	Front	10mm	4	349000	1745	21.62	22.50	1.225	0.08	0.427	0.523
	FR1 n66_Ant 2	40M	BPSK	108	54	Front	10mm	4	349000	1745	21.58	22.50	1.236	-0.02	0.474	0.586
	FR1 n66_Ant 2	40M	BPSK	1	1	Back	10mm	4	349000	1745	21.62	22.50	1.225	0.03	0.551	0.675
42	FR1 n66_Ant 2	40M	BPSK	108	54	Back	10mm	4	349000	1745	21.58	22.50	1.236	-0.02	0.601	0.743
	FR1 n66_Ant 2	40M	BPSK	1	1	Left Side	10mm	4	349000	1745	21.62	22.50	1.225	-0.08	0.052	0.064
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Side	10mm	4	349000	1745	21.58	22.50	1.236	-0.08	0.057	0.070
	FR1 n66_Ant 2	40M	BPSK	1	1	Right Side	10mm	4	349000	1745	21.62	22.50	1.225	0.1	0.494	0.605
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Side	10mm	4	349000	1745	21.58	22.50	1.236	-0.16	0.590	0.729
	FR1 n66_Ant 2	40M	BPSK	1	1	Bottom Side	10mm	4	349000	1745	21.62	22.50	1.225	-0.18	0.286	0.350
	FR1 n66_Ant 2	40M	BPSK	108	54	Bottom Side	10mm	4	349000	1745	21.58	22.50	1.236	0.1	0.303	0.374
	FR1 n66_Ant 0	40M	BPSK	1	1	Front	10mm	4	349000	1745	21.95	23.00	1.274	0.13	0.249	0.317
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	4	349000	1745	22.15	23.00	1.216	0.12	0.265	0.322
	FR1 n66_Ant 0	40M	BPSK	1	1	Back	10mm	4	349000	1745	21.95	23.00	1.274	0.08	0.355	0.452
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	4	349000	1745	22.15	23.00	1.216	0.18	0.325	0.395
	FR1 n66_Ant 0	40M	BPSK	1	1	Left Side	10mm	4	349000	1745	21.95	23.00	1.274	0.16	0.224	0.285
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Side	10mm	4	349000	1745	22.15	23.00	1.216	-0.1	0.256	0.311
	FR1 n66_Ant 0	40M	BPSK	1	1	Right Side	10mm	4	349000	1745	21.95	23.00	1.274	0.07	0.057	0.073
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Side	10mm	4	349000	1745	22.15	23.00	1.216	0.18	0.048	0.058
	FR1 n66_Ant 0	40M	BPSK	1	1	Bottom Side	10mm	4	349000	1745	21.95	23.00	1.274	-0.1	0.296	0.377
	FR1 n66_Ant 0	40M	BPSK	108	54	Bottom Side	10mm	4	349000	1745	22.15	23.00	1.216	0.01	0.304	0.370



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	1	Front	10mm	4	656000	3840	19.43	20.80	1.371	-0.03	0.267	0.366
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	4	656000	3840	19.90	20.80	1.230	-0.07	0.310	0.381
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	4	656000	3840	19.43	20.80	1.371	0.14	0.314	0.430
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	4	656000	3840	19.90	20.80	1.230	-0.11	0.356	0.438
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	19.43	20.80	1.371	-0.05	0.416	0.570
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	19.90	20.80	1.230	-0.07	0.492	0.605
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	19.43	20.80	1.371	0.14	0.001	0.001
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	19.90	20.80	1.230	-0.17	0.001	0.001
	FR1 n77_Ant 6	100M	BPSK	1	1	Bottom Side	10mm	4	656000	3840	19.43	20.80	1.371	0.17	0.178	0.244
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	4	656000	3840	19.90	20.80	1.230	-0.05	0.169	0.208
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	22.47	23.90	1.390	0.1	0.434	0.603
	FR1 n77_Ant 6	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	19.52	20.80	1.343	0.08	0.188	0.252
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	19.91	20.80	1.227	-0.02	0.206	0.253
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	19.52	20.80	1.343	0.01	0.312	0.419
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	19.91	20.80	1.227	-0.05	0.354	0.435
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	19.52	20.80	1.343	0.03	0.408	0.548
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	19.91	20.80	1.227	-0.08	0.493	0.605
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	19.52	20.80	1.343	-0.08	0.062	0.083
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	19.91	20.80	1.227	-0.08	0.072	0.088
	FR1 n77_Ant 6	100M	BPSK	1	1	Bottom Side	10mm	4	633332	3499.98	19.52	20.80	1.343	0.1	0.087	0.117
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	4	633332	3499.98	19.91	20.80	1.227	-0.18	0.134	0.164
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	22.47	23.90	1.390	0.12	0.383	0.532
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	4	656000	3840	17.99	19.50	1.416	-0.12	0.203	0.287
	FR1 n77_Ant 2	100M	BPSK	135	69	Front	10mm	4	656000	3840	18.46	19.50	1.271	0.03	0.218	0.277
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	4	656000	3840	17.99	19.50	1.416	-0.09	0.227	0.321
	FR1 n77_Ant 2	100M	BPSK	135	69	Back	10mm	4	656000	3840	18.46	19.50	1.271	-0.08	0.248	0.315
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	17.99	19.50	1.416	0.1	0.036	0.051
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	18.46	19.50	1.271	-0.18	0.047	0.060
43	FR1 n77_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	17.99	19.50	1.416	-0.04	0.573	0.811
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	18.46	19.50	1.271	0.12	0.513	0.652
	FR1 n77_Ant 2	100M	BPSK	270	0	Right Side	10mm	4	656000	3840	18.50	19.50	1.259	0.07	0.502	0.632
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	4	656000	3840	17.99	19.50	1.416	0.08	0.107	0.151
	FR1 n77_Ant 2	100M	BPSK	135	69	Bottom Side	10mm	4	656000	3840	18.46	19.50	1.271	-0.17	0.111	0.141
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	21.00	22.50	1.413	0.14	0.518	0.732
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	18.36	19.50	1.300	-0.03	0.128	0.166
	FR1 n77_Ant 2	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	18.70	19.50	1.202	0.03	0.139	0.167
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	18.36	19.50	1.300	0.19	0.154	0.200
	FR1 n77_Ant 2	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	18.70	19.50	1.202	0	0.172	0.207
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	18.36	19.50	1.300	-0.06	0.020	0.026
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	18.70	19.50	1.202	0.09	0.018	0.022
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	18.36	19.50	1.300	0.15	0.361	0.469
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	18.70	19.50	1.202	-0.09	0.462	0.555
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	4	633332	3499.98	18.36	19.50	1.300	0.07	0.077	0.100
	FR1 n77_Ant 2	100M	BPSK	135	69	Bottom Side	10mm	4	633332	3499.98	18.70	19.50	1.202	-0.06	0.089	0.107
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	21.30	22.50	1.318	0.09	0.344	0.453
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Front	10mm	4	656000	3840	22.4	22.5	1.023	0.08	0.406	0.415
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Front	10mm	4	656000	3840	22.29	22.5	1.050	0.01	0.356	0.374
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Back	10mm	4	656000	3840	22.4	22.5	1.023	-0.07	0.440	0.450
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	4	656000	3840	22.29	22.5	1.050	-0.08	0.389	0.408
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	22.4	22.5	1.023	-0.08	0.147	0.150
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	22.29	22.5	1.050	0.1	0.177	0.186
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	22.4	22.5	1.023	-0.18	0.019	0.019



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	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	22.29	22.5	1.050	0.1	0.017	0.018
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Top Side	10mm	4	656000	3840	22.4	22.5	1.023	0.04	0.475	0.486
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Top Side	10mm	4	656000	3840	22.29	22.5	1.050	-0.17	0.369	0.387
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	22.17	22.5	1.079	0.11	0.242	0.261
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	22.1	22.5	1.096	-0.05	0.226	0.248
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	22.17	22.5	1.079	0.02	0.289	0.312
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	22.1	22.5	1.096	0.14	0.271	0.297
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	22.17	22.5	1.079	-0.17	0.088	0.095
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	22.1	22.5	1.096	0.17	0.074	0.081
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	22.17	22.5	1.079	-0.05	0.001	0.001
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	22.1	22.5	1.096	0.01	0.001	0.001
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Top Side	10mm	4	633332	3499.98	22.17	22.5	1.079	0	0.476	0.514
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Top Side	10mm	4	633332	3499.98	22.1	22.5	1.096	-0.17	0.444	0.487
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	4	656000	3840	21.90	22.50	1.148	-0.07	0.306	0.351
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Front	10mm	4	656000	3840	21.88	22.50	1.153	-0.08	0.259	0.299
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	4	656000	3840	21.90	22.50	1.148	-0.02	0.254	0.292
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	4	656000	3840	21.88	22.50	1.153	0.06	0.202	0.233
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	21.90	22.50	1.148	-0.09	0.001	0.001
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	21.88	22.50	1.153	-0.08	0.001	0.001
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	21.90	22.50	1.148	0.13	0.273	0.313
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	21.88	22.50	1.153	0.12	0.214	0.247
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Top Side	10mm	4	656000	3840	21.90	22.50	1.148	0.03	0.059	0.068
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Top Side	10mm	4	656000	3840	21.88	22.50	1.153	0.18	0.047	0.054
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	21.54	22.50	1.247	-0.1	0.227	0.283
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	21.60	22.50	1.230	0.07	0.214	0.263
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	21.54	22.50	1.247	-0.09	0.359	0.448
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	21.60	22.50	1.230	-0.1	0.313	0.385
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	21.54	22.50	1.247	0.01	0.000	0.000
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	21.60	22.50	1.230	-0.15	0.001	0.001
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	21.54	22.50	1.247	0.19	0.126	0.157
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	21.60	22.50	1.230	0.07	0.121	0.149
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Top Side	10mm	4	633332	3499.98	21.54	22.50	1.247	-0.18	0.030	0.037
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Top Side	10mm	4	633332	3499.98	21.60	22.50	1.230	0.03	0.025	0.031

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.092	0.097
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.15	0.088	0.093
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	0.02	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.076	0.080
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.14	0.030	0.032
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.079	0.083
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.07	0.175	0.180
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	0.04	0.196	0.201
44	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.07	0.300	0.308
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	0.05	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.05	0.069	0.071
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	0	0.235	0.242
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.08	0.079	0.093
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.08	0.115	0.166
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.01	0.095	0.112
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.01	0.134	0.193
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.05	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.05	0.205	0.295
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.09	0.052	0.061
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.09	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.02	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.02	0.067	0.097
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.05	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.05	0.169	0.243

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.13	0.245	0.287
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.1	0.187	0.219
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	0.18	0.005	0.006
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.13	0.055	0.065
45	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.08	0.350	0.411
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4	8	44	5220	17.10	17.50	1.096	93.46	1.070	-0.05	0.342	0.401
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	-0.02	0.175	0.196
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	-0.02	0.161	0.183
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	-0.09	0.209	0.234
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	-0.09	0.192	0.219
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	-0.01	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	-0.01	0.180	0.205
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	0.14	0.075	0.084
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	0.14	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	0.04	0.327	0.366
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	0.04	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (4)	7/8/9	44	5220	17.30	17.50	1.047	93.46	1.070	-0.02	0.324	0.363
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3 (3)	7/8/9	44	5220	17.23	17.50	1.064	93.46	1.070	-0.02	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	-0.04	0.290	0.313
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	-0.04	0.221	0.335
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	0.02	0.407	0.439
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	0.02	0.169	0.256
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	0.07	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	0.07	0.104	0.157
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	0.01	0.107	0.115
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	0.01	0.001	0.002
46	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	-0.14	0.457	0.493
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	-0.14	0.001	0.002
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (4)	7	151	5755	17.30	18.00	1.175	92.7	1.079	0.1	0.307	0.389
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4+3 (3)	7	151	5755	16.70	18.00	1.349	92.7	1.079	0.1	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	0.01	0.247	0.292
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	0	0.328	0.388
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	0	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	-0.06	0.089	0.105
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	-0.05	0.376	0.445
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	Ant 4	8	151	5755	17.50	18.00	1.122	92.7	1.079	-0.14	0.260	0.315
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.08	0.172	0.196
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.08	0.141	0.187
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.07	0.228	0.259
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.07	0.102	0.135
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.05	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.05	0.073	0.097
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	-0.09	0.051	0.058
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	-0.09	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	-0.18	0.252	0.287
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	-0.18	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	-0.12	0.200	0.228
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	-0.12	0.001	0.001



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)	Measured APD (W/m^2)	Reported APD (W/m^2)
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3 (4)	7/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.04	0.040	0.047	0.344	0.403
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3 (3)	7/9	71	6305	11.10	12.00	1.230	88.24	1.133	0.04	0.027	0.038	0.212	0.296
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	7/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.06	0.062	0.073	0.517	0.606
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	7/9	71	6305	11.10	12.00	1.230	88.24	1.133	0.06	0.057	0.079	0.396	0.552
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	7/9	7	5985	11.35	11.50	1.035	88.24	1.133	0.09	0.067	0.079	0.457	0.536
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	7/9	7	5985	10.80	11.50	1.175	88.24	1.133	0.09	0.033	0.044	0.185	0.246
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	7/9	167	6785	8.15	8.50	1.084	88.24	1.133	0.08	0.037	0.045	0.260	0.319
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	7/9	167	6785	7.57	8.50	1.239	88.24	1.133	0.08	0.035	0.049	0.238	0.334
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	10mm	Ant 4+3 (4)	7/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.08	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	10mm	Ant 4+3 (3)	7/9	71	6305	11.10	12.00	1.230	88.24	1.133	-0.01	0.040	0.056	0.325	0.453
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	10mm	Ant 4+3 (4)	7/9	71	6305	11.85	12.00	1.035	88.24	1.133	-0.08	0.033	0.039	0.283	0.332
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	10mm	Ant 4+3 (3)	7/9	71	6305	11.10	12.00	1.230	88.24	1.133	-0.08	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4+3 (4)	7/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.07	0.057	0.067	0.485	0.569
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4+3 (3)	7/9	71	6305	11.10	12.00	1.230	88.24	1.133	0.07	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	7/9	7	5985	11.35	11.50	1.035	88.24	1.133	0.06	0.050	0.059	0.295	0.346
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	7/9	7	5985	10.80	11.50	1.175	88.24	1.133	0.06	0.030	0.040	0.137	0.182
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4	8	71	6305	11.95	12.00	1.012	88.24	1.133	-0.11	0.042	0.048	0.325	0.372
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	8	71	6305	11.95	12.00	1.012	88.24	1.133	0.09	0.066	0.076	0.537	0.615
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	10mm	Ant 4	8	71	6305	11.95	12.00	1.012	88.24	1.133	0.12	0.003	0.003	0.022	0.025
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	10mm	Ant 4	8	71	6305	11.95	12.00	1.012	88.24	1.133	0.01	0.020	0.023	0.166	0.190
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	8	71	6305	11.95	12.00	1.012	88.24	1.133	0.1	0.067	0.077	0.512	0.587
47	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	8	7	5985	11.35	11.50	1.035	88.24	1.133	-0.11	0.121	0.142	0.977	1.146
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	8	167	6785	6.75	8.50	1.496	88.24	1.133	0.14	0.035	0.059	0.294	0.498
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	8	7	5985	11.35	11.50	1.035	88.24	1.133	-0.06	0.097	0.114	0.693	0.813

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.06	0.047	0.054
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.17	0.055	0.064
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.05	0.033	0.038
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.09	0.030	0.035
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.11	0.051	0.059
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.05	0.126	0.139
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.03	0.150	0.165
48	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.09	0.207	0.228
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	0	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.02	0.047	0.052
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.16	0.202	0.222

15.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (3 Tx slots)	Front	10mm	5	189	836.4	30.53	31.50	1.250	-0.02	0.458	0.573
	GSM850_Ant 0	GPRS (3 Tx slots)	Back	10mm	5	189	836.4	30.53	31.50	1.250	-0.01	0.471	0.589
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	6	189	836.4	28.16	29.20	1.271	-0.02	0.338	0.429
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	28.16	29.20	1.271	-0.02	0.351	0.446
	GSM850_Ant 1	GPRS (2 Tx slots)	Front	10mm	5	189	836.4	31.16	32.30	1.300	-0.02	0.507	0.659
49	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5	189	836.4	31.16	32.30	1.300	-0.03	0.695	0.904
	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5	128	824.2	30.99	32.30	1.352	0.06	0.658	0.890
	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5	251	848.8	30.72	32.30	1.439	0.02	0.618	0.889
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	6	189	836.4	25.49	26.20	1.178	-0.02	0.263	0.310
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	25.49	26.20	1.178	0.11	0.363	0.427
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	5/6	661	1880	24.24	25.80	1.432	-0.01	0.344	0.493
50	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5/6	661	1880	24.24	25.80	1.432	-0.14	0.516	0.739
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	5	661	1880	26.01	27.30	1.346	-0.1	0.317	0.427
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	661	1880	26.01	27.30	1.346	-0.04	0.468	0.630
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	6	661	1880	24.75	25.50	1.189	-0.18	0.256	0.304
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	661	1880	24.75	25.50	1.189	-0.03	0.379	0.450

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA_II_Ant 2	RMC 12.2Kbps	Front	10mm	5/6	9262	1852.4	20.57	21.70	1.297	-0.16	0.391	0.507
51	WCDMA_II_Ant 2	RMC 12.2Kbps	Back	10mm	5/6	9262	1852.4	20.57	21.70	1.297	-0.14	0.465	0.603
	WCDMA_II_Ant 0	RMC 12.2Kbps	Front	10mm	5	9400	1880	23.58	23.80	1.052	-0.13	0.333	0.350
	WCDMA_II_Ant 0	RMC 12.2Kbps	Back	10mm	5	9400	1880	23.58	23.80	1.052	0.01	0.531	0.559
	WCDMA_II_Ant 0	RMC 12.2Kbps	Front	10mm	6	9400	1880	22.49	23.10	1.151	0.08	0.245	0.282
	WCDMA_II_Ant 0	RMC 12.2Kbps	Back	10mm	6	9400	1880	22.49	23.10	1.151	0.09	0.390	0.449
	WCDMA_IV_Ant 2	RMC 12.2Kbps	Front	10mm	5/6	1312	1712.4	20.98	22.40	1.387	-0.09	0.337	0.467
52	WCDMA_IV_Ant 2	RMC 12.2Kbps	Back	10mm	5/6	1312	1712.4	20.98	22.40	1.387	-0.12	0.412	0.571
	WCDMA_IV_Ant 0	RMC 12.2Kbps	Front	10mm	5	1413	1732.6	24.06	25.00	1.242	0.05	0.384	0.477
	WCDMA_IV_Ant 0	RMC 12.2Kbps	Back	10mm	5	1413	1732.6	24.06	25.00	1.242	-0.08	0.430	0.534
	WCDMA_IV_Ant 0	RMC 12.2Kbps	Front	10mm	6	1413	1732.6	24.06	24.30	1.057	0.05	0.384	0.406
	WCDMA_IV_Ant 0	RMC 12.2Kbps	Back	10mm	6	1413	1732.6	24.06	24.30	1.057	-0.08	0.430	0.454
	WCDMA_V_Ant 0	RMC 12.2Kbps	Front	10mm	5	4182	836.4	24.77	25.70	1.239	-0.04	0.378	0.468
	WCDMA_V_Ant 0	RMC 12.2Kbps	Back	10mm	5	4182	836.4	24.77	25.70	1.239	-0.03	0.384	0.476
	WCDMA_V_Ant 0	RMC 12.2Kbps	Front	10mm	6	4182	836.4	24.77	25.50	1.183	-0.04	0.378	0.447
	WCDMA_V_Ant 0	RMC 12.2Kbps	Back	10mm	6	4182	836.4	24.77	25.50	1.183	-0.03	0.384	0.454
	WCDMA_V_Ant 1	RMC 12.2Kbps	Front	10mm	5	4182	836.4	24.19	25.20	1.262	0.08	0.419	0.529
53	WCDMA_V_Ant 1	RMC 12.2Kbps	Back	10mm	5	4182	836.4	24.19	25.20	1.262	0.13	0.652	0.823
	WCDMA_V_Ant 1	RMC 12.2Kbps	Back	10mm	5	4132	826.4	24.17	25.20	1.268	0.01	0.546	0.692
	WCDMA_V_Ant 1	RMC 12.2Kbps	Back	10mm	5	4233	846.6	24.13	25.20	1.279	-0.05	0.624	0.798
	WCDMA_V_Ant 1	RMC 12.2Kbps	Front	10mm	6	4182	836.4	20.65	22.50	1.531	0.08	0.150	0.230
	WCDMA_V_Ant 1	RMC 12.2Kbps	Back	10mm	6	4182	836.4	20.65	22.50	1.531	0	0.232	0.355



<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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)
54	LTE Band 2_Ant 2	20M	QPSK	1	0	Front	10mm	5/6	18900	1880	20.65	21.90	1.334	-0.05	0.494	0.659
	LTE Band 2_Ant 2	20M	QPSK	50	0	Front	10mm	5/6	18900	1880	20.64	21.90	1.337	-0.17	0.474	0.634
	LTE Band 2_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	18900	1880	20.65	21.90	1.334	-0.15	0.531	0.708
	LTE Band 2_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	18900	1880	20.64	21.90	1.337	0.18	0.511	0.683
	LTE Band 2_Ant 0	20M	QPSK	1	0	Front	10mm	5	18900	1880	23.34	23.50	1.038	-0.06	0.452	0.469
	LTE Band 2_Ant 0	20M	QPSK	50	0	Front	10mm	5	18900	1880	22.36	23.50	1.300	0.01	0.360	0.468
	LTE Band 2_Ant 0	20M	QPSK	1	0	Back	10mm	5	18900	1880	23.34	23.50	1.038	-0.06	0.625	0.648
	LTE Band 2_Ant 0	20M	QPSK	50	0	Back	10mm	5	18900	1880	22.36	23.50	1.300	0.03	0.490	0.637
	LTE Band 2_Ant 0	20M	QPSK	1	0	Front	10mm	6	18900	1880	20.99	22.00	1.262	0.08	0.218	0.275
	LTE Band 2_Ant 0	20M	QPSK	50	0	Front	10mm	6	18900	1880	21.03	22.00	1.250	0.01	0.219	0.274
	LTE Band 2_Ant 0	20M	QPSK	1	0	Back	10mm	6	18900	1880	20.99	22.00	1.262	-0.01	0.301	0.380
	LTE Band 2_Ant 0	20M	QPSK	50	0	Back	10mm	6	18900	1880	21.03	22.00	1.250	-0.08	0.298	0.373
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	5/6	21100	2535	19.82	21.60	1.507	-0.01	0.370	0.557
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	5/6	21100	2535	19.91	21.60	1.476	0.08	0.364	0.537
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	21100	2535	19.82	21.60	1.507	-0.05	0.462	0.696
	LTE ULCA_7C_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	21350+21152	2560	18.98	19.60	1.153	0.14	0.379	0.437
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	21100	2535	19.91	21.60	1.476	-0.08	0.469	0.692
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	5	21100	2535	22.27	23.60	1.358	-0.03	0.649	0.882
	LTE ULCA_7C_Ant 0	20M	QPSK	1	0	Front	10mm	5	21100+20902	2535	20.63	22.10	1.403	0.18	0.469	0.658
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	5	20850	2510	22.17	23.60	1.390	0.03	0.628	0.873
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	5	21350	2560	22.13	23.60	1.403	0.03	0.623	0.874
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	5	21100	2535	22.23	23.60	1.371	0.03	0.606	0.831
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	5	20850	2510	22.17	23.60	1.390	-0.17	0.586	0.815
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	5	21350	2560	22.15	23.60	1.396	-0.03	0.582	0.813
	LTE Band 7_Ant 0	20M	QPSK	100	0	Front	10mm	5	21100	2535	22.19	23.60	1.384	0.03	0.576	0.797
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	5	21100	2535	22.27	23.60	1.358	-0.09	0.615	0.835
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	5	20850	2510	22.17	23.60	1.390	0.14	0.595	0.827
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	5	21350	2560	22.13	23.60	1.403	0.11	0.590	0.828
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	5	21100	2535	22.23	23.60	1.371	0.05	0.605	0.829
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	5	20850	2510	22.17	23.60	1.390	-0.05	0.590	0.820
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	5	21350	2560	22.15	23.60	1.396	0.18	0.586	0.818
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	5	21100	2535	22.19	23.60	1.384	0.14	0.577	0.798
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	6	21100	2535	20.19	21.00	1.205	0.08	0.337	0.406
	LTE ULCA_7C_Ant 0	20M	QPSK	1	0	Front	10mm	6	21100+20902	2535	18.91	19.50	1.146	0.11	0.306	0.351
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	6	21100	2535	20.20	21.00	1.202	0.01	0.319	0.384
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	6	21100	2535	20.19	21.00	1.205	-0.18	0.320	0.386
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	6	21100	2535	20.20	21.00	1.202	-0.08	0.320	0.385
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	5/6	23095	707.5	24.66	25.70	1.271	0.01	0.261	0.332
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	5/6	23095	707.5	23.81	24.70	1.227	0.1	0.213	0.261
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	5/6	23095	707.5	24.66	25.70	1.271	0.01	0.289	0.367
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	5/6	23095	707.5	23.81	24.70	1.227	-0.17	0.224	0.275
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	5	23095	707.5	23.72	25.20	1.406	0	0.227	0.319
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	5	23095	707.5	22.80	24.20	1.380	0.11	0.183	0.253
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	5	23095	707.5	23.72	25.20	1.406	0	0.325	0.457
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	5	23095	707.5	22.80	24.20	1.380	-0.05	0.257	0.355
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	6	23095	707.5	23.72	25.10	1.374	0	0.227	0.312
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	6	23095	707.5	22.80	24.20	1.380	0.11	0.183	0.253
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	6	23095	707.5	23.72	25.10	1.374	0	0.325	0.447
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	6	23095	707.5	22.80	24.20	1.380	-0.05	0.257	0.355



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	5/6	26865	831.5	24.67	25.70	1.268	-0.01	0.333	0.422
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	5/6	26865	831.5	23.77	24.70	1.239	-0.17	0.268	0.332
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	5/6	26865	831.5	24.67	25.70	1.268	0.01	0.348	0.441
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	5/6	26865	831.5	23.77	24.70	1.239	-0.03	0.294	0.364
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	5	26865	831.5	24.07	25.20	1.297	-0.03	0.412	0.534
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	5	26865	831.5	23.10	24.20	1.288	0.06	0.301	0.388
57	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	5	26865	831.5	24.07	25.20	1.297	-0.02	0.604	0.783
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	5	26865	831.5	23.10	24.20	1.288	-0.09	0.474	0.611
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	6	26865	831.5	21.81	22.70	1.227	0.08	0.213	0.261
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	6	26865	831.5	21.85	22.70	1.216	0.01	0.197	0.240
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	6	26865	831.5	21.81	22.70	1.227	0.03	0.314	0.385
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	6	26865	831.5	21.85	22.70	1.216	0.03	0.298	0.362

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	5/6	40185	2549.5	22.40	23.70	1.349	62.9	1.006	0.02	0.406	0.551
	LTE Band 41_Ant 2	20M	QPSK	50	0	Front	10mm	5/6	40185	2549.5	22.45	23.70	1.334	62.9	1.006	-0.08	0.390	0.523
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	40185	2549.5	22.40	23.70	1.349	62.9	1.006	0.02	0.499	0.677
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	39750	2506	22.26	23.70	1.393	62.9	1.006	0.16	0.477	0.669
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	40620	2593	22.22	23.70	1.406	62.9	1.006	0.13	0.462	0.653
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	41055	2636.5	22.31	23.70	1.377	62.9	1.006	-0.18	0.430	0.596
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	41490	2680	22.39	23.70	1.352	62.9	1.006	0.02	0.352	0.479
58	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	40185	2549.5	22.45	23.70	1.334	62.9	1.006	-0.04	0.522	0.700
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	39750	2506	22.28	23.70	1.387	62.9	1.006	-0.02	0.500	0.698
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	40620	2593	22.21	23.70	1.409	62.9	1.006	-0.03	0.456	0.646
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	41055	2636.5	22.34	23.70	1.368	62.9	1.006	-0.03	0.431	0.593
	LTE Band 41_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	41490	2680	22.44	23.70	1.337	62.9	1.006	0.08	0.346	0.465
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	40185	2549.5	23.87	25.30	1.390	42.9	1.009	0.18	0.464	0.651
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	39750	2506	23.70	25.30	1.445	42.9	1.009	0.01	0.441	0.643
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	40620	2593	23.70	25.30	1.445	42.9	1.009	0.03	0.427	0.623
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	41055	2636.5	23.75	25.30	1.429	42.9	1.009	-0.08	0.395	0.569
	LTE Band 41_HPUE_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	41490	2680	23.86	25.30	1.393	42.9	1.009	-0.08	0.317	0.446
	LTE ULCA_41C_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	41490+41292	2680	21.24	21.70	1.112	62.9	1.006	-0.05	0.227	0.254
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	5	40620	2593	24.56	25.20	1.159	62.9	1.006	-0.14	0.495	0.577
	LTE Band 41_Ant 0	20M	QPSK	50	0	Front	10mm	5	40620	2593	23.54	24.20	1.164	62.9	1.006	-0.1	0.403	0.472
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	5	40620	2593	24.56	25.20	1.159	62.9	1.006	0.07	0.520	0.606
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	5	39750	2506	24.48	25.20	1.180	62.9	1.006	-0.1	0.469	0.557
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	5	40185	2549.5	24.52	25.20	1.169	62.9	1.006	-0.15	0.562	0.661
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	5	41055	2636.5	24.52	25.20	1.169	62.9	1.006	0.01	0.459	0.540
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	5	41490	2680	24.55	25.20	1.161	62.9	1.006	-0.15	0.468	0.547
	LTE Band 41_Ant 0	20M	QPSK	50	0	Back	10mm	5	40620	2593	23.54	24.20	1.164	62.9	1.006	0.19	0.393	0.460
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	5	40620	2593	26.29	27.00	1.178	42.9	1.009	0.08	0.505	0.600
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	5	39750	2506	26.05	27.00	1.245	42.9	1.009	0.03	0.464	0.583
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	5	40185	2549.5	26.03	27.00	1.250	42.9	1.009	-0.08	0.516	0.651
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	5	41055	2636.5	26.28	27.00	1.180	42.9	1.009	-0.08	0.454	0.541
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	5	41490	2680	26.04	27.00	1.247	42.9	1.009	0.1	0.463	0.583
	LTE ULCA_41C_Ant 0	20M	QPSK	1	0	Back	10mm	5	41490+41292	2680	22.51	23.20	1.172	62.9	1.006	0.1	0.389	0.459
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	6	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.08	0.275	0.346
	LTE Band 41_Ant 0	20M	QPSK	50	0	Front	10mm	6	41055	2636.5	22.61	23.60	1.256	62.9	1.006	0.01	0.271	0.342
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	6	41055	2636.5	22.63	23.60	1.250	62.9	1.006	0.03	0.293	0.369
	LTE Band 41_Ant 0	20M	QPSK	50	0	Back	10mm	6	41055	2636.5	22.61	23.60	1.256	62.9	1.006	-0.08	0.276	0.349
	LTE Band 41_HPUE_Ant 0	20M	QPSK	1	0	Back	10mm	6	41055	2636.5	24.58	25.20	1.153	42.9	1.009	-0.17	0.301	0.350
	LTE ULCA_41C_Ant 0	20M	QPSK	1	0	Back	10mm	6	41490+41292	2680	20.44	21.60	1.306	62.9	1.006	-0.03	0.199	0.261

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	5/6	132322	1745	20.85	22.10	1.334	0.08	0.370	0.493
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	5/6	132322	1745	20.93	22.10	1.309	-0.11	0.392	0.513
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	5/6	132322	1745	20.85	22.10	1.334	0.01	0.426	0.568
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	5/6	132322	1745	20.93	22.10	1.309	-0.12	0.441	0.577
59	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	5	132322	1745	24.08	24.70	1.153	-0.18	0.531	0.612
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	5	132322	1745	23.01	24.20	1.315	0.17	0.425	0.559
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	5	132322	1745	24.08	24.70	1.153	-0.05	0.488	0.563
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	5	132322	1745	23.01	24.20	1.315	-0.05	0.390	0.513
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	6	132322	1745	22.76	23.70	1.242	0.04	0.334	0.415
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	6	132322	1745	22.82	23.70	1.225	-0.03	0.337	0.413
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	6	132322	1745	22.76	23.70	1.242	0.02	0.364	0.452
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	6	132322	1745	22.82	23.70	1.225	0.11	0.357	0.437

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n2_Ant 2	20M	BPSK	1	1	Front	10mm	5	376000	1880	21.43	22.50	1.279	0.05	0.585	0.748
	FR1 n2_Ant 2	20M	BPSK	50	28	Front	10mm	5	376000	1880	21.42	22.50	1.282	-0.09	0.599	0.768
60	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	5	376000	1880	21.43	22.50	1.279	-0.13	0.737	0.943
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	5	372000	1860	21.38	22.50	1.294	0.1	0.726	0.940
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	5	380000	1900	21.36	22.50	1.300	0.12	0.715	0.930
	FR1 n2_Ant 2	20M	BPSK	50	28	Back	10mm	5	376000	1880	21.42	22.50	1.282	0.08	0.729	0.935
	FR1 n2_Ant 2	20M	BPSK	50	28	Back	10mm	5	372000	1860	21.35	22.50	1.303	0.05	0.711	0.927
	FR1 n2_Ant 2	20M	BPSK	50	28	Back	10mm	5	380000	1900	21.35	22.50	1.303	0.09	0.708	0.923
	FR1 n2_Ant 2	20M	BPSK	100	0	Back	10mm	5	376000	1880	21.35	22.50	1.303	-0.17	0.709	0.924
	FR1 n2_Ant 2	20M	BPSK	1	1	Front	10mm	6	376000	1880	21.43	21.80	1.089	0.05	0.585	0.637
	FR1 n2_Ant 2	20M	BPSK	50	28	Front	10mm	6	376000	1880	21.42	21.80	1.091	-0.09	0.599	0.654
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	6	376000	1880	21.43	21.80	1.089	-0.13	0.737	0.803
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	6	372000	1860	21.38	21.80	1.102	0.1	0.726	0.800
	FR1 n2_Ant 2	20M	BPSK	1	1	Back	10mm	6	380000	1900	21.36	21.80	1.107	0.12	0.715	0.791
	FR1 n2_Ant 2	20M	BPSK	50	28	Back	10mm	6	376000	1880	21.42	21.80	1.091	0.08	0.729	0.796
	FR1 n2_Ant 2	20M	BPSK	100	0	Back	10mm	6	376000	1880	21.35	21.80	1.109	-0.17	0.709	0.786
	FR1 n2_Ant 0	20M	BPSK	1	1	Front	10mm	5	376000	1880	23.59	23.70	1.026	0.08	0.381	0.391
	FR1 n2_Ant 0	20M	BPSK	50	28	Front	10mm	5	376000	1880	23.54	23.70	1.038	-0.07	0.392	0.407
	FR1 n2_Ant 0	20M	BPSK	1	1	Back	10mm	5	376000	1880	23.59	23.70	1.026	0.04	0.518	0.531
	FR1 n2_Ant 0	20M	BPSK	50	28	Back	10mm	5	376000	1880	23.54	23.70	1.038	-0.08	0.654	0.679
	FR1 n2_Ant 0	20M	BPSK	1	1	Front	10mm	6	376000	1880	20.96	22.00	1.271	0.01	0.181	0.230
	FR1 n2_Ant 0	20M	BPSK	50	28	Front	10mm	6	376000	1880	21.02	22.00	1.253	0.1	0.191	0.239
	FR1 n2_Ant 0	20M	BPSK	1	1	Back	10mm	6	376000	1880	20.96	22.00	1.271	-0.17	0.247	0.314
	FR1 n2_Ant 0	20M	BPSK	50	28	Back	10mm	6	376000	1880	21.02	22.00	1.253	0.08	0.314	0.393



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n2_Ant 0	20M	BPSK	1	1	Front	10mm	6	376000	1880	20.96	22.00	1.271	0.01	0.181	0.230
	FR1 n2_Ant 0	20M	BPSK	50	28	Front	10mm	6	376000	1880	21.02	22.00	1.253	0.1	0.191	0.239
	FR1 n2_Ant 0	20M	BPSK	1	1	Back	10mm	6	376000	1880	20.96	22.00	1.271	-0.17	0.247	0.314
	FR1 n2_Ant 0	20M	BPSK	50	28	Back	10mm	6	376000	1880	21.02	22.00	1.253	0.08	0.314	0.393
	FR1 n7_Ant 2	50M	BPSK	1	1	Front	10mm	5	507000	2535	21.09	22.00	1.233	0.01	0.491	0.605
	FR1 n7_Ant 2	50M	BPSK	135	68	Front	10mm	5	507000	2535	20.82	22.00	1.312	0.08	0.455	0.597
	FR1 n7_Ant 2	50M	BPSK	1	1	Back	10mm	5	507000	2535	21.09	22.00	1.233	0.05	0.657	0.810
	FR1 n7_Ant 2	50M	BPSK	135	68	Back	10mm	5	507000	2535	20.82	22.00	1.312	0.01	0.615	0.807
	FR1 n7_Ant 2	50M	BPSK	270	0	Back	10mm	5	507000	2535	20.79	22.00	1.321	0.05	0.589	0.778
	FR1 n7_Ant 2	50M	BPSK	1	1	Front	10mm	6	507000	2535	21.09	21.30	1.050	0.01	0.491	0.515
	FR1 n7_Ant 2	50M	BPSK	135	68	Front	10mm	6	507000	2535	20.82	21.30	1.117	0.08	0.455	0.508
	FR1 n7_Ant 2	50M	BPSK	1	1	Back	10mm	6	507000	2535	21.09	21.30	1.050	0.05	0.657	0.690
	FR1 n7_Ant 2	50M	BPSK	135	68	Back	10mm	6	507000	2535	20.82	21.30	1.117	0.01	0.615	0.687
61	FR1 n7_Ant 0	50M	BPSK	1	1	Front	10mm	5	507000	2535	22.18	23.60	1.387	0.01	0.710	0.985
	FR1 n7_Ant 0	50M	BPSK	135	68	Front	10mm	5	507000	2535	22.20	23.60	1.380	0.08	0.671	0.926
	FR1 n7_Ant 0	50M	BPSK	270	0	Front	10mm	5	507000	2535	22.25	23.60	1.365	0.01	0.630	0.860
	FR1 n7_Ant 0	50M	BPSK	1	1	Back	10mm	5	507000	2535	22.18	23.60	1.387	-0.03	0.661	0.917
	FR1 n7_Ant 0	50M	BPSK	135	68	Back	10mm	5	507000	2535	22.20	23.60	1.380	0.03	0.649	0.896
	FR1 n7_Ant 0	50M	BPSK	270	0	Back	10mm	5	507000	2535	22.25	23.60	1.365	-0.08	0.627	0.856
	FR1 n7_Ant 0	50M	BPSK	1	1	Front	10mm	6	507000	2535	19.96	20.60	1.159	-0.08	0.389	0.451
	FR1 n7_Ant 0	50M	BPSK	135	68	Front	10mm	6	507000	2535	19.85	20.60	1.189	0.08	0.356	0.423
	FR1 n7_Ant 0	50M	BPSK	1	1	Back	10mm	6	507000	2535	19.96	20.60	1.159	0.01	0.361	0.418
	FR1 n7_Ant 0	50M	BPSK	135	68	Back	10mm	6	507000	2535	19.85	20.60	1.189	0.03	0.344	0.409



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	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 n12_Ant 0	15M	BPSK	1	1	Front	10mm	5/6	141500	707.5	24.81	25.70	1.227	0.01	0.263	0.323
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	5/6	141500	707.5	24.80	25.70	1.230	-0.08	0.244	0.300
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	5/6	141500	707.5	24.81	25.70	1.227	0.02	0.276	0.339
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	5/6	141500	707.5	24.80	25.70	1.230	-0.08	0.270	0.332
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	5/6	141500	707.5	24.02	25.20	1.312	-0.03	0.190	0.249
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	5/6	141500	707.5	23.98	25.20	1.324	0.12	0.179	0.237
62	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	5/6	141500	707.5	24.02	25.20	1.312	-0.02	0.284	0.373
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	5/6	141500	707.5	23.98	25.20	1.324	0.03	0.226	0.299
	FR1 n26_Ant 0	20M	BPSK	1	1	Front	10mm	5/6	166300	831.5	25.12	25.70	1.143	0.08	0.347	0.397
	FR1 n26_Ant 0	20M	BPSK	50	28	Front	10mm	5/6	166300	831.5	25.03	25.70	1.167	-0.02	0.348	0.406
	FR1 n26_Ant 0	20M	BPSK	1	1	Back	10mm	5/6	166300	831.5	25.12	25.70	1.143	0.03	0.349	0.399
	FR1 n26_Ant 0	20M	BPSK	50	28	Back	10mm	5/6	166300	831.5	25.03	25.70	1.167	0.1	0.374	0.436
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	10mm	5	166300	831.5	24.65	25.20	1.135	-0.01	0.381	0.432
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	10mm	5	166300	831.5	24.64	25.20	1.138	0.01	0.369	0.420
63	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	5	166300	831.5	24.65	25.20	1.135	-0.02	0.640	0.726
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	10mm	5	166300	831.5	24.64	25.20	1.138	0.03	0.629	0.716
	FR1 n26_Ant 1	20M	BPSK	1	1	Front	10mm	6	166300	831.5	22.02	23.10	1.282	0.01	0.189	0.242
	FR1 n26_Ant 1	20M	BPSK	50	28	Front	10mm	6	166300	831.5	21.99	23.10	1.291	0.1	0.181	0.234
	FR1 n26_Ant 1	20M	BPSK	1	1	Back	10mm	6	166300	831.5	22.02	23.10	1.282	-0.04	0.317	0.406
	FR1 n26_Ant 1	20M	BPSK	50	28	Back	10mm	6	166300	831.5	21.99	23.10	1.291	0.04	0.311	0.402
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	10mm	5/6	518598	2592.99	20.22	21.70	1.406	-0.05	0.414	0.582
	FR1 n41_Ant 2	100M	BPSK	135	69	Front	10mm	5/6	518598	2592.99	19.92	21.70	1.507	0.01	0.352	0.530
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	5/6	518598	2592.99	20.22	21.70	1.406	0.08	0.477	0.671
	FR1 n41_Ant 2	100M	BPSK	135	69	Back	10mm	5/6	518598	2592.99	19.92	21.70	1.507	0.09	0.411	0.619
	FR1 n41_HPUE_Ant 2	100M	BPSK	1	1	Back	10mm	5/6	518598	2592.99	23.30	24.70	1.380	-0.15	0.477	0.658
	FR1 n41_Ant 0	100M	BPSK	1	1	Front	10mm	5	518598	2592.99	22.70	24.40	1.479	0.08	0.550	0.814
	FR1 n41_Ant 0	100M	BPSK	135	69	Front	10mm	5	518598	2592.99	22.50	24.40	1.549	-0.14	0.571	0.884
	FR1 n41_Ant 0	100M	BPSK	270	0	Front	10mm	5	518598	2592.99	22.58	24.40	1.521	0.12	0.502	0.763
64	FR1 n41_Ant 0	100M	BPSK	1	1	Back	10mm	5	518598	2592.99	22.70	24.40	1.479	0.1	0.599	0.886
	FR1 n41_Ant 0	100M	BPSK	135	69	Back	10mm	5	518598	2592.99	22.50	24.40	1.549	0.01	0.556	0.861
	FR1 n41_Ant 0	100M	BPSK	270	0	Back	10mm	5	518598	2592.99	22.58	24.40	1.521	0.08	0.547	0.832
	FR1 n41_HPUE_Ant 0	100M	BPSK	1	1	Back	10mm	5	518598	2592.99	26.62	27.00	1.091	0.03	0.670	0.731
	FR1 n41_Ant 0	100M	BPSK	1	1	Front	10mm	6	518598	2592.99	21.13	21.90	1.194	-0.05	0.349	0.417
	FR1 n41_Ant 0	100M	BPSK	135	69	Front	10mm	6	518598	2592.99	20.79	21.90	1.291	0.18	0.341	0.440
	FR1 n41_Ant 0	100M	BPSK	1	1	Back	10mm	6	518598	2592.99	21.13	21.90	1.194	0.08	0.373	0.445
	FR1 n41_Ant 0	100M	BPSK	135	69	Back	10mm	6	518598	2592.99	20.79	21.90	1.291	-0.17	0.342	0.442
	FR1 n41_HPUE_Ant 0	100M	BPSK	1	1	Back	10mm	6	518598	2592.99	24.18	24.90	1.180	0.05	0.255	0.301
	FR1 n66_Ant 2	40M	BPSK	1	1	Front	10mm	5/6	349000	1745	21.62	22.50	1.225	0.08	0.427	0.523
	FR1 n66_Ant 2	40M	BPSK	108	54	Front	10mm	5/6	349000	1745	21.58	22.50	1.236	-0.02	0.474	0.586
	FR1 n66_Ant 2	40M	BPSK	1	1	Back	10mm	5/6	349000	1745	21.62	22.50	1.225	0.03	0.551	0.675
65	FR1 n66_Ant 2	40M	BPSK	108	54	Back	10mm	5/6	349000	1745	21.58	22.50	1.236	-0.02	0.601	0.743
	FR1 n66_Ant 0	40M	BPSK	1	1	Front	10mm	5	349000	1745	24.03	24.80	1.194	0.01	0.430	0.513
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	5	349000	1745	23.89	24.80	1.233	-0.07	0.423	0.522
	FR1 n66_Ant 0	40M	BPSK	1	1	Back	10mm	5	349000	1745	24.03	24.80	1.194	-0.01	0.578	0.690
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	5	349000	1745	23.89	24.80	1.233	-0.15	0.517	0.638
	FR1 n66_Ant 0	40M	BPSK	1	1	Front	10mm	6	349000	1745	21.95	23.00	1.274	0.13	0.249	0.317
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	6	349000	1745	22.15	23.00	1.216	0.12	0.265	0.322
	FR1 n66_Ant 0	40M	BPSK	1	1	Back	10mm	6	349000	1745	21.95	23.00	1.274	0.08	0.355	0.452
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	6	349000	1745	22.15	23.00	1.216	0.18	0.325	0.395



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	1	Front	10mm	5/6	656000	3840	19.43	20.80	1.371	-0.03	0.267	0.366
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	5/6	656000	3840	19.90	20.80	1.230	-0.07	0.310	0.381
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	5/6	656000	3840	19.43	20.80	1.371	0.14	0.314	0.430
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	5/6	656000	3840	19.90	20.80	1.230	-0.11	0.356	0.438
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Back	10mm	5/6	656000	3840	22.47	23.90	1.390	0.01	0.307	0.427
	FR1 n77_Ant 6	100M	BPSK	1	1	Front	10mm	5/6	633332	3499.98	19.52	20.80	1.343	0.08	0.188	0.252
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	5/6	633332	3499.98	19.91	20.80	1.227	-0.02	0.206	0.253
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	5/6	633332	3499.98	19.52	20.80	1.343	0.01	0.312	0.419
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	5/6	633332	3499.98	19.91	20.80	1.227	-0.05	0.354	0.435
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Back	10mm	5/6	633332	3499.98	22.47	23.90	1.390	0.1	0.236	0.328
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	5/6	656000	3840	20.13	21.00	1.222	-0.06	0.282	0.345
	FR1 n77_Ant 2	100M	BPSK	135	69	Front	10mm	5/6	656000	3840	20.51	21.00	1.119	-0.15	0.316	0.354
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	5/6	656000	3840	20.13	21.00	1.222	0.01	0.398	0.486
	FR1 n77_Ant 2	100M	BPSK	135	69	Back	10mm	5/6	656000	3840	20.51	21.00	1.119	-0.06	0.462	0.517
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Back	10mm	5/6	656000	3840	22.17	24.00	1.524	-0.19	0.316	0.482
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	5/6	633332	3499.98	20.33	21.00	1.167	-0.06	0.293	0.342
	FR1 n77_Ant 2	100M	BPSK	135	69	Front	10mm	5/6	633332	3499.98	20.69	21.00	1.074	-0.12	0.329	0.353
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	5/6	633332	3499.98	20.33	21.00	1.167	-0.17	0.327	0.382
	FR1 n77_Ant 2	100M	BPSK	135	69	Back	10mm	5/6	633332	3499.98	20.69	21.00	1.074	-0.09	0.359	0.386
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Back	10mm	5/6	633332	3499.98	22.28	24.00	1.486	-0.16	0.255	0.379
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Front	10mm	5	656000	3840	24.71	25.4	1.172	0.05	0.599	0.702
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Front	10mm	5	656000	3840	24.53	25.4	1.222	0.08	0.518	0.633
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Back	10mm	5	656000	3840	24.71	25.4	1.172	-0.17	0.648	0.760
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	5	656000	3840	24.53	25.4	1.222	-0.17	0.565	0.690
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Front	10mm	5	633332	3499.98	24.55	25.4	1.216	-0.06	0.484	0.589
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Front	10mm	5	633332	3499.98	24.26	25.4	1.300	-0.17	0.429	0.558
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Back	10mm	5	633332	3499.98	24.55	25.4	1.216	-0.05	0.578	0.703
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	5	633332	3499.98	24.26	25.4	1.300	-0.05	0.516	0.671
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Front	10mm	6	656000	3840	22.4	22.5	1.023	0.08	0.406	0.415
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Front	10mm	6	656000	3840	22.29	22.5	1.050	0.01	0.356	0.374
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Back	10mm	6	656000	3840	22.4	22.5	1.023	-0.07	0.440	0.450
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	6	656000	3840	22.29	22.5	1.050	-0.08	0.389	0.408
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Front	10mm	6	633332	3499.98	22.17	22.5	1.079	0.11	0.242	0.261
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Front	10mm	6	633332	3499.98	22.1	22.5	1.096	-0.05	0.226	0.248
	FR1 n77_HPUE_Ant 1	100M	BPSK	1	1	Back	10mm	6	633332	3499.98	22.17	22.5	1.079	0.02	0.289	0.312
	FR1 n77_HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	6	633332	3499.98	22.1	22.5	1.096	0.14	0.271	0.297
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	5	656000	3840	24.26	25.50	1.330	-0.04	0.559	0.744
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Front	10mm	5	656000	3840	24.14	25.50	1.368	0.14	0.462	0.632
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	5	656000	3840	24.26	25.50	1.330	-0.03	0.380	0.506
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	5	656000	3840	24.14	25.50	1.368	0.11	0.296	0.405
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	5	633332	3499.98	24.67	25.50	1.211	-0.07	0.413	0.500
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Front	10mm	5	633332	3499.98	24.60	25.50	1.230	0.01	0.376	0.463
66	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	5	633332	3499.98	24.67	25.50	1.211	-0.13	0.652	0.789
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	5	633332	3499.98	24.60	25.50	1.230	0.03	0.550	0.677
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	6	656000	3840	21.90	22.50	1.148	-0.07	0.306	0.351
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Front	10mm	6	656000	3840	21.88	22.50	1.153	-0.08	0.259	0.299
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	6	656000	3840	21.90	22.50	1.148	-0.02	0.254	0.292
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	6	656000	3840	21.88	22.50	1.153	0.06	0.202	0.233
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Front	10mm	6	633332	3499.98	21.54	22.50	1.247	-0.1	0.227	0.283
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Front	10mm	6	633332	3499.98	21.60	22.50	1.230	0.07	0.214	0.263
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	10mm	6	633332	3499.98	21.54	22.50	1.247	-0.09	0.359	0.448
	FR1 n77_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	6	633332	3499.98	21.60	22.50	1.230	-0.1	0.313	0.385

**<WLAN SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	5	6	2437	20.40	20.50	1.023	99.08	1.009	-0.09	0.273	0.282
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	5	6	2437	20.40	20.50	1.023	99.08	1.009	-0.1	0.312	0.322
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	5	6	2437	20.40	20.50	1.023	99.08	1.009	-0.12	0.288	0.297
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	5/6	6	2437	20.32	20.50	1.042	99.08	1.009	0.02	0.577	0.607
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	5/6	6	2437	20.32	20.50	1.042	99.08	1.009	-0.01	0.667	0.701
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	5/6	6	2437	20.32	20.50	1.042	99.08	1.009	-0.03	0.559	0.588
67	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3 (4)	5	6	2437	20.20	20.50	1.072	93.19	1.073	0.1	0.345	0.397
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3 (3)	5	6	2437	19.62	20.50	1.225	93.19	1.073	0.1	0.419	0.551
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	5	6	2437	20.20	20.50	1.072	93.19	1.073	-0.03	0.359	0.413
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	5	6	2437	19.62	20.50	1.225	93.19	1.073	-0.03	0.557	0.732
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	5	6	2437	20.20	20.50	1.072	93.19	1.073	0	0.269	0.309
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	5	6	2437	19.62	20.50	1.225	93.19	1.073	0	0.469	0.616
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.092	0.097
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.15	0.088	0.093
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	14.80	15.00	1.047	99.08	1.009	-0.11	0.079	0.083
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.07	0.175	0.180
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	0.04	0.196	0.201
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	7/8	1	2412	14.92	15.00	1.019	99.08	1.009	-0.05	0.162	0.166
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.08	0.079	0.093
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.08	0.115	0.166
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.01	0.095	0.112
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.01	0.134	0.193
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (4)	7	1	2412	14.60	15.00	1.096	93.19	1.073	-0.07	0.079	0.093
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3 (3)	7	1	2412	13.72	15.00	1.343	93.19	1.073	-0.07	0.124	0.179



FCC SAR TEST REPORT

Report No. : FA451607B

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	-0.15	0.182	0.205
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	-0.15	0.134	0.193
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	-0.15	0.154	0.173
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	-0.15	0.217	0.313
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.01	0.201	0.226
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.01	0.171	0.246
68	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.06	1.075	-0.07	0.273	0.322
	WLAN5GHz	802.11n-HT20 MCS0	Back	10mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.06	1.075	-0.08	0.268	0.316
	WLAN5GHz	802.11n-HT20 MCS0	Front	10mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.06	1.075	0.09	0.251	0.296
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	-0.02	0.501	0.601
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	-0.02	0.356	0.455
69	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	-0.06	0.538	0.646
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	-0.06	0.271	0.346
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	0.01	0.522	0.627
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	0.01	0.238	0.304
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	-0.04	0.442	0.519
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	-0.15	0.491	0.576
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	-0.11	0.432	0.507
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	-0.1	0.292	0.364
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	-0.1	0.213	0.289
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.07	0.359	0.448
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.07	0.186	0.253
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.12	0.352	0.439
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.12	0.175	0.238
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (4)	5	157	5785	19.90	20.00	1.023	93.46	1.070	-0.04	0.559	0.612
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (3)	5	157	5785	18.63	20.00	1.371	93.46	1.070	-0.04	0.403	0.591
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5	157	5785	19.90	20.00	1.023	93.46	1.070	0.01	0.688	0.753
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5	157	5785	18.63	20.00	1.371	93.46	1.070	0.01	0.280	0.411
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5	157	5785	19.90	20.00	1.023	93.46	1.070	0.04	0.560	0.613
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5	157	5785	18.63	20.00	1.371	93.46	1.070	0.04	0.193	0.283
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	6	165	5825	19.60	20.00	1.096	93.46	1.070	-0.1	0.563	0.661
70	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6	165	5825	19.60	20.00	1.096	93.46	1.070	-0.17	0.655	0.768
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6	165	5825	19.50	20.00	1.122	93.46	1.070	-0.03	0.451	0.541
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	-0.04	0.290	0.313
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	-0.04	0.221	0.335
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	7	151	5755	18.00	18.00	1.000	92.7	1.079	0.02	0.407	0.439
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (3)	7	151	5755	16.53	18.00	1.403	92.7	1.079	0.02	0.169	0.256
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (4)	7	151	5755	17.30	18.00	1.175	92.7	1.079	0.02	0.246	0.312
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4+3 (3)	7	151	5755	16.70	18.00	1.349	92.7	1.079	0.02	0.116	0.169
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	0.08	0.231	0.273
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	8	151	5755	17.60	18.00	1.096	92.7	1.079	-0.11	0.315	0.373
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	Ant 4	8	151	5755	17.50	18.00	1.122	92.7	1.079	0.15	0.223	0.270
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.08	0.172	0.196
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.08	0.141	0.187
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.07	0.228	0.259
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.07	0.102	0.135
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	155	5775	15.40	15.50	1.023	89.9	1.112	0.06	0.170	0.193
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	155	5775	14.73	15.50	1.194	89.9	1.112	0.06	0.077	0.102



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)
71	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	-0.09	0.565	0.633
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	-0.09	0.337	0.445
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	-0.12	0.682	0.764
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	-0.12	0.250	0.330
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	0.02	0.521	0.584
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	0.02	0.186	0.245
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	0.09	0.417	0.518
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	-0.15	0.455	0.565
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4	6/8	177	5885	18.10	19.50	1.380	93.46	1.070	-0.07	0.270	0.399
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.01	0.262	0.302
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.01	0.205	0.281
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.14	0.306	0.352
72	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.14	0.144	0.197
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.04	0.257	0.296
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.04	0.109	0.149
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0	0.036	0.042
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0	0.018	0.024
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.13	0.056	0.065
72	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.13	0.156	0.209
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	7	5985	10.55	12.00	1.396	88.24	1.133	-0.04	0.052	0.082
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	7	5985	10.10	12.00	1.549	88.24	1.133	-0.04	0.034	0.060
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	71	6305	10.95	12.00	1.274	88.24	1.133	-0.07	0.068	0.098
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	71	6305	10.70	12.00	1.349	88.24	1.133	-0.07	0.064	0.098
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	119	6545	11.35	12.50	1.303	88.24	1.133	0.04	0.086	0.127
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	119	6545	10.77	12.50	1.489	88.24	1.133	0.04	0.086	0.145
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	167	6785	10.95	11.00	1.012	88.24	1.133	-0.07	0.070	0.080
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	167	6785	10.37	11.00	1.156	88.24	1.133	-0.07	0.066	0.086
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	-0.04	0.052	0.061
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	-0.04	0.117	0.157
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	88.24	1.133	0.09	0.019	0.022
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	88.24	1.133	-0.06	0.046	0.052
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	7	5985	12.25	14.00	1.496	88.24	1.133	0.03	0.082	0.139
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	71	6305	12.45	14.00	1.429	88.24	1.133	0.1	0.078	0.126
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	119	6545	11.85	12.50	1.161	88.24	1.133	0.08	0.073	0.096
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	-0.15	0.121	0.139
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.1	0.094	0.108

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm-	Ant 4	2/3	39	2441	20.21	20.50	1.069	77.13	1.080	-0.17	0.179	0.207
	Bluetooth	1Mbps	Back	10mm-	Ant 4	2/3	39	2441	20.21	20.50	1.069	77.13	1.080	-0.12	0.182	0.210
	Bluetooth	1Mbps	Back	10mm-	Ant 4	2/3	39	2441	20.21	20.50	1.069	77.13	1.080	-0.18	0.180	0.208
	Bluetooth	1Mbps	Front	10mm-	Ant 3	2/3	78	2480	19.79	20.00	1.050	77.13	1.080	-0.07	0.350	0.397
73	Bluetooth	1Mbps	Back	10mm-	Ant 3	2/3	78	2480	19.79	20.00	1.050	77.13	1.080	-0.05	0.462	0.524
	Bluetooth	1Mbps	Back	10mm-	Ant 3	2/3	78	2480	19.79	20.00	1.050	77.13	1.080	-0.11	0.402	0.456
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.06	0.047	0.054
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.17	0.055	0.064
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	14.70	15.00	1.072	77.13	1.080	-0.11	0.051	0.059
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.05	0.126	0.139
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.03	0.150	0.165
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	39	2441	14.92	15.00	1.019	77.13	1.080	-0.04	0.150	0.165

15.4 Product Specific SAR
<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.09	1.390	1.565
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.09	1.190	1.714
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.14	0.579	0.652
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.14	0.576	0.830
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.12	0.001	0.001
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.12	0.626	0.902
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.08	0.121	0.136
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.08	0.001	0.001
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.04	0.878	0.988
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.04	0.001	0.001
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (4)	5/7/9	52	5260	19.80	20.00	1.047	93.06	1.075	0.13	0.932	1.049
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4+3 (3)	5/7/9	52	5260	18.73	20.00	1.340	93.06	1.075	0.13	0.944	1.360
74	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	0.17	1.680	1.980
	WLAN5GHz	802.11n-HT20 MCS0	Back	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	-0.09	0.632	0.745
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	0.15	0.009	0.011
	WLAN5GHz	802.11n-HT20 MCS0	Right Side	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	0.16	0.107	0.126
	WLAN5GHz	802.11n-HT20 MCS0	Top Side	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	-0.02	0.973	1.147
	WLAN5GHz	802.11n-HT20 MCS0	Front	0mm	Ant 4	6/8	52	5260	19.60	20.00	1.096	93.03	1.075	0.07	1.330	1.568



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	0.19	1.810	2.173
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	0.19	1.450	1.852
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	5/7	138	5690	18.90	19.00	1.023	89.9	1.112	0.01	1.600	1.821
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	5/7	138	5690	18.33	19.00	1.167	89.9	1.112	0.01	1.500	1.946
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	100	5500	15.50	15.50	1.000	93.46	1.070	0.19	0.806	0.862
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	100	5500	14.93	15.50	1.140	93.46	1.070	0.19	0.531	0.648
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	116	5580	18.70	19.00	1.072	93.46	1.070	0.1	1.990	2.282
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	116	5580	18.23	19.00	1.194	93.46	1.070	0.1	1.390	1.776
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	124	5620	18.60	19.00	1.096	93.46	1.070	0.12	2.300	2.698
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	124	5620	18.43	19.00	1.140	93.46	1.070	0.12	1.850	2.257
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	132	5660	17.80	18.00	1.047	93.46	1.070	0.07	2.320	2.599
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	132	5660	17.23	18.00	1.194	93.46	1.070	0.07	1.830	2.338
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	-0.16	1.470	1.765
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	-0.16	0.910	1.163
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	0.13	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	0.13	0.624	0.797
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	0.09	0.188	0.226
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	0.09	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3 (4)	5/7	144	5720	19.00	19.50	1.122	93.46	1.070	0.01	1.190	1.429
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3 (3)	5/7	144	5720	18.73	19.50	1.194	93.46	1.070	0.01	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	124	5620	18.60	19.00	1.096	93.46	1.070	0.11	1.950	2.288
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	124	5620	18.43	19.00	1.140	93.46	1.070	0.11	1.920	2.343
75	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.1	2.340	2.745
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4	6/8	138	5690	18.90	19.00	1.023	89.9	1.112	0.03	1.920	2.185
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	100	5500	15.30	15.50	1.047	93.46	1.070	0.04	0.869	0.974
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	116	5580	18.50	19.00	1.122	93.46	1.070	0.16	2.240	2.689
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	124	5620	18.90	19.00	1.023	93.46	1.070	0.12	2.460	2.694
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	132	5660	17.60	18.00	1.096	93.46	1.070	0.18	1.970	2.311
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.06	1.560	1.830
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.03	0.025	0.029
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.09	0.255	0.299
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	-0.01	1.420	1.666
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	144	5720	19.10	19.50	1.096	93.46	1.070	0.08	1.770	2.077
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.04	1.110	1.385
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.04	1.190	1.617
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.19	0.874	1.090
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.19	0.636	0.864
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.12	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.12	0.409	0.556
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.11	0.107	0.134
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.11	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.02	0.732	0.913
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	138	5690	17.00	17.50	1.122	89.9	1.112	0.03	1.240	1.547
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	138	5690	16.63	17.50	1.222	89.9	1.112	0.03	1.140	1.549

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)
76	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	0.14	2.480	2.779
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	0.14	1.540	2.032
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	173	5865	19.05	19.50	1.109	93.46	1.070	0.04	2.290	2.718
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	173	5865	18.09	19.50	1.384	93.46	1.070	0.04	1.220	1.806
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.14	2.490	2.790
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.14	1.180	1.747
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	0.17	1.850	2.073
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	0.17	0.906	1.195
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (4)	5/7	173	5865	19.05	19.50	1.109	93.46	1.070	0.09	1.650	1.958
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (3)	5/7	173	5865	18.09	19.50	1.384	93.46	1.070	0.09	0.770	1.140
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.12	1.800	2.017
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.12	0.799	1.183
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	0.17	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	0.17	0.638	0.842
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	0.15	0.235	0.263
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	0.15	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3 (4)	5/7	169	5845	19.30	19.50	1.047	93.46	1.070	-0.02	1.520	1.703
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3 (3)	5/7	169	5845	18.59	19.50	1.233	93.46	1.070	-0.02	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.15	1.930	2.162
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.15	1.060	1.569
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	0.11	2.010	2.498
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	169	5845	18.85	19.50	1.161	93.46	1.070	0.09	2.090	2.597
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	173	5865	18.85	19.50	1.161	93.46	1.070	0.09	2.030	2.523
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	0.02	1.250	1.553
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	0.03	0.014	0.017
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	0.02	0.155	0.193
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4	6/8	177	5885	18.85	19.50	1.161	93.46	1.070	0.01	1.080	1.342
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	169	5845	18.85	19.50	1.161	93.46	1.070	0.01	1.530	1.901
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.15	1.290	1.485
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.15	0.915	1.255
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.12	0.992	1.142
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.12	0.557	0.764
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.14	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.14	0.375	0.514
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.16	0.085	0.098
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.16	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	-0.11	0.684	0.787
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	-0.11	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (4)	9	171	5855	16.85	17.00	1.035	89.9	1.112	0.18	0.972	1.119
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	Ant 4+3 (3)	9	171	5855	16.09	17.00	1.233	89.9	1.112	0.18	0.637	0.873

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)	Measured APD (W/m^2)	Reported APD (W/m^2)
	WLAN6GHz	802.11ax-HE80 MCS0	Front	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.18	0.132	0.154	3.130	3.646
	WLAN6GHz	802.11ax-HE80 MCS0	Front	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.18	0.179	0.240	4.290	5.750
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.03	0.137	0.160	3.290	3.832
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.03	0.274	0.367	6.640	8.900
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	7	5985	10.55	12.00	1.396	88.24	1.133	-0.05	0.144	0.228	3.520	5.569
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	7	5985	10.10	12.00	1.549	88.24	1.133	-0.05	0.126	0.221	3.030	5.317
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	71	6305	10.95	12.00	1.274	88.24	1.133	-0.11	0.227	0.328	5.410	7.806
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	71	6305	10.70	12.00	1.349	88.24	1.133	-0.11	0.147	0.225	3.550	5.426
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	119	6545	11.35	12.50	1.303	88.24	1.133	0.05	0.231	0.341	5.600	8.268
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	119	6545	10.77	12.50	1.489	88.24	1.133	0.05	0.199	0.336	4.830	8.150
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	167	6785	10.95	11.00	1.012	88.24	1.133	0.03	0.193	0.221	4.650	5.329
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	167	6785	10.37	11.00	1.156	88.24	1.133	0.03	0.170	0.223	4.120	5.397
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	-0.11	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	-0.11	0.169	0.227	3.970	5.321
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.1	0.020	0.023	0.476	0.554
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.1	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.02	0.154	0.179	3.650	4.251
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.02	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (4)	5/7/9	215	7025	13.38	13.50	1.028	88.24	1.133	0.13	0.162	0.189	3.950	4.601
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3 (3)	5/7/9	215	7025	12.77	13.50	1.183	88.24	1.133	0.13	0.269	0.361	6.490	8.699
	WLAN6GHz	802.11ax-HE80 MCS0	Front	0mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	93.46	1.070	-0.04	0.087	0.094	2.080	2.236
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	93.46	1.070	0.06	0.130	0.140	3.130	3.365
77	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	7	5985	12.25	14.00	1.496	88.24	1.133	0.04	0.287	0.487	6.870	11.646
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	71	6305	12.45	14.00	1.429	88.24	1.133	0.09	0.266	0.431	6.410	10.377
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	119	6545	11.85	12.50	1.161	88.24	1.133	0.07	0.258	0.340	6.240	8.211
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	167	6785	13.45	13.50	1.012	88.24	1.133	0.05	0.312	0.358	7.550	8.653
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	0mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	93.46	1.070	0.05	0.001	0.001	0.033	0.035
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	0mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	93.46	1.070	-0.04	0.013	0.014	0.313	0.336
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	0mm	Ant 4	6/8	215	7025	14.48	14.50	1.005	93.46	1.070	0.06	0.078	0.084	1.860	1.999
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4	6/8	7	5985	12.25	14.00	1.496	88.24	1.133	0.09	0.264	0.448	6.310	10.697

<NFC SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Freq. (MHz)	Power Drift (dB)	Measured 10g SAR (W/kg)
	NFC	ASK	Front	0mm	13.56	0	0.001
78	NFC	ASK	Back	0mm	13.56	-0.02	0.063
	NFC	ASK	Left Side	0mm	13.56	0	0.001
	NFC	ASK	Right Side	0mm	13.56	0	0.001
	NFC	ASK	Top Side	0mm	13.56	0	0.001
	NFC	ASK	Bottom Side	0mm	13.56	0	0.001

**15.5 6GHz PD Test Result**

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	7	5985	10.65	0.0625	1.7	2.092596223	2.25	3.25
WLAN6GHz	802.11ax-HE80 MCS0	Front	10.02mm	Ant 4+3(4)	7	5985	10.65	0.25	1.05		0.675	0.916
WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(3)	215	7025	13.47	0.0625	2.67	4.265112614	1.62	2.16
WLAN6GHz	802.11ax-HE80 MCS0	Front	8.54mm	Ant 4+3(4)	215	7025	14.18	0.25	1		0.326	0.456

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	Grid Step (λ)	Scaling Factor for Measurement Uncertainty	Power Drift (dB)	Normal psPD (W/m ²)	Scaled Normal psPD (W/m ²)	Total psPD (W/m ²)	Scaled Total psPD (W/m ²)
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4	1/2	215	7025	14.48	14.50	1.005	88.24	1.133	0.0625	1.5535	0.1	0.944	1.67	1.07	1.89
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4	1/2	7	5985	12.35	12.50	1.035	88.24	1.133	0.0625	1.5535	0.1	2.18	3.97	3.66	6.67
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4	1/2	71	6305	12.45	12.50	1.012	88.24	1.133	0.0625	1.5535	-0.05	1.37	2.44	2.08	3.70
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4	1/2	119	6545	12.85	13.50	1.161	88.24	1.133	0.0625	1.5535	0.03	2.74	5.60	3.48	7.11
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4	1/2	167	6785	14.35	14.50	1.035	88.24	1.133	0.0625	1.5535	-0.05	2.5	4.55	3.73	6.80
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(3)	1/2	215	7025	13.47	14.50	1.268	88.24	1.133	0.0625	1.5535	0.11	1.62	3.61	2.16	4.82
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	1/2	7	5985	10.65	11.50	1.216	88.24	1.133	0.0625	1.5535	0.12	2.25	4.82	3.25	6.96
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	1/2	71	6305	10.85	11.50	1.161	88.24	1.133	0.0625	1.5535	-0.11	1.76	3.60	2.83	5.79
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	1/2	119	6545	12.55	13.50	1.245	88.24	1.133	0.0625	1.5535	0.17	1.5	3.29	3.16	6.92
01	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	1/2	167	6785	13.95	14.50	1.135	88.24	1.133	0.0625	1.5535	0.12	2.7	5.39	3.68	7.35
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4	5/6	215	7025	14.48	14.50	1.005	88.24	1.133	0.0625	1.5535	0.1	0.944	1.67	1.07	1.89
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4	5/6	215	7025	14.48	14.50	1.005	88.24	1.133	0.0625	1.5535	0.11	1.99	3.52	2.15	3.80
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4	5/6	7	5985	12.35	14.00	1.462	88.24	1.133	0.0625	1.5535	0.1	1.53	3.94	2.24	5.76
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4	5/6	71	6305	12.45	14.00	1.429	88.24	1.133	0.0625	1.5535	-0.18	1.43	3.60	2.49	6.26
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4	5/6	119	6545	11.95	12.50	1.135	88.24	1.133	0.0625	1.5535	-0.11	2.9	5.79	3.54	7.07
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4	5/6	167	6785	13.35	13.50	1.035	88.24	1.133	0.0625	1.5535	0.17	3.24	5.90	3.81	6.94
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	2mm	Ant 4	5/6	215	7025	14.48	14.50	1.005	88.24	1.133	0.0625	1.5535	0.14	0.438	0.77	0.448	0.79
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	2mm	Ant 4	5/6	215	7025	14.48	14.50	1.005	88.24	1.133	0.0625	1.5535	0.16	0.277	0.49	0.333	0.59
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	2mm	Ant 4	5/6	215	7025	14.48	14.50	1.005	88.24	1.133	0.0625	1.5535	0.03	1.04	1.84	1.2	2.12
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	5/6	215	7025	13.18	13.50	1.076	88.24	1.133	0.0625	1.5535	0.11	0.617	1.17	1.07	2.03
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(3)	5/6	215	7025	12.77	13.50	1.183	88.24	1.133	0.0625	1.5535	-0.19	2.55	5.31	3.02	6.29
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(4)	5/6	7	5985	10.65	12.00	1.365	88.24	1.133	0.0625	1.5535	-0.14	1.12	2.69	1.38	3.31
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(4)	5/6	71	6305	10.85	12.00	1.303	88.24	1.133	0.0625	1.5535	-0.09	1.97	4.52	3.1	7.11
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(4)	5/6	119	6545	11.45	12.50	1.274	88.24	1.133	0.0625	1.5535	0.11	2.09	4.68	3.14	7.04
02	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(3)	5/6	167	6785	10.37	11.00	1.156	88.24	1.133	0.0625	1.5535	-0.13	3.3	6.72	3.59	7.31
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	2mm	Ant 4+3(3)	5/6	215	7025	12.77	13.50	1.183	88.24	1.133	0.0625	1.5535	0	1.73	3.60	2.27	4.73
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	2mm	Ant 4+3(4)	5/6	215	7025	13.18	13.50	1.076	88.24	1.133	0.0625	1.5535	0.09	0.682	1.29	0.701	1.33
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	2mm	Ant 4+3(4)	5/6	215	7025	13.18	13.50	1.076	88.24	1.133	0.0625	1.5535	-0.08	1.14	2.16	1.49	2.82
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4	7/8/9	71	6305	11.95	12.00	1.012	88.24	1.133	0.0625	1.5535	-0.16	0.453	0.81	0.531	0.95
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	7/8/9	71	6305	11.95	12.00	1.012	88.24	1.133	0.0625	1.5535	-0.12	0.798	1.42	1.04	1.85
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	7/8/9	7	5985	11.35	11.50	1.035	88.24	1.133	0.0625	1.5535	-0.12	0.907	1.65	1.08	1.97
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4	7/8/9	167	6785	6.75	8.50	1.496	88.24	1.133	0.0625	1.5535	-0.17	0.209	0.55	0.401	1.06
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	10mm	Ant 4	7/8/9	71	6305	11.95	12.00	1.012	88.24	1.133	0.0625	1.5535	-0.15	0.308	0.55	0.313	0.56
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	10mm	Ant 4	7/8/9	71	6305	11.95	12.00	1.012	88.24	1.133	0.0625	1.5535	0.05	0.517	0.92	0.547	0.97
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4	7/8/9	71	6305	11.95	12.00	1.012	88.24	1.133	0.0625	1.5535	-0.07	0.852	1.52	0.877	1.56
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3(4)	7/8/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.0625	1.5535	0.08	0.483	0.88	0.655	1.19
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	7/8/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.0625	1.5535	-0.07	0.639	1.16	0.799	1.46
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	10mm	Ant 4+3(3)	7/8/9	71	6305	11.10	12.00	1.230	88.24	1.133	0.0625	1.5535	0.15	0.455	0.99	0.486	1.05
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	10mm	Ant 4+3(4)	7/8/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.0625	1.5535	-0.1	0.324	0.59	0.328	0.60
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4+3(4)	7/8/9	71	6305	11.85	12.00	1.035	88.24	1.133	0.0625	1.5535	-0.08	0.737	1.34	1.06	1.93
03	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4+3(4)	7/8/9	7	5985	11.35	11.50	1.035	88.24	1.133	0.0625	1.5535	-0.03	1.53	2.79	1.66	3.02
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	10mm	Ant 4+3(4)	7/8/9	167	6785	8.15	8.50	1.084	88.24	1.133	0.0625	1.5535	0.16	0.606	1.16	0.676	1.29

15.6 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	-0.08	0.863	-	1.143
2nd	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1/2	12	2467	13.82	15.00	1.312	99.08	1.009	0.11	0.842	1.02	1.115
1st	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4	2	60	5300	13.70	14.00	1.072	93.46	1.070	0.01	0.901	-	1.033
2nd	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4	2	60	5300	13.70	14.00	1.072	93.46	1.070	0.08	0.888	1.01	1.018
1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	0.04	0.966	-	1.125
2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4	2	122	5610	13.80	14.00	1.047	89.9	1.112	0.17	0.933	1.04	1.086
1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	0.18	0.936	-	1.065
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	0.18	0.156		0.214
2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (4)	1	171	5855	13.40	13.50	1.023	89.9	1.112	0.18	0.898	1.04	1.022
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3 (3)	1	171	5855	12.58	13.50	1.236	89.9	1.112	0.18	0.150		0.206

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	167	6785	14.48	14.50	1.005	88.24	1.133	-0.1	0.988	-	1.125
2nd	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4	2	167	6785	14.48	14.50	1.005	88.24	1.133	0.18	0.979	1.01	1.114

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)	Ratio	Reported 10g SAR (W/kg)
1st	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	124	5620	18.90	19.00	1.023	93.46	1.070	0.12	2.460	-	2.694
2nd	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4	6/8	124	5620	18.90	19.00	1.023	93.46	1.070	0.09	2.330	1.06	2.551
1st	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.14	2.490	-	2.790
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.14	1.180		1.747
2nd	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (4)	5/7	177	5885	19.30	19.50	1.047	93.46	1.070	0.08	2.400	1.04	2.689
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3 (3)	5/7	177	5885	18.09	19.50	1.384	93.46	1.070	0.08	1.480		2.191

General Note:

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

15.7 Power Class 2 and Power Class 3 Linearity

General Note:

This device support Power Class 2 and Power Class 3 operations. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE and FR1 configuration and exposure condition combination, according to the highest time averaged power for Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required. Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<LTE Band 41 Linearity Data for Head>

Ant 2	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.5
Reported 1g SAR (W/kg)	0.712	0.692
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	235.18	243.49
Linearity SAR(W/kg)	0.74	
% deviation from expected linearity		-6.13%

Ant 0	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.2	27
Reported 1g SAR (W/kg)	0.245	0.242
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	209.61	217.01
Linearity SAR(W/kg)	0.25	
% deviation from expected linearity		-4.60%

<LTE Band 41 Linearity Data for Hotspot>

Ant 2	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.3	24.9
Reported 1g SAR (W/kg)	0.823	0.738
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	135.33	133.81
Linearity SAR(W/kg)	0.81	
% deviation from expected linearity		-9.31%

Ant 0	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.6	25.2
Reported 1g SAR (W/kg)	0.453	0.406
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	145.01	143.38
Linearity SAR(W/kg)	0.45	
% deviation from expected linearity		-9.36%

<LTE Band 41 Linearity Data for Body-worn>

Ant 2	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.7	25.3
Reported 1g SAR (W/kg)	0.7	0.651
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	148.39	146.72
Linearity SAR(W/kg)	0.69	
% deviation from expected linearity		-5.94%

Ant 0	LTE Band 41	LTE Band 41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.2	27
Reported 1g SAR (W/kg)	0.661	0.651
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	209.61	217.01
Linearity SAR(W/kg)	0.68	
% deviation from expected linearity		-4.87%

<FR1 n41 Linearity Data for Head>

Ant 2	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.5	27.5
Reported 1g SAR (W/kg)	0.949	0.702
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	354.81	281.17
Linearity SAR(W/kg)	0.75	
% deviation from expected linearity		-6.65%

Ant 0	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.2	27
Reported 1g SAR (W/kg)	0.538	0.426
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	331.13	250.59
Linearity SAR(W/kg)	0.41	
% deviation from expected linearity		4.63%

<FR1 n77 Linearity Data for Head>

Ant 6	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.7	27.3
Reported 1g SAR (W/kg)	0.767	0.594
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	371.54	268.52
Linearity SAR(W/kg)	0.55	
% deviation from expected linearity		7.16%

Ant 2	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	25.1	26.7
Reported 1g SAR (W/kg)	0.983	0.643
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	323.59	233.87
Linearity SAR(W/kg)	0.71	
% deviation from expected linearity		-9.49%

<FR1 n41 Linearity Data for Hotspot>

Ant 2	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	21.6	24.6
Reported 1g SAR (W/kg)	0.842	0.824
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	144.54	144.20
Linearity SAR(W/kg)	0.84	
% deviation from expected linearity		-1.91%

Ant 0	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	21.9	24.9
Reported 1g SAR (W/kg)	0.469	0.432
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	154.88	154.51
Linearity SAR(W/kg)	0.47	
% deviation from expected linearity		-7.67%

<FR1 n77 Linearity Data for Hotspot>

Ant 6	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	20.8	23.9
Reported 1g SAR (W/kg)	0.605	0.603
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	120.23	122.74
Linearity SAR(W/kg)	0.62	
% deviation from expected linearity		-2.37%

Ant 2	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	19.5	22.5
Reported 1g SAR (W/kg)	0.811	0.732
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	89.13	88.91
Linearity SAR(W/kg)	0.81	
% deviation from expected linearity		-9.53%

<FR1 n41 Linearity Data for Body-worn>

Ant 2	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	21.7	24.7
Reported 1g SAR (W/kg)	0.671	0.658
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	147.91	147.56
Linearity SAR(W/kg)	0.67	
% deviation from expected linearity		-1.70%

Ant 0	FR1 n41	FR1 n41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24.4	27
Reported 1g SAR (W/kg)	0.886	0.731
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	275.42	250.59
Linearity SAR(W/kg)	0.81	
% deviation from expected linearity		-9.32%

<FR1 n77 Linearity Data for Body-worn>

Ant 6	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	20.8	23.9
Reported 1g SAR (W/kg)	0.438	0.427
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	120.23	122.74
Linearity SAR(W/kg)	0.45	
% deviation from expected linearity		-4.50%

Ant 2	FR1 n77	FR1 n77
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	21	24
Reported 1g SAR (W/kg)	0.517	0.482
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	125.89	125.59
Linearity SAR(W/kg)	0.52	
% deviation from expected linearity		-6.55%

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.

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16. Uncertainty Assessment

The component of uncertainty may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainty by the statistical analysis of a series of observations is termed a Type A evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observation is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

A Type A evaluation of standard uncertainty may be based on any valid statistical method for treating data. This includes calculating the standard deviation of the mean of a series of independent observations; using the method of least squares to fit a curve to the data in order to estimate the parameter of the curve and their standard deviations; or carrying out an analysis of variance in order to identify and quantify random effects in certain kinds of measurement.

A type B evaluation of standard uncertainty is typically based on scientific judgment using all of the relevant information available. These may include previous measurement data, experience, and knowledge of the behavior and properties of relevant materials and instruments, manufacture's specification, data provided in calibration reports and uncertainties assigned to reference data taken from handbooks. Broadly speaking, the uncertainty is either obtained from an outdoor source or obtained from an assumed distribution, such as the normal distribution, rectangular or triangular distributions indicated in table below.

Uncertainty Distributions	Normal	Rectangular	Triangular	U-Shape
Multi-plying Factor ^(a)	$1/k^{(b)}$	$1/\sqrt{3}$	$1/\sqrt{6}$	$1/\sqrt{2}$

(a) standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity

(b) k is the coverage factor

Standard Uncertainty for Assumed Distribution

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual "root-sum-squares" (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances.

Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. Typically, the coverage factor ranges from 2 to 3. Using a coverage factor allows the true value of a measured quantity to be specified with a defined probability within the specified uncertainty range. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %. The DASY uncertainty Budget is shown in the following tables.

The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.

Applicable for SAR Measurements:

Uncertainty Budget (4 MHz - 10 GHz range)							
Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System							
Probe Calibration	18.60	N	2	1	1	9.3	9.3
Axial Isotropy	4.70	R	1.732	0.7	0.7	1.9	1.9
Hemispherical Isotropy	9.60	R	1.732	0.7	0.7	3.9	3.9
Linearity	4.70	R	1.732	1	1	2.7	2.7
Modulation Response	4.68	R	1.732	1	1	2.7	2.7
System Detection Limits	1.00	R	1.732	1	1	0.6	0.6
Boundary Effects	2.00	R	1.732	1	1	1.2	1.2
Readout Electronics	0.30	N	1	1	1	0.3	0.3
Response Time	0.00	R	1.732	1	1	0.0	0.0
Integration Time	2.60	R	1.732	1	1	1.5	1.5
RF Ambient Noise	3.00	R	1.732	1	1	1.7	1.7
RF Ambient Reflections	3.00	R	1.732	1	1	1.7	1.7
Probe Positioner	0.40	R	1.732	1	1	0.2	0.2
Probe Positioning	6.70	R	1.732	1	1	3.9	3.9
Post-processing	4.00	R	1.732	1	1	2.3	2.3
Test Sample Related							
Device Holder	3.60	N	1	1	1	3.6	3.6
Test sample Positioning	3.03	N	1	1	1	3.0	3.0
Power Scaling	0.00	R	1.732	1	1	0.0	0.0
Power Drift	5.00	R	1.732	1	1	2.9	2.9
Phantom and Setup							
Phantom Uncertainty	7.60	R	1.732	1	1	4.4	4.4
SAR correction	0.00	R	1.732	1	0.84	0.0	0.0
Liquid Conductivity Repeatability	0.03	N	1	0.78	0.77	0.0	0.0
Liquid Conductivity (target)	5.00	R	1.732	0.78	0.77	2.3	2.2
Liquid Conductivity (mea.)	2.50	R	1.732	0.78	0.77	1.1	1.1
Temp. unc. - Conductivity	3.68	R	1.732	0.78	0.77	1.7	1.6
Liquid Permittivity Repeatability	0.02	N	1	0.23	0.26	0.0	0.0
Liquid Permittivity (target)	5.00	R	1.732	0.23	0.26	0.7	0.8
Liquid Permittivity (mea.)	2.50	R	1.732	0.23	0.26	0.3	0.4
Temp. unc. - Permittivity	0.84	R	1.732	0.23	0.26	0.1	0.1
Combined Std. Uncertainty						14.5%	14.2%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						29.0%	28.4%

Applicable for Power Density Measurements:

Error Description	Uncertainty Value (±dB)	Probability	Divisor	(Ci)	Standard Uncertainty (±dB)
Probe Calibration	0.49	N	1	1	0.49
Probe correction	0.00	R	1.732	1	0.00
Frequency response (BW ≤ 1 GHz)	0.20	R	1.732	1	0.12
Sensor cross coupling	0.00	R	1.732	1	0.00
Isotropy	0.50	R	1.732	1	0.29
Linearity	0.20	R	1.732	1	0.12
Probe scattering	0.00	R	1.732	1	0.00
Probe positioning offset	0.30	R	1.732	1	0.17
Probe positioning repeatability	0.04	R	1.732	1	0.02
Sensor mechanical offset	0.00	R	1.732	1	0.00
Probe spatial resolution	0.00	R	1.732	1	0.00
Field impedance dependance	0.00	R	1.732	1	0.00
Amplitude and phase drift	0.00	R	1.732	1	0.00
Amplitude and phase noise	0.04	R	1.732	1	0.02
Measurement area truncation	0.00	R	1.732	1	0.00
Data acquisition	0.03	N	1	1	0.03
Sampling	0.00	R	1.732	1	0.00
Field reconstruction	2.00	R	1.732	1	1.15
Forward transformation	0.00	R	1.732	1	0.00
Power density scaling	0.00	R	1.732	1	0.00
Spatial averaging	0.10	R	1.732	1	0.06
System detection limit	0.04	R	1.732	1	0.02
Uncertainty terms dependent on the DUT and environmental factors					
Probe coupling with DUT	0.00	R	1.732	1	0.0
Modulation response	0.40	R	1.732	1	0.2
Integration time	0.00	R	1.732	1	0.0
Response time	0.00	R	1.732	1	0.0
Device holder influence	0.10	R	1.732	1	0.1
DUT alignment	0.00	R	1.732	1	0.0
RF ambient conditions	0.04	R	1.732	1	0.0
Ambient reflections	0.04	R	1.732	1	0.0
Immunity / secondary reception	0.00	R	1.732	1	0.0
Drift of the DUT		R	1.732	1	
Combined Std. Uncertainty					1.34
Expanded STD Uncertainty (95%)					2.68

17. References

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