

FCC SAR TEST REPORT

FCC ID : A4RG9S9B
Equipment : Phone
Model Name : G9S9B
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Jun 09, 2021 and testing was started from Jun 15, 2021 and completed on Jul 23, 2021. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager



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1. Statement of Compliance

The maximum results of Specific Absorption Rate and PD found during testing for Google LLC, Phone, G9S9B, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)		
		Head (Separation 0mm)	Body-worn (Separation 10mm)	Hotspot (Separation 10mm)	Product Specific (Separation 0mm)			
		1g SAR (W/kg)					10g SAR (W/kg)	
Licensed	GSM850	1.09	0.82	0.82		1.58		
	GSM1900	0.46	1.20	0.90	0.95			
	WCDMA II	0.47	1.20	0.91	1.97			
	WCDMA IV	0.36	1.16	0.89	2.54			
	WCDMA V	0.48	0.38	0.38				
	LTE Band 7	0.45	1.20	0.87	2.82			
	LTE Band 12 / 17	0.68	0.31	0.51				
	LTE Band 13	1.08	0.39	0.46				
	LTE Band 14	1.10	0.41	0.45				
	LTE Band 2 / 25	0.47	1.20	0.90	2.05			
	LTE Band 5 / 26	1.15	0.45	0.47				
	LTE Band 30	0.38	1.11	0.90	2.50			
	LTE Band 38 / 41	0.36	0.93	0.90				
	LTE Band 48	0.45	0.52	0.91				
	LTE Band 4 / 66	0.47	1.07	0.91	2.48			
	LTE Band 71	0.85	0.34	0.47				
	FR1 n5	0.94	0.26	0.43				
	FR1 n7	0.36	1.20	0.91	2.49			
	FR1 n12	0.67	0.32	0.40				
	FR1 n25 / n2	0.49	1.17	0.90	1.83			
FR1 n30	0.31	1.12	0.90	2.42				
FR1 n41 / n38	1.17	0.72	0.89					
FR1 n66	0.39	1.07	0.82	2.81				
FR1 n71	0.88	0.23	0.26					
FR1 n77	1.06	0.73	0.84					
DTS	2.4GHz WLAN	1.19	1.12	0.59		1.58		
NII	5GHz WLAN	1.16	0.79	0.67	2.90	1.56		
DSS	Bluetooth	0.20	0.41	0.53		1.54		
Equipment Class	Frequency Band	Head		Body		Product Specific		Highest Reported PD (W/m^2)
		Reported 1g SAR (W/kg)	APD (W/m^2)	Reported 1g SAR (W/kg)	APD (W/m^2)	Reported 1g SAR (W/kg)	APD (W/m^2)	
6XD	6GHz WLAN	0.53	3.25	0.09	0.77	0.33	7.46	7.43
Date of Testing:		2021/6/15 ~ 2021/7/23						

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications

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



2. Equipment Under Test (EUT) Information

2.1 General Information

Product Feature & Specification	
Equipment Name	Phone
Model Name	G9S9B
FCC ID	A4RG9S9B
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77 : 3450MHz ~ 3550MHz, 3700 MHz ~ 3980 MHz 5G NR n260 : 37 GHz~40 GHz 5G NR n261 : 27.5 GHz~28.35 GHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz WPT: 110KHz ~ 148.5KHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC:ASK WPT ASK
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark:	<ol style="list-style-type: none"> Dynamic antenna tuning mechanism is available at Ant. 0 and for its <1GHz band, details are illustrated in the operational description The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) and the TAS feature will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications



2.2 Maximum Tune-up Limit

General Note:

- 1. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
2. The device implements the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity), the power selection is determined by the user cases as tested in Section 15 of this report, and TAS feature will manage to ensure the average power level not exceeding the associated power table. Full details about the proprietary power management decision are illustrated in the operational description.
3. The following table shows maximum output power configurations for various exposure conditions (output power index) with tune-up tolerance accounted. For TAS enabled bands, the values associate with Plimit plus the total uncertainty, or Pmax plus total uncertainty when the derived Plimit is higher than Pmax. In some frequency bands, for some power indexes which associate with the same power level, conducted power measurement for those only need to perform at once.
4. For the mobile condition, the compliance is demonstrated in Sporton's test report FA0D2942-04A.
5. SAR compliance for the scenario, when device in next-to-ear voice call with hotspot enabled, is justified via head SAR test at Power Index 3

Table with 2 columns: Transmit switching diversity configuration, Support transmit antenna and band. Rows include TX 0 and TX 1 configurations with antenna details.



Maximum Transmit Burst Average Power (dBm)									
Band	Config	Antenna	duty cycle	Mobile Condition	Head Standalone	Head Simultaneous	Hotspot Simultaneous	Body-worn Extremity Standalone	Body-worn Extremity Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GPRS 1TX	TX0	0	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
GSM850 GPRS 2TX	TX0	0	25.00%	32.5	32.5	32.5	32.5	32.5	32.5
GSM850 GPRS 3TX	TX0	0	37.50%	31.5	31.5	31.5	31.5	31.5	31.5
GSM850 GPRS 4TX	TX0	0	50.00%	30.5	30.5	30.5	30.5	30.5	30.5
GSM850 EDGE 1TX	TX0	0	12.50%	28	28	28	28	28	28
GSM850 EDGE 2TX	TX0	0	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	TX0	0	37.50%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 4TX	TX0	0	50.00%	25.5	25.5	25.5	25.5	25.5	25.5
GSM1900 GPRS 1TX	TX0	2	12.50%	31	31	31	30.3	31	30.3
GSM1900 GPRS 2TX	TX0	2	25.00%	29.5	29.5	29.5	27.3	28.5	27.3
GSM1900 GPRS 3TX	TX0	2	37.50%	29	29	29	25.5	26.7	25.5
GSM1900 GPRS 4TX	TX0	2	50.00%	28	28	28	24.3	25.5	24.3
GSM1900 EDGE 1TX	TX0	2	12.50%	26	26	26	26	26	26
GSM1900 EDGE 2TX	TX0	2	25.00%	25	25	25	25	25	25
GSM1900 EDGE 3TX	TX0	2	37.50%	25	25	25	25	25	25
GSM1900 EDGE 4TX	TX0	2	50.00%	24	24	24	24	24	24
WCDMA B2	TX0	2	100.00%	25	25	25	21.2	22.6	21.4
WCDMA B4	TX0	2	100.00%	25	25	25	22.4	24	22.8
WCDMA B5	TX0	0	100.00%	25	25	25	25	25	25
LTE B7	TX0	2	100.00%	24.6	24.6	24.6	19.8	21.5	20.3
LTE B12/17	TX0	0	100.00%	25	25	25	25	25	25
LTE B13	TX0	0	100.00%	25	25	25	25	25	25
LTE B14	TX0	0	100.00%	25	25	25	25	25	25
LTE B25/2	TX0	2	100.00%	25	25	25	20.7	22.9	21.7
LTE B26/5	TX0	0	100.00%	25	25	25	25	25	25
LTE B30	TX0	2	100.00%	25	25	25	20.4	22.6	21.5
LTE B41/B38 PC3	TX0	2	63.30%	23.8	23.8	23.8	22.1	23.4	23.2
LTE B41/B38 PC2	TX0	2	43.30%	26.8	26.8	26.8	23.8	25	24.8
LTE B48	TX0	6	63.30%	24	24	24	24	24	24
LTE B66/4	TX0	2	100.00%	25	25	25	22	23.6	22.4
LTE B71	TX0	0	100.00%	25	25	25	25	25	25
FR1 n25/2	TX0	2	100.00%	25	25	25	20.2	22.3	21.1
FR1 n5	TX0	0	100.00%	25	25	25	25	25	25
FR1 n7	TX0	2	100.00%	24.6	24.6	24.6	19.5	22	20.8
FR1 n12	TX0	0	100.00%	25	25	25	25	25	25
FR1 n30	TX0	2	100.00%	25	25	25	21	22.8	21.6
FR1 n41/38 PC3	TX0	5	100.00%	24.8	18	16.8	20.6	22	20.8
FR1 n41 PC2	TX0	5	50.00%	26.8	21	19.8	23.6	25	23.8
FR1 n66	TX0	2	100.00%	25	25	25	22.7	24.7	23.5
FR1 n71	TX0	0	100.00%	25	25	25	25	25	25
FR1 n77 PC3	TX0	6	100.00%	25	25	24.6	21.6	22.8	21.6
FR1 n77 PC2	TX0	6	50.00%	27	27	27	24.6	25.8	24.6



Maximum Transmit Burst Average Power (dBm)									
Band	Config	Antenna	duty cycle	Mobile Condition	Head Standalone	Head Simultaneous	Hotspot Simultaneous	Body-worn Extremity Standalone	Body-worn Extremity Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GPRS 1TX	TX1	1	12.50%	33.9	33.9	33.1	33.9	33.9	33.9
GSM850 GPRS 2TX	TX1	1	25.00%	32.4	31.3	30.1	32.4	32.4	32.4
GSM850 GPRS 3TX	TX1	1	37.50%	31.4	29.5	28.3	31.4	31.4	31.4
GSM850 GPRS 4TX	TX1	1	50.00%	30.4	28.3	27.1	30.4	30.4	30.4
GSM850 EDGE 1TX	TX0	1	12.50%	27.9	27.9	27.9	27.9	27.9	27.9
GSM850 EDGE 2TX	TX0	1	25.00%	27.4	27.4	27.4	27.4	27.4	27.4
GSM850 EDGE 3TX	TX0	1	37.50%	27.4	27.4	27.4	27.4	27.4	27.4
GSM850 EDGE 4TX	TX0	1	50.00%	25.4	25.4	25.4	25.4	25.4	25.4
GSM1900 GPRS 1TX	TX1	0	12.50%	30.7	30.7	30.7	30.7	30.7	30.7
GSM1900 GPRS 2TX	TX1	0	25.00%	29.2	29.2	29.2	29.2	29.2	29.2
GSM1900 GPRS 3TX	TX1	0	37.50%	28.7	28.7	28.7	27.5	28.7	27.7
GSM1900 GPRS 4TX	TX1	0	50.00%	27.7	27.7	27.7	26.3	27.7	26.5
GSM1900 EDGE 1TX	TX0	0	12.50%	25.7	25.7	25.7	25.7	25.7	25.7
GSM1900 EDGE 2TX	TX0	0	25.00%	24.7	24.7	24.7	24.7	24.7	24.7
GSM1900 EDGE 3TX	TX0	0	37.50%	24.7	24.7	24.7	24.7	24.7	24.7
GSM1900 EDGE 4TX	TX0	0	50.00%	23.7	23.7	23.7	23.7	23.7	23.7
WCDMA B2	TX1	0	100.00%	24.7	24.7	24.7	22.6	23.9	22.7
WCDMA B4	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
WCDMA B5	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
LTE B4	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
LTE B7	TX1	0	100.00%	24	24	24	24	24	24
LTE B12/17	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
LTE B13	TX1	1	100.00%	24.9	24.9	24.1	24.9	24.9	24.9
LTE B14	TX1	1	100.00%	24.9	24.5	23.3	24.9	24.9	24.9
LTE B25/2	TX1	0	100.00%	24.7	24.7	24.7	22.5	23.8	22.5
LTE B26/5	TX1	1	100.00%	24.9	24.9	24.2	24.9	24.9	24.9
LTE B30	TX1	0	100.00%	24.4	24.4	24.4	23.9	24.4	24.4
LTE B41/38 PC3	TX1	0	63.30%	23.2	23.2	23.2	23.2	23.2	23.2
LTE B38 PC2	TX1	0	43.30%	26.2	26.2	26.2	26.2	26.2	26.2
LTE B41 PC2	TX1	0	43.30%	26.5	26.5	26.5	26.5	26.5	26.5
LTE B48	TX1	2	63.30%	24.5	24.5	24.5	24.2	24.5	24.5
LTE B66	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
LTE B71	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
FR1 n25/2	TX1	0	100.00%	24.7	24.7	24.7	22.6	23.9	22.7
FR1 n5	TX1	1	100.00%	24.9	24.9	24.7	24.9	24.9	24.9
FR1 n7	TX1	0	100.00%	24	24	24	24	24	24
FR1 n12	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
FR1 n30	TX1	0	100.00%	24.4	24.4	24.4	24.4	24.4	24.4
FR1 n38 PC3	TX1	1	100.00%	25.2	18	16.8	24.6	25.2	25.2
FR1 n41 PC3	TX1	1	100.00%	25.4	18.2	17	24.8	25.4	25.4
FR1 n41 PC2	TX1	1	50.00%	27.4	21.2	20	27.4	27.4	27.4
FR1 n66	TX1	0	100.00%	24.7	24.7	24.7	24.7	24.7	24.7
FR1 n71	TX1	1	100.00%	24.9	24.9	24.9	24.9	24.9	24.9
FR1 n77 PC3	TX1	2	100.00%	25	25	24.2	21.9	23.1	22
FR1 n77 PC2	TX1	2	50.00%	27	27	27	24.9	26.1	25



<WLAN Maximum Power>

General Note:

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

<Mobile Condition – Power Index 0>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	23.00	23.00	26.0
		6	2437	22.00	22.00	25.0
		11	2462	22.50	22.50	25.5
		12	2467	22.50	22.50	25.5
		13	2472	21.00	21.00	24.0
	802.11g 6Mbps	1	2412	20.00	20.00	23.0
		6	2437	21.00	21.00	24.0
		11	2462	19.00	19.00	22.0
		12	2467	17.50	17.50	20.5
		13	2472	16.50	16.50	19.5
	802.11n-HT20 MCS0	1	2412	20.00	20.00	23.0
		6	2437	21.00	21.00	24.0
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	17.00	17.00	20.0
	802.11ac-VHT20 MCS0	1	2412	20.00	20.00	23.0
		6	2437	21.00	21.00	24.0
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	17.00	17.00	20.0
802.11ax-HE20 MCS0	1	2412	20.00	20.00	23.0	
	6	2437	21.00	21.00	24.0	
	11	2462	18.50	18.50	21.5	
	12	2467	17.50	17.50	20.5	
	13	2472	17.00	17.00	20.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	18.00	18.00	21.0
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.00	18.00	21.0
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.0
		46	5230	20.00	20.00	23.0
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.0
		46	5230	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.0
	802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
48		5240	18.50	18.50	21.5	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.0	
	46	5230	20.00	20.00	23.0	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.0	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	18.50	18.50	21.5
	802.11n-HT20 MCS0	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
	802.11n-HT40 MCS0	54	5270	20.00	20.00	23.0
		62	5310	16.00	16.00	19.0
	802.11ac-VHT20 MCS0	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	54	5270	20.00	20.00	23.0
		62	5310	16.00	16.00	19.0
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.0
	802.11ac-VHT160 MCS0	50	5250	15.50	15.50	18.5
	802.11ax-HE20 MCS0	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
60		5300	18.50	18.50	21.5	
64		5320	17.50	17.50	20.5	
802.11ax-HE40 MCS0	54	5270	20.00	20.00	23.0	
	62	5310	16.00	16.00	19.0	
802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.0	
802.11ax-HE160 MCS0	50	5250	16.00	16.00	19.0	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	106	5530	16.50	16.50	19.5
		122	5610	20.00	20.00	23.0
		138	5690	20.00	20.00	23.0
		114	5570	16.50	16.50	19.5
	802.11ac-VHT160 MCS0	114	5570	16.50	16.50	19.5
	802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
	802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
	802.11ax-HE80 MCS0	106	5530	16.50	16.50	19.5
		122	5610	20.00	20.00	23.0
		138	5690	20.00	20.00	23.0
		114	5570	16.50	16.50	19.5
	802.11ax-HE160 MCS0	114	5570	16.50	16.50	19.5



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11n-HT20 MCS0	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11n-HT40 MCS0	151	5755	20.00	20.00	23.0
		159	5795	20.00	20.00	23.0
	802.11ac-VHT20 MCS0	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11ac-VHT40 MCS0	151	5755	20.50	20.50	23.5
		159	5795	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	155	5775	20.00	20.00	23.0
	802.11ax-HE20 MCS0	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11ax-HE40 MCS0	151	5755	20.50	20.50	23.5
159		5795	20.00	20.00	23.0	
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.0	



<Power Index 1>
<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
		13	2472	16.50	16.50	19.5
	802.11g 6Mbps	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
		13	2472	16.50	16.50	19.5
	802.11n-HT20 MCS0	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
		13	2472	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	1	2412	16.50	16.50	19.5
		6	2437	16.50	16.50	19.5
		11	2462	16.50	16.50	19.5
		12	2467	16.50	16.50	19.5
		13	2472	16.50	16.50	19.5
802.11ax-HE20 MCS0	1	2412	16.50	16.50	19.5	
	6	2437	16.50	16.50	19.5	
	11	2462	16.50	16.50	19.5	
	12	2467	16.50	16.50	19.5	
	13	2472	16.50	16.50	19.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11n-HT20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11n-HT40 MCS0	38	5190	15.50	15.50	18.5
		46	5230	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	38	5190	15.50	15.50	18.5
		46	5230	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	42	5210	15.50	15.50	18.5
	802.11ax-HE20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
48		5240	15.50	15.50	18.5	
802.11ax-HE40 MCS0	38	5190	15.50	15.50	18.5	
	46	5230	15.50	15.50	18.5	
802.11ax-HE80 MCS0	42	5210	15.50	15.50	18.5	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
	802.11n-HT20 MCS0	52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
	802.11n-HT40 MCS0	54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	58	5290	15.00	15.00	18.0
	802.11ac-VHT160 MCS0	50	5250	15.50	15.50	18.5
	802.11ax-HE20 MCS0	52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
60		5300	15.00	15.00	18.0	
64		5320	15.00	15.00	18.0	
802.11ax-HE40 MCS0	54	5270	15.00	15.00	18.0	
	62	5310	15.00	15.00	18.0	
802.11ax-HE80 MCS0	58	5290	15.00	15.00	18.0	
802.11ax-HE160 MCS0	50	5250	15.50	15.50	18.5	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11n-HT20 MCS0	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11n-HT40 MCS0	102	5510	15.50	15.50	18.5
		110	5550	15.50	15.50	18.5
		126	5630	15.50	15.50	18.5
		134	5670	15.50	15.50	18.5
		142	5710	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	102	5510	15.50	15.50	18.5
		110	5550	15.50	15.50	18.5
		126	5630	15.50	15.50	18.5
		134	5670	15.50	15.50	18.5
		142	5710	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	106	5530	15.50	15.50	18.5
		122	5610	15.50	15.50	18.5
		138	5690	15.50	15.50	18.5
	802.11ac-VHT160 MCS0	114	5570	15.50	15.50	18.5
	802.11ax-HE20 MCS0	100	5500	15.50	15.50	18.5
		116	5580	15.50	15.50	18.5
		124	5620	15.50	15.50	18.5
		132	5660	15.50	15.50	18.5
		144	5720	15.50	15.50	18.5
	802.11ax-HE40 MCS0	102	5510	15.50	15.50	18.5
		110	5550	15.50	15.50	18.5
		126	5630	15.50	15.50	18.5
		134	5670	15.50	15.50	18.5
		142	5710	15.50	15.50	18.5
	802.11ax-HE80 MCS0	106	5530	15.50	15.50	18.5
122		5610	15.50	15.50	18.5	
138		5690	15.50	15.50	18.5	
802.11ax-HE160 MCS0	114	5570	15.50	15.50	18.5	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.50	16.50	19.5
		157	5785	16.50	16.50	19.5
		165	5825	16.50	16.50	19.5
	802.11n-HT20 MCS0	149	5745	16.50	16.50	19.5
		157	5785	16.50	16.50	19.5
		165	5825	16.50	16.50	19.5
	802.11n-HT40 MCS0	151	5755	16.50	16.50	19.5
		159	5795	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	149	5745	16.50	16.50	19.5
		157	5785	16.50	16.50	19.5
		165	5825	16.50	16.50	19.5
	802.11ac-VHT40 MCS0	151	5755	16.50	16.50	19.5
		159	5795	16.50	16.50	19.5
	802.11ac-VHT80 MCS0	155	5775	16.50	16.50	19.5
	802.11ax-HE20 MCS0	149	5745	16.50	16.50	19.5
		157	5785	16.50	16.50	19.5
		165	5825	16.50	16.50	19.5
	802.11ax-HE40 MCS0	151	5755	16.50	16.50	19.5
159		5795	16.50	16.50	19.5	
802.11ax-HE80 MCS0	155	5775	16.50	16.50	19.5	



<Power Index 2>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	13.00	13.00	16.0
		6	2437	13.00	13.00	16.0
		11	2462	13.00	13.00	16.0
		12	2467	13.00	13.00	16.0
		13	2472	13.00	13.00	16.0
	802.11g 6Mbps	1	2412	13.00	13.00	16.0
		6	2437	13.00	13.00	16.0
		11	2462	13.00	13.00	16.0
		12	2467	13.00	13.00	16.0
		13	2472	13.00	13.00	16.0
	802.11n-HT20 MCS0	1	2412	13.00	13.00	16.0
		6	2437	13.00	13.00	16.0
		11	2462	13.00	13.00	16.0
		12	2467	13.00	13.00	16.0
		13	2472	13.00	13.00	16.0
	802.11ac-VHT20 MCS0	1	2412	13.00	13.00	16.0
		6	2437	13.00	13.00	16.0
		11	2462	13.00	13.00	16.0
		12	2467	13.00	13.00	16.0
		13	2472	13.00	13.00	16.0
802.11ax-HE20 MCS0	1	2412	13.00	13.00	16.0	
	6	2437	13.00	13.00	16.0	
	11	2462	13.00	13.00	16.0	
	12	2467	13.00	13.00	16.0	
	13	2472	13.00	13.00	16.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11n-HT20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11n-HT40 MCS0	38	5190	15.00	15.00	18.0
		46	5230	15.00	15.00	18.0
	802.11ac-VHT20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
		48	5240	15.00	15.00	18.0
	802.11ac-VHT40 MCS0	38	5190	15.00	15.00	18.0
		46	5230	15.00	15.00	18.0
	802.11ac-VHT80 MCS0	42	5210	15.00	15.00	18.0
	802.11ax-HE20 MCS0	36	5180	15.00	15.00	18.0
		40	5200	15.00	15.00	18.0
		44	5220	15.00	15.00	18.0
48		5240	15.00	15.00	18.0	
802.11ax-HE40 MCS0	38	5190	15.00	15.00	18.0	
	46	5230	15.00	15.00	18.0	
802.11ax-HE80 MCS0	42	5210	15.00	15.00	18.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	14.50	14.50
56			5280	14.50	14.50	17.5
60			5300	14.50	14.50	17.5
64			5320	14.50	14.50	17.5
802.11n-HT20 MCS0		52	5260	14.50	14.50	17.5
		56	5280	14.50	14.50	17.5
		60	5300	14.50	14.50	17.5
		64	5320	14.50	14.50	17.5
802.11n-HT40 MCS0		54	5270	14.50	14.50	17.5
		62	5310	14.50	14.50	17.5
802.11ac-VHT20 MCS0		52	5260	14.50	14.50	17.5
		56	5280	14.50	14.50	17.5
		60	5300	14.50	14.50	17.5
		64	5320	14.50	14.50	17.5
802.11ac-VHT40 MCS0		54	5270	14.50	14.50	17.5
		62	5310	14.50	14.50	17.5
802.11ac-VHT80 MCS0		58	5290	14.50	14.50	17.5
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	14.50	14.50	17.5
		56	5280	14.50	14.50	17.5
		60	5300	14.50	14.50	17.5
		64	5320	14.50	14.50	17.5
802.11ax-HE40 MCS0		54	5270	14.50	14.50	17.5
		62	5310	14.50	14.50	17.5
802.11ax-HE80 MCS0		58	5290	14.50	14.50	17.5
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.0



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
		144	5720	15.00	15.00	18.0
802.11n-HT20 MCS0		100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
802.11n-HT40 MCS0		102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
802.11ac-VHT20 MCS0		100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
802.11ac-VHT40 MCS0		102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
802.11ac-VHT80 MCS0		106	5530	15.00	15.00	18.0
		122	5610	15.00	15.00	18.0
		138	5690	15.00	15.00	18.0
		114	5570	15.00	15.00	18.0
802.11ac-VHT160 MCS0		114	5570	15.00	15.00	18.0
802.11ax-HE20 MCS0		100	5500	15.00	15.00	18.0
		116	5580	15.00	15.00	18.0
		124	5620	15.00	15.00	18.0
		132	5660	15.00	15.00	18.0
802.11ax-HE40 MCS0		102	5510	15.00	15.00	18.0
		110	5550	15.00	15.00	18.0
		126	5630	15.00	15.00	18.0
		134	5670	15.00	15.00	18.0
802.11ax-HE80 MCS0		106	5530	15.00	15.00	18.0
		122	5610	15.00	15.00	18.0
		138	5690	15.00	15.00	18.0
802.11ax-HE160 MCS0		114	5570	15.00	15.00	18.0



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11n-HT20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11n-HT40 MCS0	151	5755	15.50	15.50	18.5
		159	5795	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	151	5755	15.50	15.50	18.5
		159	5795	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	155	5775	15.50	15.50	18.5
	802.11ax-HE20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11ax-HE40 MCS0	151	5755	15.50	15.50	18.5
159		5795	15.50	15.50	18.5	
802.11ax-HE80 MCS0	155	5775	15.50	15.50	18.5	



<Power Index 3>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
		802.11b 1Mbps	1	2412	13.50	13.50
6			2437	13.50	13.50	16.5
11			2462	13.50	13.50	16.5
12			2467	13.50	13.50	16.5
13			2472	13.50	13.50	16.5
802.11g 6Mbps		1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
802.11n-HT20 MCS0		1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
802.11ac-VHT20 MCS0		1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
802.11ax-HE20 MCS0	1	2412	13.50	13.50	16.5	
	6	2437	13.50	13.50	16.5	
	11	2462	13.50	13.50	16.5	
	12	2467	13.50	13.50	16.5	
	13	2472	13.50	13.50	16.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	10.50	10.50	13.5
		40	5200	10.50	10.50	13.5
		44	5220	10.50	10.50	13.5
		48	5240	10.50	10.50	13.5
	802.11n-HT20 MCS0	36	5180	10.50	10.50	13.5
		40	5200	10.50	10.50	13.5
		44	5220	10.50	10.50	13.5
		48	5240	10.50	10.50	13.5
	802.11n-HT40 MCS0	38	5190	10.50	10.50	13.5
		46	5230	10.50	10.50	13.5
	802.11ac-VHT20 MCS0	36	5180	10.50	10.50	13.5
		40	5200	10.50	10.50	13.5
		44	5220	10.50	10.50	13.5
		48	5240	10.50	10.50	13.5
	802.11ac-VHT40 MCS0	38	5190	10.50	10.50	13.5
		46	5230	10.50	10.50	13.5
	802.11ac-VHT80 MCS0	42	5210	10.50	10.50	13.5
	802.11ax-HE20 MCS0	36	5180	10.50	10.50	13.5
		40	5200	10.50	10.50	13.5
		44	5220	10.50	10.50	13.5
48		5240	10.50	10.50	13.5	
802.11ax-HE40 MCS0	38	5190	10.50	10.50	13.5	
	46	5230	10.50	10.50	13.5	
802.11ax-HE80 MCS0	42	5210	10.50	10.50	13.5	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	10.50	10.50
56			5280	10.50	10.50	13.5
60			5300	10.50	10.50	13.5
64			5320	10.50	10.50	13.5
802.11n-HT20 MCS0		52	5260	10.50	10.50	13.5
		56	5280	10.50	10.50	13.5
		60	5300	10.50	10.50	13.5
		64	5320	10.50	10.50	13.5
802.11n-HT40 MCS0		54	5270	10.50	10.50	13.5
		62	5310	10.50	10.50	13.5
802.11ac-VHT20 MCS0		52	5260	10.50	10.50	13.5
		56	5280	10.50	10.50	13.5
		60	5300	10.50	10.50	13.5
		64	5320	10.50	10.50	13.5
802.11ac-VHT40 MCS0		54	5270	10.50	10.50	13.5
		62	5310	10.50	10.50	13.5
802.11ac-VHT80 MCS0		58	5290	10.50	10.50	13.5
802.11ac-VHT160 MCS0		50	5250	10.50	10.50	13.5
802.11ax-HE20 MCS0		52	5260	10.50	10.50	13.5
		56	5280	10.50	10.50	13.5
		60	5300	10.50	10.50	13.5
		64	5320	10.50	10.50	13.5
802.11ax-HE40 MCS0		54	5270	10.50	10.50	13.5
		62	5310	10.50	10.50	13.5
802.11ax-HE80 MCS0		58	5290	10.50	10.50	13.5
802.11ax-HE160 MCS0		50	5250	10.50	10.50	13.5



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		100	5500	11.50	11.50	14.5
		116	5580	11.50	11.50	14.5
		124	5620	11.50	11.50	14.5
		132	5660	11.50	11.50	14.5
		144	5720	11.50	11.50	14.5
802.11n-HT20 MCS0		100	5500	11.50	11.50	14.5
		116	5580	11.50	11.50	14.5
		124	5620	11.50	11.50	14.5
		132	5660	11.50	11.50	14.5
		144	5720	11.50	11.50	14.5
802.11n-HT40 MCS0		102	5510	11.50	11.50	14.5
		110	5550	11.50	11.50	14.5
		126	5630	11.50	11.50	14.5
		134	5670	11.50	11.50	14.5
		142	5710	11.50	11.50	14.5
802.11ac-VHT20 MCS0		100	5500	11.50	11.50	14.5
		116	5580	11.50	11.50	14.5
		124	5620	11.50	11.50	14.5
		132	5660	11.50	11.50	14.5
		144	5720	11.50	11.50	14.5
802.11ac-VHT40 MCS0		102	5510	11.50	11.50	14.5
		110	5550	11.50	11.50	14.5
		126	5630	11.50	11.50	14.5
		134	5670	11.50	11.50	14.5
		142	5710	11.50	11.50	14.5
802.11ac-VHT80 MCS0		106	5530	11.50	11.50	14.5
		122	5610	11.50	11.50	14.5
		138	5690	11.50	11.50	14.5
802.11ac-VHT160 MCS0		114	5570	11.50	11.50	14.5
802.11ax-HE20 MCS0		100	5500	11.50	11.50	14.5
		116	5580	11.50	11.50	14.5
		124	5620	11.50	11.50	14.5
		132	5660	11.50	11.50	14.5
		144	5720	11.50	11.50	14.5
802.11ax-HE40 MCS0		102	5510	11.50	11.50	14.5
		110	5550	11.50	11.50	14.5
		126	5630	11.50	11.50	14.5
		134	5670	11.50	11.50	14.5
		142	5710	11.50	11.50	14.5
802.11ax-HE80 MCS0		106	5530	11.50	11.50	14.5
		122	5610	11.50	11.50	14.5
		138	5690	11.50	11.50	14.5
802.11ax-HE160 MCS0		114	5570	11.50	11.50	14.5



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
802.11n-HT20 MCS0		149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
802.11n-HT40 MCS0		151	5755	11.50	11.50	14.5
		159	5795	11.50	11.50	14.5
802.11ac-VHT20 MCS0		149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
802.11ac-VHT40 MCS0		151	5755	11.50	11.50	14.5
		159	5795	11.50	11.50	14.5
802.11ac-VHT80 MCS0		155	5775	11.50	11.50	14.5
802.11ax-HE20 MCS0		149	5745	11.50	11.50	14.5
		157	5785	11.50	11.50	14.5
		165	5825	11.50	11.50	14.5
802.11ax-HE40 MCS0		151	5755	11.50	11.50	14.5
		159	5795	11.50	11.50	14.5
802.11ax-HE80 MCS0		155	5775	11.50	11.50	14.5



<Power Index 4>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	7.50	7.50	10.5
		6	2437	7.50	7.50	10.5
		11	2462	7.50	7.50	10.5
		12	2467	7.50	7.50	10.5
		13	2472	7.50	7.50	10.5
	802.11g 6Mbps	1	2412	7.50	7.50	10.5
		6	2437	7.50	7.50	10.5
		11	2462	7.50	7.50	10.5
		12	2467	7.50	7.50	10.5
		13	2472	7.50	7.50	10.5
	802.11n-HT20 MCS0	1	2412	7.50	7.50	10.5
		6	2437	7.50	7.50	10.5
		11	2462	7.50	7.50	10.5
		12	2467	7.50	7.50	10.5
		13	2472	7.50	7.50	10.5
	802.11ac-VHT20 MCS0	1	2412	7.50	7.50	10.5
		6	2437	7.50	7.50	10.5
		11	2462	7.50	7.50	10.5
		12	2467	7.50	7.50	10.5
		13	2472	7.50	7.50	10.5
802.11ax-HE20 MCS0	1	2412	7.50	7.50	10.5	
	6	2437	7.50	7.50	10.5	
	11	2462	7.50	7.50	10.5	
	12	2467	7.50	7.50	10.5	
	13	2472	7.50	7.50	10.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
		48	5240	11.50	11.50	14.5
	802.11n-HT20 MCS0	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
		48	5240	11.50	11.50	14.5
	802.11n-HT40 MCS0	38	5190	11.50	11.50	14.5
		46	5230	11.50	11.50	14.5
	802.11ac-VHT20 MCS0	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
		48	5240	11.50	11.50	14.5
	802.11ac-VHT40 MCS0	38	5190	11.50	11.50	14.5
		46	5230	11.50	11.50	14.5
	802.11ac-VHT80 MCS0	42	5210	11.50	11.50	14.5
	802.11ax-HE20 MCS0	36	5180	11.50	11.50	14.5
		40	5200	11.50	11.50	14.5
		44	5220	11.50	11.50	14.5
48		5240	11.50	11.50	14.5	
802.11ax-HE40 MCS0	38	5190	11.50	11.50	14.5	
	46	5230	11.50	11.50	14.5	
802.11ax-HE80 MCS0	42	5210	11.50	11.50	14.5	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
		60	5300	11.50	11.50	14.5
		64	5320	11.50	11.50	14.5
	802.11n-HT20 MCS0	52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
		60	5300	11.50	11.50	14.5
		64	5320	11.50	11.50	14.5
	802.11n-HT40 MCS0	54	5270	11.50	11.50	14.5
		62	5310	11.50	11.50	14.5
	802.11ac-VHT20 MCS0	52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
		60	5300	11.50	11.50	14.5
		64	5320	11.50	11.50	14.5
	802.11ac-VHT40 MCS0	54	5270	11.50	11.50	14.5
		62	5310	11.50	11.50	14.5
	802.11ac-VHT80 MCS0	58	5290	11.50	11.50	14.5
	802.11ac-VHT160 MCS0	50	5250	11.50	11.50	14.5
	802.11ax-HE20 MCS0	52	5260	11.50	11.50	14.5
		56	5280	11.50	11.50	14.5
60		5300	11.50	11.50	14.5	
64		5320	11.50	11.50	14.5	
802.11ax-HE40 MCS0	54	5270	11.50	11.50	14.5	
	62	5310	11.50	11.50	14.5	
802.11ax-HE80 MCS0	58	5290	11.50	11.50	14.5	
802.11ax-HE160 MCS0	50	5250	11.50	11.50	14.5	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	12.50	12.50	15.5
		116	5580	12.50	12.50	15.5
		124	5620	12.50	12.50	15.5
		132	5660	12.50	12.50	15.5
		144	5720	12.50	12.50	15.5
	802.11n-HT20 MCS0	100	5500	12.50	12.50	15.5
		116	5580	12.50	12.50	15.5
		124	5620	12.50	12.50	15.5
		132	5660	12.50	12.50	15.5
		144	5720	12.50	12.50	15.5
	802.11n-HT40 MCS0	102	5510	12.50	12.50	15.5
		110	5550	12.50	12.50	15.5
		126	5630	12.50	12.50	15.5
		134	5670	12.50	12.50	15.5
		142	5710	12.50	12.50	15.5
	802.11ac-VHT20 MCS0	100	5500	12.50	12.50	15.5
		116	5580	12.50	12.50	15.5
		124	5620	12.50	12.50	15.5
		132	5660	12.50	12.50	15.5
		144	5720	12.50	12.50	15.5
	802.11ac-VHT40 MCS0	102	5510	12.50	12.50	15.5
		110	5550	12.50	12.50	15.5
		126	5630	12.50	12.50	15.5
		134	5670	12.50	12.50	15.5
		142	5710	12.50	12.50	15.5
	802.11ac-VHT80 MCS0	106	5530	12.50	12.50	15.5
		122	5610	12.50	12.50	15.5
		138	5690	12.50	12.50	15.5
	802.11ac-VHT160 MCS0	114	5570	12.50	12.50	15.5
	802.11ax-HE20 MCS0	100	5500	12.50	12.50	15.5
		116	5580	12.50	12.50	15.5
		124	5620	12.50	12.50	15.5
132		5660	12.50	12.50	15.5	
144		5720	12.50	12.50	15.5	
802.11ax-HE40 MCS0	102	5510	12.50	12.50	15.5	
	110	5550	12.50	12.50	15.5	
	126	5630	12.50	12.50	15.5	
	134	5670	12.50	12.50	15.5	
	142	5710	12.50	12.50	15.5	
802.11ax-HE80 MCS0	106	5530	12.50	12.50	15.5	
	122	5610	12.50	12.50	15.5	
	138	5690	12.50	12.50	15.5	
802.11ax-HE160 MCS0	114	5570	12.50	12.50	15.5	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		149	5745	12.50	12.50	15.5
		157	5785	12.50	12.50	15.5
		165	5825	12.50	12.50	15.5
802.11n-HT20 MCS0		149	5745	12.50	12.50	15.5
		157	5785	12.50	12.50	15.5
		165	5825	12.50	12.50	15.5
802.11n-HT40 MCS0		151	5755	12.50	12.50	15.5
		159	5795	12.50	12.50	15.5
802.11ac-VHT20 MCS0		149	5745	12.50	12.50	15.5
		157	5785	12.50	12.50	15.5
		165	5825	12.50	12.50	15.5
802.11ac-VHT40 MCS0		151	5755	12.50	12.50	15.5
		159	5795	12.50	12.50	15.5
802.11ac-VHT80 MCS0		155	5775	12.50	12.50	15.5
802.11ax-HE20 MCS0		149	5745	12.50	12.50	15.5
		157	5785	12.50	12.50	15.5
		165	5825	12.50	12.50	15.5
802.11ax-HE40 MCS0		151	5755	12.50	12.50	15.5
		159	5795	12.50	12.50	15.5
802.11ax-HE80 MCS0		155	5775	12.50	12.50	15.5



<Power Index 5>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	21.50	21.50	24.5
		6	2437	21.50	21.50	24.5
		11	2462	21.50	21.50	24.5
		12	2467	21.50	21.50	24.5
		13	2472	21.00	21.00	24.0
	802.11g 6Mbps	1	2412	20.00	20.00	23.0
		6	2437	21.00	21.00	24.0
		11	2462	19.00	19.00	22.0
		12	2467	17.50	17.50	20.5
		13	2472	16.50	16.50	19.5
	802.11n-HT20 MCS0	1	2412	20.00	20.00	23.0
		6	2437	21.00	21.00	24.0
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	17.00	17.00	20.0
	802.11ac-VHT20 MCS0	1	2412	20.00	20.00	23.0
		6	2437	21.00	21.00	24.0
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	17.00	17.00	20.0
802.11ax-HE20 MCS0	1	2412	20.00	20.00	23.0	
	6	2437	21.00	21.00	24.0	
	11	2462	18.50	18.50	21.5	
	12	2467	17.50	17.50	20.5	
	13	2472	17.00	17.00	20.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	18.00	18.00	21.0
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.00	18.00	21.0
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.0
	802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
48		5240	18.50	18.50	21.5	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.0	
	46	5230	19.00	19.00	22.0	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.0	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	18.50	18.50	21.5
	802.11n-HT20 MCS0	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
	802.11n-HT40 MCS0	54	5270	19.00	19.00	22.0
		62	5310	16.00	16.00	19.0
	802.11ac-VHT20 MCS0	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
	802.11ac-VHT40 MCS0	54	5270	19.00	19.00	22.0
		62	5310	16.00	16.00	19.0
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.0
	802.11ac-VHT160 MCS0	50	5250	15.00	15.00	18.0
	802.11ax-HE20 MCS0	52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
60		5300	18.50	18.50	21.5	
64		5320	17.50	17.50	20.5	
802.11ax-HE40 MCS0	54	5270	19.00	19.00	22.0	
	62	5310	16.00	16.00	19.0	
802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.0	
802.11ax-HE160 MCS0	50	5250	16.00	16.00	19.0	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
	802.11ac-VHT40 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
	802.11ac-VHT80 MCS0	106	5530	16.50	16.50	19.5
		122	5610	20.00	20.00	23.0
		138	5690	20.00	20.00	23.0
		114	5570	16.50	16.50	19.5
	802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
	802.11ax-HE40 MCS0	100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
124		5620	19.00	19.00	22.0	
132		5660	19.00	19.00	22.0	
802.11ax-HE80 MCS0	106	5530	16.50	16.50	19.5	
	122	5610	20.00	20.00	23.0	
	138	5690	20.00	20.00	23.0	
	114	5570	16.50	16.50	19.5	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11n-HT20 MCS0		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11n-HT40 MCS0		151	5755	20.00	20.00	23.0
		159	5795	20.00	20.00	23.0
802.11ac-VHT20 MCS0		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11ac-VHT40 MCS0		151	5755	20.50	20.50	23.5
		159	5795	20.00	20.00	23.0
802.11ac-VHT80 MCS0		155	5775	20.00	20.00	23.0
802.11ax-HE20 MCS0		149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
802.11ax-HE40 MCS0		151	5755	20.50	20.50	23.5
		159	5795	20.00	20.00	23.0
802.11ax-HE80 MCS0		155	5775	20.00	20.00	23.0



<Power Index 6>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
		12	2467	17.50	17.50	20.5
		13	2472	17.50	17.50	20.5
	802.11g 6Mbps	1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
		12	2467	17.50	17.50	20.5
	802.11n-HT20 MCS0	13	2472	16.50	16.50	19.5
		1	2412	17.50	17.50	20.5
		6	2437	17.50	17.50	20.5
		11	2462	17.50	17.50	20.5
802.11ac-VHT20 MCS0	12	2467	17.50	17.50	20.5	
	13	2472	17.00	17.00	20.0	
	1	2412	17.50	17.50	20.5	
	6	2437	17.50	17.50	20.5	
802.11ax-HE20 MCS0	11	2462	17.50	17.50	20.5	
	12	2467	17.50	17.50	20.5	
	13	2472	17.00	17.00	20.0	
	1	2412	17.50	17.50	20.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	18.00	18.00	21.0
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.00	18.00	21.0
	802.11n-HT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	36	5180	17.50	17.50	20.5
		40	5200	18.00	18.00	21.0
		44	5220	18.00	18.00	21.0
		48	5240	18.50	18.50	21.5
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.0
		46	5230	19.00	19.00	22.0
802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.0	
802.11ax-HE20 MCS0	36	5180	17.50	17.50	20.5	
	40	5200	18.00	18.00	21.0	
	44	5220	18.00	18.00	21.0	
	48	5240	18.50	18.50	21.5	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.0	
	46	5230	19.00	19.00	22.0	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.5
60			5300	18.50	18.50	21.5
64			5320	18.50	18.50	21.5
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
802.11n-HT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	16.00	16.00	19.0
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
802.11ac-VHT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	16.00	16.00	19.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.0
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.5
		56	5280	18.50	18.50	21.5
		60	5300	18.50	18.50	21.5
		64	5320	17.50	17.50	20.5
802.11ax-HE40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	16.00	16.00	19.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	16.00	16.00	19.0



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
802.11n-HT20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
802.11n-HT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
		142	5710	20.00	20.00	23.0
802.11ac-VHT20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
802.11ac-VHT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
		142	5710	20.00	20.00	23.0
802.11ac-VHT80 MCS0		106	5530	16.50	16.50	19.5
		122	5610	20.00	20.00	23.0
		138	5690	20.00	20.00	23.0
802.11ac-VHT160 MCS0		114	5570	16.50	16.50	19.5
802.11ax-HE20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	19.00	19.00	22.0
		124	5620	19.00	19.00	22.0
		132	5660	19.00	19.00	22.0
		144	5720	19.00	19.00	22.0
802.11ax-HE40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	20.00	20.00	23.0
		126	5630	20.00	20.00	23.0
		134	5670	20.00	20.00	23.0
		142	5710	20.00	20.00	23.0
802.11ax-HE80 MCS0		106	5530	16.50	16.50	19.5
		122	5610	20.00	20.00	23.0
		138	5690	20.00	20.00	23.0
802.11ax-HE160 MCS0		114	5570	16.50	16.50	19.5



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11n-HT20 MCS0	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11n-HT40 MCS0	151	5755	20.00	20.00	23.0
		159	5795	20.00	20.00	23.0
	802.11ac-VHT20 MCS0	149	5745	21.00	21.00	24.0
		157	5785	21.00	21.00	24.0
		165	5825	21.00	21.00	24.0
	802.11ac-VHT40 MCS0	151	5755	20.50	20.50	23.5
		159	5795	20.00	20.00	23.0
	802.11ac-VHT80 MCS0	155	5775	20.00	20.00	23.0
802.11ax-HE20 MCS0	149	5745	21.00	21.00	24.0	
	157	5785	21.00	21.00	24.0	
	165	5825	21.00	21.00	24.0	
802.11ax-HE40 MCS0	151	5755	20.50	20.50	23.5	
	159	5795	20.00	20.00	23.0	
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.0	



<Power Index 7>

<2.4GHz WLAN>

Burst Average Power (dBm)						
2.4GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11b 1Mbps	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	18.50	18.50	21.5
		13	2472	18.50	18.50	21.5
	802.11g 6Mbps	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	16.50	16.50	19.5
	802.11n-HT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	17.00	17.00	20.0
	802.11ac-VHT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	18.50	18.50	21.5
		11	2462	18.50	18.50	21.5
		12	2467	17.50	17.50	20.5
		13	2472	17.00	17.00	20.0
802.11ax-HE20 MCS0	1	2412	18.50	18.50	21.5	
	6	2437	18.50	18.50	21.5	
	11	2462	18.50	18.50	21.5	
	12	2467	17.50	17.50	20.5	
	13	2472	17.00	17.00	20.0	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	16.50	16.50	19.5
		40	5200	16.50	16.50	19.5
		44	5220	16.50	16.50	19.5
		48	5240	16.50	16.50	19.5
	802.11n-HT20 MCS0	36	5180	16.50	16.50	19.5
		40	5200	16.50	16.50	19.5
		44	5220	16.50	16.50	19.5
		48	5240	16.50	16.50	19.5
	802.11n-HT40 MCS0	38	5190	16.50	16.50	19.5
		46	5230	16.50	16.50	19.5
	802.11ac-VHT20 MCS0	36	5180	16.50	16.50	19.5
		40	5200	16.50	16.50	19.5
		44	5220	16.50	16.50	19.5
		48	5240	16.50	16.50	19.5
	802.11ac-VHT40 MCS0	38	5190	16.50	16.50	19.5
		46	5230	16.50	16.50	19.5
	802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.0
	802.11ax-HE20 MCS0	36	5180	16.50	16.50	19.5
		40	5200	16.50	16.50	19.5
		44	5220	16.50	16.50	19.5
48		5240	16.50	16.50	19.5	
802.11ax-HE40 MCS0	38	5190	16.50	16.50	19.5	
	46	5230	16.50	16.50	19.5	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.0	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.00	17.00	20.0
		56	5280	17.00	17.00	20.0
		60	5300	17.00	17.00	20.0
		64	5320	17.00	17.00	20.0
	802.11n-HT20 MCS0	52	5260	17.00	17.00	20.0
		56	5280	17.00	17.00	20.0
		60	5300	17.00	17.00	20.0
		64	5320	17.00	17.00	20.0
	802.11n-HT40 MCS0	54	5270	17.00	17.00	20.0
		62	5310	16.00	16.00	19.0
	802.11ac-VHT20 MCS0	52	5260	17.00	17.00	20.0
		56	5280	17.00	17.00	20.0
		60	5300	17.00	17.00	20.0
		64	5320	17.00	17.00	20.0
	802.11ac-VHT40 MCS0	54	5270	17.00	17.00	20.0
		62	5310	16.00	16.00	19.0
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.0
	802.11ac-VHT160 MCS0	50	5250	15.00	15.00	18.0
	802.11ax-HE20 MCS0	52	5260	17.00	17.00	20.0
		56	5280	17.00	17.00	20.0
60		5300	17.00	17.00	20.0	
64		5320	17.00	17.00	20.0	
802.11ax-HE40 MCS0	54	5270	17.00	17.00	20.0	
	62	5310	16.00	16.00	19.0	
802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.0	
802.11ax-HE160 MCS0	50	5250	16.00	16.00	19.0	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
	802.11ac-VHT80 MCS0	106	5530	16.50	16.50	19.5
		122	5610	17.00	17.00	20.0
		138	5690	17.00	17.00	20.0
	802.11ac-VHT160 MCS0	114	5570	16.50	16.50	19.5
	802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
132		5660	17.00	17.00	20.0	
144		5720	17.00	17.00	20.0	
802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.0	
	110	5550	17.00	17.00	20.0	
	126	5630	17.00	17.00	20.0	
	134	5670	17.00	17.00	20.0	
	142	5710	17.00	17.00	20.0	
802.11ax-HE80 MCS0	106	5530	16.50	16.50	19.5	
	122	5610	17.00	17.00	20.0	
	138	5690	17.00	17.00	20.0	
802.11ax-HE160 MCS0	114	5570	16.50	16.50	19.5	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
802.11n-HT20 MCS0		149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
802.11n-HT40 MCS0		151	5755	18.00	18.00	21.0
		159	5795	18.00	18.00	21.0
802.11ac-VHT20 MCS0		149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
802.11ac-VHT40 MCS0		151	5755	18.00	18.00	21.0
		159	5795	18.00	18.00	21.0
802.11ac-VHT80 MCS0		155	5775	18.00	18.00	21.0
802.11ax-HE20 MCS0		149	5745	18.00	18.00	21.0
		157	5785	18.00	18.00	21.0
		165	5825	18.00	18.00	21.0
802.11ax-HE40 MCS0		151	5755	18.00	18.00	21.0
		159	5795	18.00	18.00	21.0
802.11ax-HE80 MCS0		155	5775	18.00	18.00	21.0



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<2.4 GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
	802.11g 6Mbps	1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
	802.11n-HT20 MCS0	1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
	802.11ac-VHT20 MCS0	1	2412	13.50	13.50	16.5
		6	2437	13.50	13.50	16.5
		11	2462	13.50	13.50	16.5
		12	2467	13.50	13.50	16.5
		13	2472	13.50	13.50	16.5
802.11ax-HE20 MCS0	1	2412	13.50	13.50	16.5	
	6	2437	13.50	13.50	16.5	
	11	2462	13.50	13.50	16.5	
	12	2467	13.50	13.50	16.5	
	13	2472	13.50	13.50	16.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	14.00	14.00	17.0
		40	5200	14.00	14.00	17.0
		44	5220	14.00	14.00	17.0
		48	5240	14.00	14.00	17.0
	802.11n-HT20 MCS0	36	5180	14.00	14.00	17.0
		40	5200	14.00	14.00	17.0
		44	5220	14.00	14.00	17.0
		48	5240	14.00	14.00	17.0
	802.11n-HT40 MCS0	38	5190	14.00	14.00	17.0
		46	5230	14.00	14.00	17.0
	802.11ac-VHT20 MCS0	36	5180	14.00	14.00	17.0
		40	5200	14.00	14.00	17.0
		44	5220	14.00	14.00	17.0
		48	5240	14.00	14.00	17.01
	802.11ac-VHT40 MCS0	38	5190	14.00	14.00	17.0
		46	5230	14.00	14.00	17.0
	802.11ac-VHT80 MCS0	42	5210	14.00	14.00	17.0
	802.11ax-HE20 MCS0	36	5180	14.00	14.00	17.0
		40	5200	14.00	14.00	17.0
		44	5220	14.00	14.00	17.0
48		5240	14.00	14.00	17.0	
802.11ax-HE40 MCS0	38	5190	14.00	14.00	17.0	
	46	5230	14.00	14.00	17.0	
802.11ax-HE80 MCS0	42	5210	14.00	14.00	17.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	15.50	15.50
56			5280	15.50	15.50	18.5
60			5300	15.50	15.50	18.5
64			5320	15.50	15.50	18.5
802.11n-HT20 MCS0		52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
		60	5300	15.50	15.50	18.5
		64	5320	15.50	15.50	18.5
802.11n-HT40 MCS0		54	5270	15.50	15.50	18.5
		62	5310	15.50	15.50	18.5
802.11ac-VHT20 MCS0		52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
		60	5300	15.50	15.50	18.5
		64	5320	15.50	15.50	18.5
802.11ac-VHT40 MCS0		54	5270	15.50	15.50	18.5
		62	5310	15.50	15.50	18.5
802.11ac-VHT80 MCS0		58	5290	15.50	15.50	18.5
802.11ac-VHT160 MCS0		50	5250	15.50	15.50	18.5
802.11ax-HE20 MCS0		52	5260	15.50	15.50	18.5
		56	5280	15.50	15.50	18.5
		60	5300	15.50	15.50	18.5
		64	5320	15.50	15.50	18.5
802.11ax-HE40 MCS0		54	5270	15.50	15.50	18.5
		62	5310	15.50	15.50	18.5
802.11ax-HE80 MCS0		58	5290	15.50	15.50	18.5
802.11ax-HE160 MCS0		50	5250	15.50	15.50	18.5



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11n-HT20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11n-HT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
802.11ac-VHT20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11ac-VHT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
802.11ac-VHT80 MCS0		106	5530	16.50	16.50	19.5
		122	5610	17.00	17.00	20.0
		138	5690	17.00	17.00	20.0
802.11ac-VHT160 MCS0		114	5570	16.50	16.50	19.5
802.11ax-HE20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11ax-HE40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
802.11ax-HE80 MCS0		106	5530	16.50	16.50	19.5
		122	5610	17.00	17.00	20.0
		138	5690	17.00	17.00	20.0
802.11ax-HE160 MCS0		114	5570	16.50	16.50	19.5



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11n-HT20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11n-HT40 MCS0	151	5755	15.50	15.50	18.5
		159	5795	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	151	5755	15.50	15.50	18.5
		159	5795	15.50	15.50	18.5
802.11ac-VHT80 MCS0	155	5775	15.50	15.50	18.5	
802.11ax-HE20 MCS0	149	5745	15.50	15.50	18.5	
	157	5785	15.50	15.50	18.5	
	165	5825	15.50	15.50	18.5	
802.11ax-HE40 MCS0	151	5755	15.50	15.50	18.5	
	159	5795	15.50	15.50	18.5	
802.11ax-HE80 MCS0	155	5775	15.50	15.50	18.5	



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<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11n-HT20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11n-HT40 MCS0	38	5190	15.50	15.50	18.5
		46	5230	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
		48	5240	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	38	5190	15.50	15.50	18.5
		46	5230	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	42	5210	15.00	15.00	18.0
	802.11ax-HE20 MCS0	36	5180	15.50	15.50	18.5
		40	5200	15.50	15.50	18.5
		44	5220	15.50	15.50	18.5
48		5240	15.50	15.50	18.5	
802.11ax-HE40 MCS0	38	5190	15.50	15.50	18.5	
	46	5230	15.50	15.50	18.5	
802.11ax-HE80 MCS0	42	5210	15.00	15.00	18.0	



Burst Average Power (dBm)						
Transmit Antenna				MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
	802.11a 6Mbps		52	5260	16.50	16.50
56			5280	16.50	16.50	19.5
60			5300	16.50	16.50	19.5
64			5320	16.50	16.50	19.5
802.11n-HT20 MCS0		52	5260	16.50	16.50	19.5
		56	5280	16.50	16.50	19.5
		60	5300	16.50	16.50	19.5
		64	5320	16.50	16.50	19.5
802.11n-HT40 MCS0		54	5270	16.50	16.50	19.5
		62	5310	16.00	16.00	19.0
802.11ac-VHT20 MCS0		52	5260	16.50	16.50	19.5
		56	5280	16.50	16.50	19.5
		60	5300	16.50	16.50	19.5
		64	5320	16.50	16.50	19.5
802.11ac-VHT40 MCS0		54	5270	16.50	16.50	19.5
		62	5310	16.00	16.00	19.0
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.0
802.11ac-VHT160 MCS0		50	5250	15.50	15.50	18.5
802.11ax-HE20 MCS0		52	5260	16.50	16.50	19.5
		56	5280	16.50	16.50	19.5
		60	5300	16.50	16.50	19.5
		64	5320	16.50	16.50	19.5
802.11ax-HE40 MCS0		54	5270	16.50	16.50	19.5
		62	5310	16.00	16.00	19.0
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.0
802.11ax-HE160 MCS0		50	5250	16.00	16.00	19.0



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
802.11a 6Mbps		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11n-HT20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11n-HT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
802.11ac-VHT20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11ac-VHT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
802.11ac-VHT80 MCS0		106	5530	16.50	16.50	19.5
		122	5610	17.00	17.00	20.0
		138	5690	17.00	17.00	20.0
802.11ac-VHT160 MCS0		114	5570	16.50	16.50	19.5
802.11ax-HE20 MCS0		100	5500	16.00	16.00	19.0
		116	5580	17.00	17.00	20.0
		124	5620	17.00	17.00	20.0
		132	5660	17.00	17.00	20.0
		144	5720	17.00	17.00	20.0
802.11ax-HE40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	17.00	17.00	20.0
		126	5630	17.00	17.00	20.0
		134	5670	17.00	17.00	20.0
		142	5710	17.00	17.00	20.0
802.11ax-HE80 MCS0		106	5530	16.50	16.50	19.5
		122	5610	17.00	17.00	20.0
		138	5690	17.00	17.00	20.0
802.11ax-HE160 MCS0		114	5570	16.50	16.50	19.5



Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11n-HT20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11n-HT40 MCS0	151	5755	15.50	15.50	18.5
		159	5795	15.50	15.50	18.5
	802.11ac-VHT20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11ac-VHT40 MCS0	151	5755	15.50	15.50	18.5
		159	5795	15.50	15.50	18.5
	802.11ac-VHT80 MCS0	155	5775	15.50	15.50	18.5
	802.11ax-HE20 MCS0	149	5745	15.50	15.50	18.5
		157	5785	15.50	15.50	18.5
		165	5825	15.50	15.50	18.5
	802.11ax-HE40 MCS0	151	5755	15.50	15.50	18.5
159		5795	15.50	15.50	18.5	
802.11ax-HE80 MCS0	155	5775	15.50	15.50	18.5	



<6GHz WLAN Maximum Power>

<Mobile Condition - Power Index 0>

Burst Average Power (dBm)							
WiFi 6 GHz	Transmit Antenna			MIMO			
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit	
	802.11ax-HE20 MCS0	1	5955	5.50	5.50	8.50	
		57	6235	5.50	5.50	8.50	
		113	6515	3.50	3.50	6.50	
		173	6815	3.50	3.50	6.50	
		233	7115	5.00	5.00	8.00	
	802.11ax-HE40 MCS0	3	5965	7.00	7.00	10.00	
		59	6245	7.00	7.00	10.00	
		107	6485	7.00	7.00	10.00	
		171	6805	7.00	7.00	10.00	
	802.11ax-HE80 MCS0	227	7085	6.50	6.50	9.50	
		7	5985	11.00	11.00	14.00	
		71	6305	11.00	11.00	14.00	
		119	6545	9.50	9.50	12.50	
	802.11ax-HE160 MCS0	167	6785	9.50	9.50	12.50	
		215	7025	10.50	10.50	13.50	
		15	6025	13.50	13.50	16.50	
		802.11ax-HE160 MCS0	47	6185	13.50	13.50	16.50
			111	6505	12.00	12.00	15.00
			175	6825	12.00	12.00	15.00
			207	6985	12.50	12.50	15.50



<Power Index 1, 2>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
WiFi 6 GHz	802.11ax-HE20 MCS0	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	3.50	3.50	6.50
		173	6815	3.50	3.50	6.50
		233	7115	5.00	5.00	8.00
	802.11ax-HE40 MCS0	3	5965	7.00	7.00	10.00
		59	6245	7.00	7.00	10.00
		107	6485	7.00	7.00	10.00
		171	6805	7.00	7.00	10.00
		227	7085	6.50	6.50	9.50
	802.11ax-HE80 MCS0	7	5985	11.00	11.00	14.00
		71	6305	11.00	11.00	14.00
		119	6545	9.50	9.50	12.50
		167	6785	9.50	9.50	12.50
		215	7025	10.50	10.50	13.50
	802.11ax-HE160 MCS0	15	6025	13.50	13.50	16.50
		47	6185	13.50	13.50	16.50
		111	6505	12.00	12.00	15.00
		175	6825	12.00	12.00	15.00
		207	6985	12.50	12.50	15.50

<Power Index 3, 4>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
WiFi 6 GHz	802.11ax-HE20 MCS0	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	3.50	3.50	6.50
		173	6815	3.50	3.50	6.50
		233	7115	5.00	5.00	8.00
	802.11ax-HE40 MCS0	3	5965	7.00	7.00	10.00
		59	6245	7.00	7.00	10.00
		107	6485	7.00	7.00	10.00
		171	6805	7.00	7.00	10.00
		227	7085	6.50	6.50	9.50
	802.11ax-HE80 MCS0	7	5985	11.00	11.00	14.00
		71	6305	11.00	11.00	14.00
		119	6545	9.50	9.50	12.50
		167	6785	9.50	9.50	12.50
		215	7025	10.50	10.50	13.50
	802.11ax-HE160 MCS0	15	6025	12.00	12.00	15.00
		47	6185	12.00	12.00	15.00
		111	6505	12.00	12.00	15.00
		175	6825	12.00	12.00	15.00
		207	6985	12.50	12.50	15.50



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

Burst Average Power (dBm)						
	Transmit Antenna			MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
WiFi 6 GHz	802.11ax-HE20 MCS0	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	3.50	3.50	6.50
		173	6815	3.50	3.50	6.50
		233	7115	5.00	5.00	8.00
	802.11ax-HE40 MCS0	3	5965	7.00	7.00	10.00
		59	6245	7.00	7.00	10.00
		107	6485	7.00	7.00	10.00
		171	6805	7.00	7.00	10.00
		227	7085	6.50	6.50	9.50
	802.11ax-HE80 MCS0	7	5985	11.00	11.00	14.00
		71	6305	11.00	11.00	14.00
		119	6545	9.50	9.50	12.50
		167	6785	9.50	9.50	12.50
		215	7025	10.50	10.50	13.50
	802.11ax-HE160 MCS0	15	6025	12.00	12.00	15.00
		47	6185	12.00	12.00	15.00
		111	6505	12.00	12.00	15.00
		175	6825	12.00	12.00	15.00
		207	6985	12.50	12.50	15.50



<Bluetooth Maximum Power>

General Note:

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

<Mobile condition – Power Index 0>

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20.5	18	17	20	20

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20.5	18	17	20	20

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		17.5	17.5	20.5	15	15	18	15	15	18

<Power Index 1>

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

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

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



<Power Index 2/ Power Index 3>

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20.5	18	17	20	20

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	20.5	18	17	20	20

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		17.5	17.5	20.5	15	15	18	15	15	18

<Power Index 4>

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18	18	17	18	18

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR				
	LE				
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	16	16	16	16	16

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		14.5	14.5	17.5	14.5	14.5	17.5	14.5	14.5	17.5



2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																															
FCC ID	A4RG9S9B																																																														
Equipment Name	Phone																																																														
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																														
Channel Bandwidth	LTE Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																														
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																														
LTE Voice / Data requirements	Voice and Data																																																														
LTE MPR permanently built-in by design	<p align="center">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>	Modulation	Channel bandwidth / Transmission bandwidth (N _{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
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 13																																																														
LTE Carrier Aggregation Additional Information	This device supports maximum of 5 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICl, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																														



Transmission (H, M, L) channel numbers and frequencies in each LTE band																
LTE Band 2																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860				
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880				
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900				
LTE Band 4																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720				
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5				
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745				
LTE Band 5																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20407	824.7	20415	825.5	20425	826.5	20450	829	20475	830.5	20500	832				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20575	842.5	20550	840				
LTE Band 7																
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20875	2512.5	20900	2515				
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21325	2557.5	21300	2555				
LTE Band 12																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	23017	699.7	23025	700.5	23035	701.5	23060	704	23085	706.5	23110	709				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23105	708.5	23080	706				
LTE Band 13																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5		23280		787	
M	23230		782		23230		782		23230		782		23230		782	
H	23255		784.5		23230		782		23255		784.5		23280		787	
LTE Band 14																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Channel #		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23305		790.5		23330		793		23355		795.5		23380		798	
M	23330		793		23330		793		23330		793		23330		793	
H	23355		795.5		23330		793		23355		795.5		23380		798	
LTE Band 17																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23755		706.5		23780		709		23805		711.5		23830		714	
M	23790		710		23790		710		23790		710		23790		710	
H	23825		713.5		23800		711		23825		713.5		23850		716	



LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		
LTE Band 30												
	Bandwidth 5 MHz					Bandwidth 10 MHz						
	Channel #		Freq.(MHz)			Channel #		Freq.(MHz)				
L	27685		2307.5			27710		2310				
M	27710		2310									
H	27735		2312.5									
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580	37875	2582.5	37900	2585
M	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610	38125	2607.5	38100	2605
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	39775	2508.5	39800	2511
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5	40197	2550.7	40210	2552
M	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5	41042	2635.2	41030	2634
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680	41465	2677.5	41440	2675
LTE Band 48												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560	55365	3562.5	55390	3565
L M	55810	3607	55815	3607.5	55820	3608	55830	3609	55840	3609.5	55850	3610
M H	56170	3643	56165	3642.5	56160	3642	56150	3641	56140	3640.5	56130	3640
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690	56615	3687.5	56590	3685
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 71												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673	133247	675.5	133272	678
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5	133297	680.5	133297	680.5
H	133447	695.5	133422	693	133397	690.5	133372	688	133347	685.5	133322	683



2.4 General 5G NR SAR Test and Reporting Considerations

5G NR Information																
FCC	A4RG9S9B															
Equipment Name	Phone															
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30: 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n77: 3450 MHz ~ 3550 MHz															
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 15MHz, 20MHz 5G NR n41: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz															
SCS	FDD: SCS15KHz, TDD: SCS30KHz															
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM															
A-MPR (Additional MPR) disabled for SAR Testing?	Yes															
LTE Anchor Bands for n2	LTE B5/12/13/14/48															
LTE Anchor Bands for n5	LTE B2/7/30/48/66															
LTE Anchor Bands for n25	LTE B12/26/48															
LTE Anchor Bands for n30	LTE B5/12															
LTE Anchor Bands for n38	LTE B66															
LTE Anchor Bands for n41	LTE B2/4/12/25/26/66															
LTE Anchor Bands for n66	LTE B5/12/13/14/48/71															
LTE Anchor Bands for n71	LTE B2/7/66															
LTE Anchor Bands for n77	LTE B2/5/7/13/41/66															
NR Band 2																
Bandwidth 5MHz		Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz						
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)			
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860								
M	376000	1880	376000	1880	376000	1880	376000	1880								
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900								
NR Band 5																
Bandwidth 5MHz		Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz						
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)			
L	165300	826.5	165800	829	166300	831.5	166800	834								
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5								
H	169300	846.5	168800	844	168300	841.5	167800	839								
NR Band 7																
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520	505000	2525
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550	509000	2545



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

NR Band 25								
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		
Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905

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

NR Band 38						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		
Ch. #		Freq. (MHz)		Ch. #		
L	515004	2575.02	515502	2577.51	516000	2580
M	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522498	2612.49	522000	2610

NR Band 41																				
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	500202	2501.01	500700	2503.5	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	529998	2649.99	528996	2644.98	528000	2640

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

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

NR Band 77 (3700-3980)																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	647000	3705	647168	3707.52	647334	3710.01	647668	664334	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664668	3970.02	664504	3967.52	664340	3965.01	664176	3962.51	664012	3960.01	663848	3957.51	663684	3955.01	663520	3952.51	663356	3950.01

NR Band 77 (3450-3980)																						
Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz		
Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	
L	630334	3455.01	630500	3457.5	630338	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
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	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		



3. TAS feature for RF Exposure compliance

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

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

Pmax	Maximum Tx power that can be transmitted physically from RFIC for a given RAT
SAR_FCC_limit	SAR limit specified by FCC 1.6 W/kg averaged over 1-gram, for head and body exposure, and 4 W/kg averaged over 10-gram, for extremity exposure
PD_FCC_limit	PD limit specified by FCC, 10 W/m 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 and WCDMA don't support time average feature of dynamic power varying, the power will be fixed at the static reduce power level at different exposure conditions for RF exposure compliance. For the GSM (TDD) P_{limit} power levels in the table correspond to the burst average power levels which don't account for TX duty cycle.

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

Wireless technology/ band (No Accounting duty cycle)	Config	Antenna	TDD duty cycle	Head		Hotspot	Body-worn/Extremity		P _{Max} Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
P _{limit} ⁽¹⁾ Burst average power (dBm)									
GSM850 GPRS 1TX	TX0	0	12.50%	40.2	39	36.2	38.8	37.6	32.5
GSM850 GPRS 2TX	TX0	0	25.00%	37.2	36	33.2	35.8	34.6	31.5
GSM850 GPRS 3TX	TX0	0	37.50%	35.5	34.3	31.5	34.1	32.9	30.5
GSM850 GPRS 4TX	TX0	0	50.00%	34.2	33	30.2	32.8	31.6	29.5
GSM1900 GPRS 1TX	TX0	2	12.50%	42.9	41.7	29.3	30.5	29.3	30
GSM1900 GPRS 2TX	TX0	2	25.00%	39.9	38.7	26.3	27.5	26.3	28.5
GSM1900 GPRS 3TX	TX0	2	37.50%	38.2	37	24.5	25.7	24.5	28
GSM1900 GPRS 4TX	TX0	2	50.00%	36.9	35.7	23.3	24.5	23.3	27
WCDMA B2	TX0	2	100.00%	33.5	32.3	20.4	21.8	20.6	24.25
WCDMA B4	TX0	2	100.00%	30.5	29.3	21.6	23.2	22	24.25
WCDMA B5	TX0	0	100.00%	30.1	28.9	29.2	30.6	29.4	24.4

Wireless technology/ band (No Accounting duty cycle)	Config	Antenna	TDD duty cycle	Head		Hotspot	Body-worn/Extremity		P _{Max} Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
P _{limit} ⁽¹⁾ Burst average power (dBm)									
GSM850 GPRS 1TX	TX1	1	12.50%	33.2	32	35.7	36.9	35.7	32.75
GSM850 GPRS 2TX	TX1	1	25.00%	30.2	29	32.7	33.9	32.7	31.25
GSM850 GPRS 3TX	TX1	1	37.50%	28.4	27.2	31	32.2	31	30.25
GSM850 GPRS 4TX	TX1	1	50.00%	27.2	26	29.7	30.9	29.7	29.25
GSM1900 GPRS 1TX	TX1	0	12.50%	36.7	35.5	31.2	32.6	31.4	29.6
GSM1900 GPRS 2TX	TX1	0	25.00%	33.7	32.5	28.2	29.6	28.4	28.1
GSM1900 GPRS 3TX	TX1	0	37.50%	32	30.8	26.4	27.9	26.7	27.6
GSM1900 GPRS 4TX	TX1	0	50.00%	30.7	29.5	25.2	26.6	25.4	26.6
WCDMA B2	TX1	0	100.00%	27.9	26.7	21.8	23.1	21.9	23.85
WCDMA B4	TX1	0	100.00%	28.9	27.7	24.2	26.8	25.6	23.75
WCDMA B5	TX1	1	100.00%	28.1	26.9	27.9	29.1	27.9	24.15

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

Wireless technology/ band (Accounting duty cycle)	Config	Antenna	TDD duty cycle	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
P limit ⁽¹⁾ time-average power (dBm)									
LTE B7	TX0	2	100.00%	28.7	27.5	19	20.7	19.5	23.8
LTE B12/17	TX0	0	100.00%	30.5	29.3	26.9	30.2	29	24.4
LTE B13	TX0	0	100.00%	30	28.8	27.3	29.3	28.1	24.4
LTE B14	TX0	0	100.00%	29.8	28.6	27.4	29.3	28.1	24.4
LTE B25/2	TX0	2	100.00%	33.9	32.7	19.9	22.1	20.9	24.25
LTE B26/5	TX0	0	100.00%	30.2	29	27.2	30.2	29	24.4
LTE B30	TX0	2	100.00%	31.4	30.2	19.6	21.8	20.6	24.2
LTE B41/38 PC3	TX0	2	63.30%	27.3	26.1	19.3	20.6	20.4	21
LTE B41/38 PC2	TX0	2	43.30%	27.3	26.1	19.3	20.6	20.4	22.4
LTE B48 PC3	TX0	6	63.30%	25.5	24.3	21.3	24.7	23.5	21
LTE B66/4	TX0	2	100.00%	31.8	30.6	21.2	22.8	21.6	24.25
LTE B71	TX0	0	100.00%	30.7	29.5	27.2	29.8	28.6	24.4
FR1 n25/2	TX0	2	100.00%	34.2	33	19.4	21.5	20.3	24.25
FR1 n5	TX0	0	100.00%	30.6	29.4	27.7	31	29.8	24.4
FR1 n7	TX0	2	100.00%	29	27.8	18.7	21.2	20	23.8
FR1 n12	TX0	0	100.00%	31.3	30.1	27.9	30.1	28.9	24.4
FR1 n30	TX0	2	100.00%	31.9	30.7	20.2	22	20.8	24.2
FR1 n41/n38 PC3	TX0	5	100.00%	17.2	16	19.8	21.2	20	24
FR1 n41 PC2	TX0	5	50.00%	17.2	16	19.8	21.2	20	23
FR1 n66	TX0	2	100.00%	31.5	30.3	21.9	23.9	22.7	24.25
FR1 n71	TX0	0	100.00%	31.3	30.1	30.3	31.6	30.4	24.4
FR1 n77 PC3	TX0	6	100.00%	24.8	23.6	20.6	21.8	20.6	24
FR1 n77 PC2	TX0	6	50.00%	24.8	23.6	20.6	21.8	20.6	23

1. LTE and 5G NR TDD: P_{limit} power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
2. 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 (Accounting duty cycle)	Config	Antenna	TDD duty cycle	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 4	Index 5	Index 6	
P limit ⁽¹⁾ time-average power (dBm)									
LTE B4	TX1	0	100.00%	28	26.8	24.8	26.8	25.6	23.75
LTE B7	TX1	0	100.00%	27.4	26.2	23.7	27	25.8	23.1
LTE B12/17	TX1	1	100.00%	26.4	25.2	29.9	31	29.8	24
LTE B13	TX1	1	100.00%	24.6	23.4	28.2	29.7	28.5	24.15
LTE B14	TX1	1	100.00%	23.8	22.6	27.6	28.8	27.6	24.15
LTE B25/2	TX1	0	100.00%	27.9	26.7	21.7	22.9	21.7	23.85
LTE B26/5	TX1	1	100.00%	24.6	23.4	27.1	28.3	27.1	24.15
LTE B30	TX1	0	100.00%	28.4	27.2	23.1	26.7	25.5	23.55
LTE B41/38 PC3	TX1	0	63.30%	26.7	25.5	22	25.5	24.3	20.3
LTE B38 PC2	TX1	0	43.30%	26.7	25.5	22	25.5	24.3	21.7
LTE B41 PC2	TX1	0	43.30%	26.7	25.5	22	25.5	24.3	21.7
LTE B48 PC3	TX1	2	63.30%	25.7	24.5	20.8	25.3	24.1	21.1
LTE B66	TX1	0	100.00%	27.8	26.6	24.6	27.3	26.1	23.8
LTE B71	TX1	1	100.00%	25.5	24.3	30.6	31.8	30.6	24.05
FR1 n25/2	TX1	0	100.00%	27.7	26.5	21.8	23.1	21.9	23.85
FR1 n5	TX1	1	100.00%	25.2	24	30	31.2	30	24.15
FR1 n7	TX1	0	100.00%	28.2	27	24.5	27.7	26.5	23.1
FR1 n12	TX1	1	100.00%	26.5	25.3	30.9	32.1	30.9	24
FR1 n30	TX1	0	100.00%	29.3	28.1	24.3	27.7	26.5	23.55
FR1 n38 PC3	TX1	1	100.00%	17	15.8	23.6	25.6	24.4	24.2
FR1 n41 PC3	TX1	1	100.00%	17	15.8	23.6	25.6	24.4	24.2
FR1 n41 PC2	TX1	1	50.00%	17	15.8	23.6	25.6	24.4	23.2
FR1 n66	TX1	0	100.00%	28.6	27.4	24.3	27.1	25.9	23.8
FR1 n71	TX1	1	100.00%	25.3	24.1	29.4	31.2	30	24.05
FR1 n77 PC3	TX1	2	100.00%	23.5	22.3	20	21.2	20	23.05
FR1 n77 PC2	TX1	2	50.00%	23.5	22.3	20	21.2	20	22.05

1. LTE and 5GNR TDD: P_{limit} power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
2. 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.



4. Guidance Applied

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

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

5. RF Exposure Limits

5.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

5.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

1. Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

5.3 RF Exposure limit for above 6GHz

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

Peak Spatially Averaged Power Density was evaluated over a circular area of 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

6. Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person’s awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

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

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

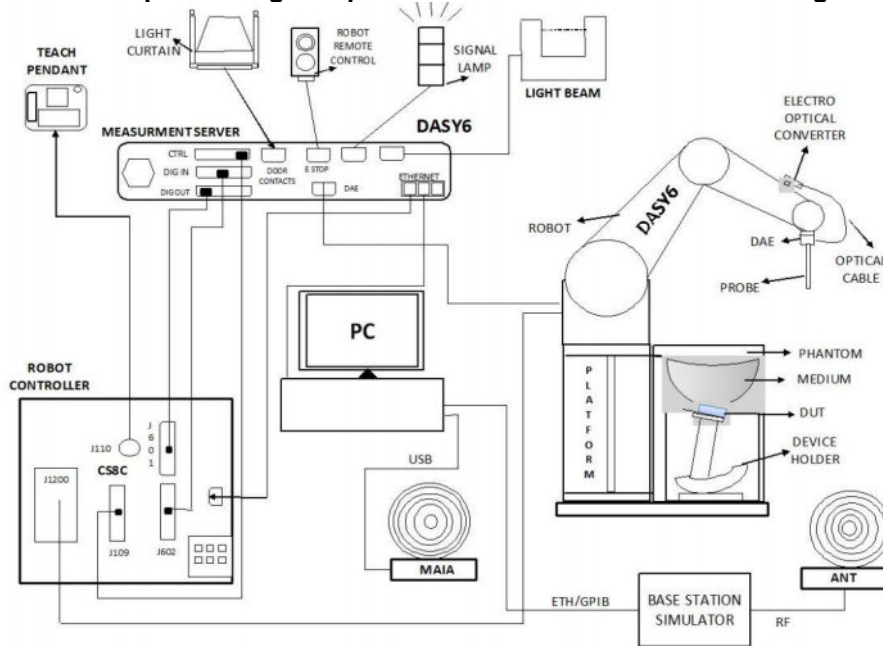
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. System Description and Setup

The DASY system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

7.1 Test Site Location


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

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


7.2 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

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

7.3 Data Acquisition Electronics (DAE)

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

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

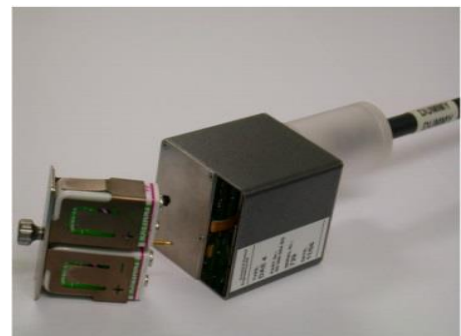



Fig 5.1 Photo of DAE


7.4 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops



8. Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

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

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

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

8.4 Zoom Scan

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

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

		≤ 3 GHz	> 3 GHz	
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}, \Delta y_{Zoom}$		≤ 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: $\Delta z_{Zoom}(n)$	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm	
	graded grid	$\Delta z_{Zoom}(1)$: 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
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z	≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm	
<p>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.</p> <p>* 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.</p>				

8.5 Volume Scan Procedures

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

8.6 Power Drift Monitoring

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



9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit ⁽²⁾	D750V3	1107	Mar. 08, 2019	Mar. 05, 2022
SPEAG	835MHz System Validation Kit ⁽²⁾	D835V2	4d167	Nov. 25, 2019	Nov. 23, 2021
SPEAG	1750MHz System Validation Kit ⁽²⁾	D1750V2	1112	Mar. 07, 2019	Mar. 04, 2022
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d041	Sep. 11, 2018	Sep. 08, 2021
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d185	Mar. 07, 2019	Mar. 04, 2022
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1006	Jan. 28, 2019	Jan. 25, 2022
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	736	Aug. 31, 2018	Aug. 28, 2021
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	929	Nov. 21, 2019	Nov. 19, 2021
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1008	Aug. 31, 2018	Aug. 28, 2021
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1078	Mar. 06, 2019	Mar. 03, 2022
SPEAG	3300MHz System Validation Kit ⁽²⁾	D3300V2	1005	Apr. 11, 2019	Apr. 08, 2022
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1014	Jan. 29, 2019	Jan. 26, 2022
SPEAG	3700MHz System Validation Kit ⁽²⁾	D3700V2	1006	Mar. 05, 2019	Mar. 02, 2022
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1017	Apr. 29, 2019	Apr. 26, 2022
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1128	Dec. 16, 2019	Dec. 14, 2021
SPEAG	6500MHz System Validation Kit ⁽²⁾	D6.5GHzV2	1003	Feb. 04, 2020	Feb. 02, 2022
SPEAG	5G Verification Source	10GHz	1020	Jan. 18, 2021	Jan. 17, 2022
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 19, 2021	Jan. 18, 2022
SPEAG	Data Acquisition Electronics	DAE4	376	Nov. 23, 2020	Nov. 22, 2021
SPEAG	Data Acquisition Electronics	DAE4	778	May. 21, 2021	May. 20, 2022
SPEAG	Data Acquisition Electronics	DAE4	1399	Feb. 16, 2021	Feb. 15, 2022
SPEAG	Data Acquisition Electronics	DAE4	1424	Jan. 19, 2021	Jan. 18, 2022
SPEAG	Data Acquisition Electronics	DAE4	1647	Jan. 07, 2021	Jan. 06, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 23, 2020	Sep. 22, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Feb. 23, 2021	Feb. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Apr. 23, 2021	Apr. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 22, 2020	Oct. 21, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7351	Jul. 06, 2020	Jul. 05, 2021
SPEAG	Dosimetric E-Field Probe	EX3DV4	7439	Feb. 23, 2021	Feb. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7590	Mar. 25, 2021	Mar. 24, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Jan. 19, 2021	Jan. 18, 2022
SPEAG	EUmmWV Probe Tip Protection	EUmmWV3	9424	Mar. 23, 2021	Mar. 22, 2022
Testo	Hygro meter	608-H1	45196600	Nov. 10, 2020	Nov. 09, 2021
Testo	Hygro meter	608-H1	45207528	Nov. 10, 2020	Nov. 09, 2021
RCPTWN	Thermometer	HTC-1	TM685-1	Nov. 10, 2020	Nov. 09, 2021
RCPTWN	Thermometer	HTC-1	TM560-2	Nov. 10, 2020	Nov. 09, 2021
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Nov. 10, 2020	Nov. 09, 2021
Anritsu	Radio Communication Analyzer	MT8820C	6201381766	Jun. 29, 2021	Jun. 28, 2022
Anritsu	Radio Communication Analyzer	MT8820C	6201381760	May. 13, 2021	May. 12, 2022
Keysight	Wireless Communication Test Set	E5515C	MY50266977	May. 12, 2021	May. 11, 2022
R&S	BT Base Station	CBT	100815	Feb. 19, 2021	Feb. 18, 2022
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Nov. 11, 2020	Nov. 10, 2021
Keysight	ENA Network Analyzer	E5071C	MY46104758	Sep. 03, 2020	Sep. 02, 2021
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 16, 2020	Sep. 15, 2021
LINE SEIKI	Digital Thermometer	DTM3000-spezial	2942	Nov. 06, 2020	Nov. 05, 2021



Anritsu	Power Meter	ML2495A	1419002	Aug. 19, 2020	Aug. 18, 2021
Anritsu	Power Sensor	MA2411B	1911176	Aug. 18, 2020	Aug. 17, 2021
Anritsu	Power Meter	ML2495A	1804003	Oct. 21, 2020	Oct. 20, 2021
Anritsu	Power Sensor	MA2411B	1726150	Oct. 21, 2020	Oct. 20, 2021
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 27, 2020	Aug. 26, 2021
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Jan. 15, 2021	Jan. 14, 2022
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 21, 2020	Oct. 20, 2021
Mini-Circuits	Power Amplifier	ZVE-8G+	479102029	Aug. 26, 2020	Aug. 25, 2021
Custom Microwave	Standard Horn antenna	M15RH	V91113-A	NCR	NCR
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Warison	Directional Coupler	WCOU-10-50S-10	WR889BMC4B1	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

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

10. System Verification

10.1 Tissue Verification

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

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

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
750	22.5	0.895	42.460	0.89	41.90	0.56	1.34	±5	2021/6/15
750	22.4	0.880	42.790	0.89	41.90	-1.12	2.12	±5	2021/6/18
750	22.2	0.878	42.507	0.89	41.90	-1.35	1.45	±5	2021/6/26
750	22.4	0.892	41.373	0.89	41.90	0.22	-1.26	±5	2021/6/28
750	22.4	0.896	41.475	0.89	41.90	0.67	-1.01	±5	2021/6/28
750	22.5	0.887	42.877	0.89	41.90	-0.34	2.33	±5	2021/6/30
750	22.5	0.891	43.326	0.89	41.90	0.11	3.40	±5	2021/7/2
750	22.7	0.894	43.491	0.89	41.90	0.45	3.80	±5	2021/7/5
750	22.1	0.908	42.362	0.89	41.90	2.02	1.10	±5	2021/7/18
750	22.3	0.894	42.421	0.89	41.90	0.45	1.24	±5	2021/7/22
835	22.2	0.882	42.181	0.90	41.50	-2.00	1.64	±5	2021/6/17
835	22.2	0.882	41.214	0.90	41.50	-2.00	-0.69	±5	2021/6/26
835	22.5	0.888	41.324	0.90	41.50	-1.33	-0.42	±5	2021/6/26
835	22.3	0.878	41.105	0.90	41.50	-2.44	-0.95	±5	2021/6/27
835	22.4	0.923	41.842	0.90	41.50	2.56	0.82	±5	2021/6/28
835	22.5	0.891	41.378	0.90	41.50	-1.00	-0.29	±5	2021/6/29
835	22.1	0.895	41.964	0.90	41.50	-0.56	1.12	±5	2021/7/4
835	22.7	0.891	42.059	0.90	41.50	-1.00	1.35	±5	2021/7/5
835	22.4	0.893	42.911	0.90	41.50	-0.78	3.40	±5	2021/7/8
835	22.1	0.891	43.011	0.90	41.50	-1.00	3.64	±5	2021/7/17
835	22.3	0.889	42.809	0.90	41.50	-1.22	3.15	±5	2021/7/22
1750	22.3	1.360	40.623	1.37	40.10	-0.73	1.30	±5	2021/6/17
1750	22.7	1.371	39.875	1.37	40.10	0.07	-0.56	±5	2021/6/21
1750	22.4	1.289	40.885	1.37	40.10	-5.91	1.96	±5	2021/6/27
1750	22.6	1.382	39.819	1.37	40.10	0.88	-0.70	±5	2021/6/29
1750	22.3	1.397	39.733	1.37	40.10	1.97	-0.92	±5	2021/7/5
1750	22.9	1.386	39.640	1.37	40.10	1.17	-1.15	±5	2021/7/7
1750	22.5	1.356	41.18	1.37	40.10	-1.02	2.69	±5	2021/7/7
1750	22.4	1.400	41.870	1.37	40.10	2.19	4.41	±5	2021/7/8
1750	22.7	1.365	39.321	1.37	40.10	-0.36	-1.94	±5	2021/7/9
1750	22.7	1.362	40.685	1.37	40.10	-0.58	1.46	±5	2021/7/10
1750	22.1	1.355	39.307	1.37	40.10	-1.09	-1.98	±5	2021/7/18



FCC SAR TEST REPORT

Report No. : FA0D2942-04C

Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (εr)	Conductivity Target (σ)	Permittivity Target (εr)	Delta (σ) (%)	Delta (εr) (%)	Limit (%)	Date
1900	22.3	1.443	39.811	1.40	40.00	3.07	-0.47	±5	2021/6/17
1900	22.5	1.429	40.386	1.40	40.00	2.07	0.97	±5	2021/6/20
1900	22.4	1.440	40.393	1.40	40.00	2.86	0.98	±5	2021/6/27
1900	22.6	1.420	39.446	1.40	40.00	1.43	-1.39	±5	2021/6/29
1900	22.3	1.403	39.250	1.40	40.00	0.21	-1.88	±5	2021/7/5
1900	22.9	1.400	39.278	1.40	40.00	0.00	-1.81	±5	2021/7/7
1900	22.1	1.393	39.409	1.40	40.00	-0.50	-1.48	±5	2021/7/7
1900	22.2	1.399	39.483	1.40	40.00	-0.07	-1.29	±5	2021/7/7
1900	22.4	1.426	39.550	1.40	40.00	1.86	-1.13	±5	2021/7/8
1900	22.7	1.454	40.462	1.40	40.00	3.86	1.16	±5	2021/7/9
1900	22.7	1.416	39.799	1.40	40.00	1.14	-0.50	±5	2021/7/9
1900	22.7	1.441	38.096	1.40	40.00	2.93	-4.76	±5	2021/7/10
1900	22.5	1.418	39.980	1.40	40.00	1.29	-0.05	±5	2021/7/15
1900	22.1	1.390	39.130	1.40	40.00	-0.71	-2.17	±5	2021/7/17
1900	22.8	1.397	40.178	1.40	40.00	-0.21	0.44	±5	2021/7/18
2300	22.4	1.661	39.469	1.67	39.50	-0.54	-0.08	±5	2021/6/19
2300	22.4	1.645	40.337	1.67	39.50	-1.50	2.12	±5	2021/6/29
2300	22.5	1.646	39.979	1.67	39.50	-1.44	1.21	±5	2021/6/30
2300	22.1	1.620	39.276	1.67	39.50	-2.99	-0.57	±5	2021/7/4
2300	22.3	1.629	40.251	1.67	39.50	-2.46	1.90	±5	2021/7/5
2300	22.9	1.627	40.237	1.67	39.50	-2.57	1.87	±5	2021/7/7
2300	22.5	1.675	40.056	1.67	39.50	0.30	1.41	±5	2021/7/7
2300	22.3	1.603	38.990	1.67	39.50	-4.01	-1.29	±5	2021/7/17
2300	22.4	1.644	39.556	1.67	39.50	-1.56	0.14	±5	2021/7/17
2450	22.5	1.787	39.654	1.80	39.20	-0.72	1.16	±5	2021/7/7
2450	22.3	1.777	39.819	1.80	39.20	-1.28	1.58	±5	2021/7/9
2450	22.2	1.836	39.182	1.80	39.20	2.00	-0.05	±5	2021/7/11
2450	22.3	1.825	40.250	1.80	39.20	1.39	2.68	±5	2021/7/14
2600	22.5	1.993	38.390	1.96	39.00	1.68	-1.56	±5	2021/6/27
2600	22.4	1.957	39.090	1.96	39.00	-0.15	0.23	±5	2021/6/29
2600	22.5	1.978	38.915	1.96	39.00	0.92	-0.22	±5	2021/6/30
2600	22.5	1.957	38.394	1.96	39.00	-0.15	-1.55	±5	2021/7/1
2600	22.3	1.939	39.004	1.96	39.00	-1.07	0.01	±5	2021/7/5
2600	22.6	1.954	39.109	1.96	39.00	-0.31	0.28	±5	2021/7/6
2600	22.3	1.949	38.513	1.96	39.00	-0.56	-1.25	±5	2021/7/6
2600	22.3	1.937	38.991	1.96	39.00	-1.17	-0.02	±5	2021/7/7
2600	22.4	1.967	38.527	1.96	39.00	0.36	-1.21	±5	2021/7/8
2600	22.2	1.961	38.636	1.96	39.00	0.05	-0.93	±5	2021/7/9
2600	22.3	1.912	37.769	1.96	39.00	-2.45	-3.16	±5	2021/7/13
2600	22.6	2.004	39.227	1.96	39.00	2.24	0.58	±5	2021/7/16
2600	22.4	1.946	38.036	1.96	39.00	-0.71	-2.47	±5	2021/7/16
2600	22.4	1.874	37.869	1.96	39.00	-4.39	-2.90	±5	2021/7/17
2600	22.3	1.953	39.534	1.96	39.00	-0.36	1.37	±5	2021/7/22
2600	22.6	1.919	38.499	1.96	39.00	-2.09	-1.28	±5	2021/7/23
3300	22.3	2.681	38.119	2.70	38.13	-0.70	-0.03	±5	2021/7/8
3500	22.7	2.956	37.696	2.91	37.90	1.58	-0.54	±5	2021/6/21
3500	22.3	2.986	38.903	2.91	37.90	2.61	2.65	±5	2021/6/27
3500	22.3	2.884	37.885	2.91	37.90	-0.89	-0.04	±5	2021/7/8
3500	22.1	2.937	37.338	2.91	37.90	0.93	-1.48	±5	2021/7/11
3500	22.2	2.926	38.273	2.91	37.90	0.55	0.98	±5	2021/7/17
3500	22.3	2.89	37.64	2.91	37.90	-0.69	-0.69	±5	2021/7/18
3500	22.3	2.892	37.423	2.91	37.90	-0.62	-1.26	±5	2021/7/22



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (εr)	Conductivity Target (σ)	Permittivity Target (εr)	Delta (σ) (%)	Delta (εr) (%)	Limit (%)	Date
3700	22.4	3.102	37.408	3.12	37.70	-0.58	-0.77	±5	2021/6/21
3700	22.3	3.138	38.633	3.12	37.70	0.58	2.47	±5	2021/6/27
3700	22.7	3.168	38.005	3.12	37.70	1.54	0.81	±5	2021/7/1
3700	22.3	3.091	37.684	3.12	37.70	-0.93	-0.04	±5	2021/7/8
3900	22.3	3.298	37.496	3.33	37.51	-0.96	-0.04	±5	2021/7/8
3900	22.1	3.245	36.788	3.33	37.51	-2.55	-1.92	±5	2021/7/11
3900	22.2	3.296	37.000	3.33	37.51	-1.02	-1.36	±5	2021/7/15
3900	22.2	3.345	37.884	3.33	37.51	0.45	1.00	±5	2021/7/17
3900	22.3	3.271	37.062	3.33	37.51	-1.77	-1.19	±5	2021/7/18
3900	22.3	3.223	37.423	3.33	37.51	-3.21	-0.23	±5	2021/7/22
5250	22.6	4.875	36.357	4.71	35.95	3.50	1.13	±5	2021/7/7
5250	22.3	4.751	36.567	4.71	35.95	0.87	1.72	±5	2021/7/9
5250	22.7	4.784	36.288	4.71	35.95	1.57	0.94	±5	2021/7/15
5250	22.1	4.847	37.142	4.71	35.95	2.91	3.32	±5	2021/7/17
5600	22.6	5.224	35.923	5.07	35.50	3.04	1.19	±5	2021/7/7
5600	22.3	5.090	36.133	5.07	35.50	0.39	1.78	±5	2021/7/9
5600	22.7	5.174	35.730	5.07	35.50	2.05	0.65	±5	2021/7/15
5600	22.1	5.227	36.631	5.07	35.50	3.10	3.19	±5	2021/7/17
5750	22.6	5.386	35.742	5.22	35.35	3.18	1.11	±5	2021/7/7
5750	22.3	5.248	35.952	5.22	35.35	0.54	1.70	±5	2021/7/9
5750	22.7	5.319	35.545	5.22	35.35	1.90	0.55	±5	2021/7/15
5750	22.1	5.397	36.448	5.22	35.35	3.39	3.11	±5	2021/7/17
6500	22.5	6.100	35.445	6.07	34.50	0.49	2.74	±5	2021/6/22



10.2 System Performance Check Results

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

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR11-HY	2021/6/15	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.385	8.32	7.7	-7.45	0.255	5.61	5.1	-9.09
SAR11-HY	2021/6/18	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.421	8.32	8.42	1.20	0.279	5.61	5.58	-0.53
SAR11-HY	2021/6/26	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.377	8.32	7.54	-9.38	0.260	5.61	5.2	-7.31
SAR05-HY	2021/6/28	750	250	D750V3-1107	EX3DV4 - SN7590	DAE4 Sn316	2.10	8.32	8.4	0.96	1.37	5.61	5.48	-2.32
SAR14-HY	2021/6/28	750	250	D750V3-1107	EX3DV4 - SN7351	DAE4 Sn1424	2.19	8.32	8.76	5.29	1.44	5.61	5.76	2.67
SAR11-HY	2021/6/30	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.382	8.32	7.64	-8.17	0.253	5.61	5.06	-9.80
SAR09-HY	2021/7/2	750	250	D750V3-1107	ES3DV3 - SN3184	DAE4 Sn1647	1.92	8.32	7.68	-7.69	1.32	5.61	5.28	-5.88
SAR09-HY	2021/7/5	750	250	D750V3-1107	ES3DV3 - SN3184	DAE4 Sn1647	2.06	8.32	8.24	-0.96	1.40	5.61	5.6	-0.18
SAR13-HY	2021/7/18	750	50	D750V3-1107	EX3DV4 - SN3931	DAE4 Sn1399	0.387	8.32	7.74	-6.97	0.253	5.61	5.06	-9.80
SAR11-HY	2021/7/22	750	50	D750V3-1107	EX3DV4 - SN7439	DAE4 Sn376	0.384	8.32	7.68	-7.69	0.255	5.61	5.1	-9.09
SAR14-HY	2021/6/17	835	250	D835V2-4d167	EX3DV4 - SN7351	DAE4 Sn1424	2.37	9.55	9.48	-0.73	1.54	6.21	6.16	-0.81
SAR11-HY	2021/6/26	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.431	9.55	8.62	-9.74	0.282	6.21	5.64	-9.18
SAR14-HY	2021/6/26	835	250	D835V2-4d167	EX3DV4 - SN7351	DAE4 Sn1424	2.39	9.55	9.56	0.10	1.55	6.21	6.2	-0.16
SAR05-HY	2021/6/27	835	250	D835V2-4d167	EX3DV4 - SN7590	DAE4 Sn316	2.34	9.55	9.36	-1.99	1.51	6.21	6.04	-2.74
SAR14-HY	2021/6/28	835	50	D835V2-4d167	EX3DV4 - SN7351	DAE4 Sn1424	0.470	9.55	9.4	-1.57	0.305	6.21	6.1	-1.77
SAR11-HY	2021/6/29	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.435	9.55	8.7	-8.90	0.285	6.21	5.7	-8.21
SAR11-HY	2021/7/4	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.437	9.55	8.74	-8.48	0.286	6.21	5.72	-7.89
SAR09-HY	2021/7/5	835	250	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn1647	2.43	9.55	9.72	1.78	1.64	6.21	6.56	5.64
SAR13-HY	2021/7/8	835	250	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	2.51	9.55	10.04	5.13	1.62	6.21	6.48	4.35
SAR13-HY	2021/7/17	835	250	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	2.31	9.55	9.24	-3.25	1.50	6.21	6	-3.38
SAR11-HY	2021/7/22	835	50	D835V2-4d167	EX3DV4 - SN7439	DAE4 Sn376	0.435	9.55	8.7	-8.90	0.284	6.21	5.68	-8.53
SAR11-HY	2021/6/17	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.77	36.70	35.4	-3.54	0.942	19.40	18.84	-2.89
SAR05-HY	2021/6/21	1750	250	D1750V2-1112	EX3DV4 - SN7590	DAE4 Sn316	9.78	36.70	39.12	6.59	5.13	19.40	20.52	5.77
SAR11-HY	2021/6/27	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.67	36.70	33.4	-8.99	0.893	19.40	17.86	-7.94
SAR14-HY	2021/6/29	1750	250	D1750V2-1112	EX3DV4 - SN7351	DAE4 Sn1424	8.98	36.70	35.92	-2.13	4.79	19.40	19.16	-1.24
SAR13-HY	2021/7/5	1750	50	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn1399	1.94	36.70	38.8	5.72	1.01	19.40	20.2	4.12
SAR13-HY	2021/7/7	1750	50	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn1399	1.79	36.70	35.8	-2.45	0.952	19.40	19.04	-1.86
SAR11-HY	2021/7/7	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.76	36.70	35.2	-4.09	0.939	19.40	18.78	-3.20
SAR13-HY	2021/7/8	1750	250	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn1399	9.11	36.70	36.44	-0.71	4.78	19.40	19.12	-1.44
SAR13-HY	2021/7/9	1750	250	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn1399	8.88	36.70	35.52	-3.22	4.66	19.40	18.64	-3.92
SAR11-HY	2021/7/10	1750	50	D1750V2-1112	EX3DV4 - SN7439	DAE4 Sn376	1.77	36.70	35.4	-3.54	0.943	19.40	18.86	-2.78
SAR13-HY	2021/7/18	1750	250	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn1399	8.82	36.70	35.28	-3.87	4.63	19.40	18.52	-4.54
SAR11-HY	2021/6/17	1900	50	D1900V2-5d041	EX3DV4 - SN7439	DAE4 Sn376	2.02	40.20	40.4	0.50	1.06	21.20	21.2	0.00
SAR05-HY	2021/6/20	1900	250	D1900V2-5d041	EX3DV4 - SN7590	DAE4 Sn316	10.60	40.20	42.4	5.47	5.57	21.20	22.28	5.09
SAR11-HY	2021/6/27	1900	50	D1900V2-5d041	EX3DV4 - SN7439	DAE4 Sn376	2.01	40.20	40.2	0.00	1.06	21.20	21.2	0.00
SAR14-HY	2021/6/29	1900	250	D1900V2-5d185	EX3DV4 - SN7351	DAE4 Sn1424	9.12	39.40	36.48	-7.41	4.76	20.50	19.04	-7.12
SAR13-HY	2021/7/5	1900	250	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn1399	10.00	39.40	40	1.52	5.17	20.50	20.68	0.88
SAR13-HY	2021/7/7	1900	50	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn1399	1.95	39.40	39	-1.02	1.02	20.50	20.4	-0.49
SAR05-HY	2021/7/7	1900	250	D1900V2-5d185	EX3DV4 - SN7590	DAE4 Sn1424	9.30	39.40	37.2	-5.58	4.83	20.50	19.32	-5.76
SAR11-HY	2021/7/7	1900	50	D1900V2-5d041	EX3DV4 - SN7439	DAE4 Sn376	1.96	40.20	39.2	-2.49	1.03	21.20	20.6	-2.83
SAR13-HY	2021/7/8	1900	250	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn1399	10.20	39.40	40.8	3.55	5.25	20.50	21	2.44
SAR13-HY	2021/7/9	1900	50	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn1399	2.03	39.40	40.6	3.05	1.06	20.50	21.2	3.41
SAR11-HY	2021/7/9	1900	50	D1900V2-5d185	EX3DV4 - SN7439	DAE4 Sn376	1.98	39.40	39.6	0.51	1.04	20.50	20.8	1.46
SAR11-HY	2021/7/10	1900	50	D1900V2-5d185	EX3DV4 - SN7439	DAE4 Sn376	2.02	39.40	40.4	2.54	1.06	20.50	21.2	3.41
SAR13-HY	2021/7/15	1900	250	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn1399	10.10	39.40	40.4	2.54	5.23	20.50	20.92	2.05
SAR13-HY	2021/7/17	1900	50	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn1399	2.05	39.40	41	4.06	1.04	20.50	20.8	1.46
SAR11-HY	2021/7/18	1900	50	D1900V2-5d185	EX3DV4 - SN7439	DAE4 Sn376	1.95	39.40	39	-1.02	1.03	20.50	20.6	0.49



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 (%)
SAR05-HY	2021/6/19	2300	50	D2300V2-1006	EX3DV4 - SN7590	DAE4 Sn316	2.27	48.70	45.4	-6.78	1.07	23.20	21.4	-7.76
SAR11-HY	2021/6/29	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.28	48.70	45.6	-6.37	1.11	23.20	22.2	-4.31
SAR14-HY	2021/6/30	2300	250	D2300V2-1006	EX3DV4 - SN7351	DAE4 Sn1424	12.20	48.70	48.8	0.21	6.00	23.20	24	3.45
SAR11-HY	2021/7/4	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.25	48.70	45	-7.60	1.10	23.20	22	-5.17
SAR13-HY	2021/7/5	2300	50	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	2.25	48.70	45	-7.60	1.10	23.20	22	-5.17
SAR13-HY	2021/7/7	2300	250	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	12.30	48.70	49.2	1.03	5.87	23.20	23.48	1.21
SAR11-HY	2021/7/7	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.32	48.70	46.4	-4.72	1.13	23.20	22.6	-2.59
SAR13-HY	2021/7/17	2300	250	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	12.10	48.70	48.4	-0.62	5.78	23.20	23.12	-0.34
SAR11-HY	2021/7/17	2300	50	D2300V2-1006	EX3DV4 - SN7439	DAE4 Sn376	2.28	48.70	45.6	-6.37	1.11	23.20	22.2	-4.31
SAR09-HY	2021/7/7	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	12.70	53.10	50.8	-4.33	6.25	24.70	25	1.21
SAR09-HY	2021/7/9	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	12.60	53.10	50.4	-5.08	6.21	24.70	24.84	0.57
SAR11-HY	2021/7/11	2450	50	D2450V2-736	EX3DV4 - SN7439	DAE4 Sn376	2.69	52.70	53.8	2.09	1.28	24.60	25.6	4.07
SAR09-HY	2021/7/14	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn1647	13.00	53.10	52	-2.07	6.38	24.70	25.52	3.32
SAR05-HY	2021/6/27	2600	250	D2600V2-1078	EX3DV4 - SN7590	DAE4 Sn316	14.30	57.60	57.2	-0.69	6.51	25.50	26.04	2.12
SAR11-HY	2021/6/29	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.93	56.40	58.6	3.90	1.35	25.30	27	6.72
SAR14-HY	2021/6/30	2600	250	D2600V2-1078	EX3DV4 - SN7351	DAE4 Sn1424	14.50	57.60	58	0.69	6.70	25.50	26.8	5.10
SAR11-HY	2021/7/1	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.93	56.40	58.6	3.90	1.35	25.30	27	6.72
SAR13-HY	2021/7/5	2600	250	D2600V2-1078	EX3DV4 - SN3931	DAE4 Sn1399	14.20	57.60	56.8	-1.39	6.48	25.50	25.92	1.65
SAR13-HY	2021/7/6	2600	250	D2600V2-1078	EX3DV4 - SN3931	DAE4 Sn1399	14.40	57.60	57.6	0.00	6.53	25.50	26.12	2.43
SAR05-HY	2021/7/6	2600	50	D2600V2-1078	EX3DV4 - SN7590	DAE4 Sn1424	2.71	57.60	54.2	-5.90	1.22	25.50	24.4	-4.31
SAR13-HY	2021/7/7	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	2.78	56.40	55.6	-1.42	1.27	25.30	25.4	0.40
SAR11-HY	2021/7/8	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.95	56.40	59	4.61	1.35	25.30	27	6.72
SAR12-HY	2021/7/9	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn316	2.6	56.40	52	-7.80	1.16	25.30	23.2	-8.30
SAR13-HY	2021/7/13	2600	50	D2600V2-1078	EX3DV4 - SN3931	DAE4 Sn1399	2.82	57.60	56.4	-2.08	1.31	25.50	26.2	2.75
SAR13-HY	2021/7/16	2600	50	D2600V2-1078	EX3DV4 - SN3931	DAE4 Sn1399	2.88	57.60	57.6	0.00	1.31	25.50	26.2	2.75
SAR12-HY	2021/7/16	2600	50	D2600V2-1078	EX3DV4 - SN3925	DAE4 Sn316	2.64	57.60	52.8	-8.33	1.20	25.50	24	-5.88
SAR11-HY	2021/7/17	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.81	56.40	56.2	-0.35	1.29	25.30	25.8	1.98
SAR05-HY	2021/7/22	2600	50	D2600V2-1008	EX3DV4 - SN7590	DAE4 Sn1424	2.71	56.40	54.2	-3.90	1.22	25.30	24.4	-3.56
SAR11-HY	2021/7/23	2600	50	D2600V2-1008	EX3DV4 - SN7439	DAE4 Sn376	2.87	56.40	57.4	1.77	1.32	25.30	26.4	4.35
SAR05-HY	2021/7/8	3300	100	D3300V2-1005	EX3DV4 - SN7590	DAE4 Sn1424	6.4	65.50	64	-2.29	2.45	25.20	24.5	-2.78
SAR05-HY	2021/6/21	3500	100	D3500V2-1014	EX3DV4 - SN7590	DAE4 Sn316	6.51	67.90	65.1	-4.12	2.45	25.60	24.5	-4.30
SAR05-HY	2021/6/27	3500	100	D3500V2-1014	EX3DV4 - SN7590	DAE4 Sn316	6.84	67.90	68.4	0.74	2.58	25.60	25.8	0.78
SAR05-HY	2021/7/8	3500	100	D3500V2-1014	EX3DV4 - SN7590	DAE4 Sn1424	6.35	67.90	63.5	-6.48	2.40	25.60	24	-6.25
SAR12-HY	2021/7/11	3500	50	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn316	3.67	67.90	73.4	8.10	1.38	25.60	27.6	7.81
SAR12-HY	2021/7/17	3500	50	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn316	3.42	67.90	68.4	0.74	1.31	25.60	26.2	2.34
SAR12-HY	2021/7/18	3500	50	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn316	3.62	67.90	72.4	6.63	1.36	25.60	27.2	6.25
SAR05-HY	2021/7/22	3500	100	D3500V2-1014	EX3DV4 - SN7590	DAE4 Sn1424	6.37	67.90	63.7	-6.19	2.41	25.60	24.1	-5.86
SAR05-HY	2021/6/21	3700	100	D3700V2-1006	EX3DV4 - SN7590	DAE4 Sn316	6.37	67.30	63.7	-5.35	2.33	24.50	23.3	-4.90
SAR05-HY	2021/6/27	3700	100	D3700V2-1006	EX3DV4 - SN7590	DAE4 Sn316	6.44	67.30	64.4	-4.31	2.36	24.50	23.6	-3.67
SAR13-HY	2021/7/1	3700	50	D3700V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	3.39	67.30	67.8	0.74	1.25	24.50	25	2.04
SAR05-HY	2021/7/8	3700	50	D3700V2-1006	EX3DV4 - SN7590	DAE4 Sn1424	3.17	67.30	63.4	-5.79	1.13	24.50	22.6	-7.76
SAR12-HY	2021/7/8	3900	100	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn316	6.85	69.50	68.5	-1.44	2.48	24.20	24.8	2.48
SAR12-HY	2021/7/11	3900	100	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn316	6.74	69.50	67.4	-3.02	2.44	24.20	24.4	0.83
SAR12-HY	2021/7/15	3900	100	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn316	6.85	69.50	68.5	-1.44	2.47	24.20	24.7	2.07
SAR12-HY	2021/7/17	3900	100	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn316	6.95	69.50	69.5	0.00	2.51	24.20	25.1	3.72
SAR12-HY	2021/7/18	3900	50	D3900V2-1017-3900	EX3DV4 - SN3925	DAE4 Sn316	3.16	69.50	63.2	-9.06	1.13	24.20	22.6	-6.61
SAR13-HY	2021/7/22	3900	100	D3900V2-1017-3900	EX3DV4 - SN3931	DAE4 Sn1399	6.73	69.50	67.3	-3.17	2.44	24.20	24.4	0.83

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR12-HY	2021/7/7	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN3925	DAE4 Sn316	7.40	80.00	74	-7.50	2.10	22.90	21	-8.30
SAR05-HY	2021/7/9	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7590	DAE4 Sn1424	7.57	80.00	75.7	-5.38	2.19	22.90	21.9	-4.37
SAR05-HY	2021/7/15	5250	50	D5GHzV2-1128-5250	EX3DV4 - SN7590	DAE4 Sn1424	3.81	80.00	76.2	-4.75	1.06	22.90	21.2	-7.42
SAR05-HY	2021/7/17	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7590	DAE4 Sn1424	8.13	80.00	81.3	1.63	2.35	22.90	23.5	2.62
SAR12-HY	2021/7/7	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN3925	DAE4 Sn316	8.19	82.40	81.9	-0.61	2.31	23.60	23.1	-2.12
SAR05-HY	2021/7/9	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7590	DAE4 Sn1424	8.38	82.40	83.8	1.70	2.38	23.60	23.8	0.85
SAR05-HY	2021/7/15	5600	50	D5GHzV2-1128-5600	EX3DV4 - SN7590	DAE4 Sn1424	3.93	82.40	78.6	-4.61	1.12	23.60	22.4	-5.08
SAR05-HY	2021/7/17	5600	50	D5GHzV2-1128-5600	EX3DV4 - SN7590	DAE4 Sn1424	3.73	82.40	74.6	-9.47	1.07	23.60	21.4	-9.32
SAR12-HY	2021/7/7	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN3925	DAE4 Sn316	7.46	79.10	74.6	-5.69	2.10	22.60	21	-7.08
SAR05-HY	2021/7/9	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	7.32	79.10	73.2	-7.46	2.10	22.60	21	-7.08
SAR05-HY	2021/7/15	5750	50	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	3.84	79.10	76.8	-2.91	1.06	22.60	21.2	-6.19
SAR05-HY	2021/7/17	5750	50	D5GHzV2-1128-5750	EX3DV4 - SN7590	DAE4 Sn1424	3.90	79.10	78	-1.39	1.11	22.60	22.2	-1.77
SAR10-HY	2021/6/22	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE4 Sn778	28.10	299.00	281	-6.02	5.27	55.10	52.7	-4.36

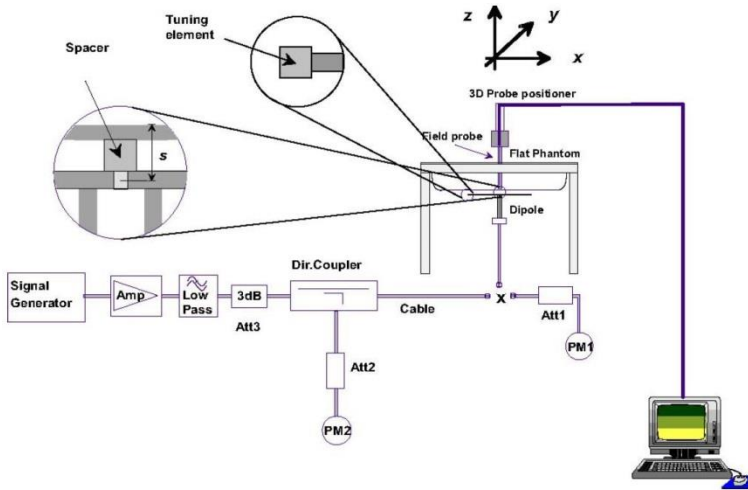


Fig 8.3.1 System Performance Check Setup



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
SAR06-HY	10G	10GHz_1020	EUmmWV3 - SN9424	DAE4 Sn778	10mm	42.4	42.2	0.02	2021/7/5

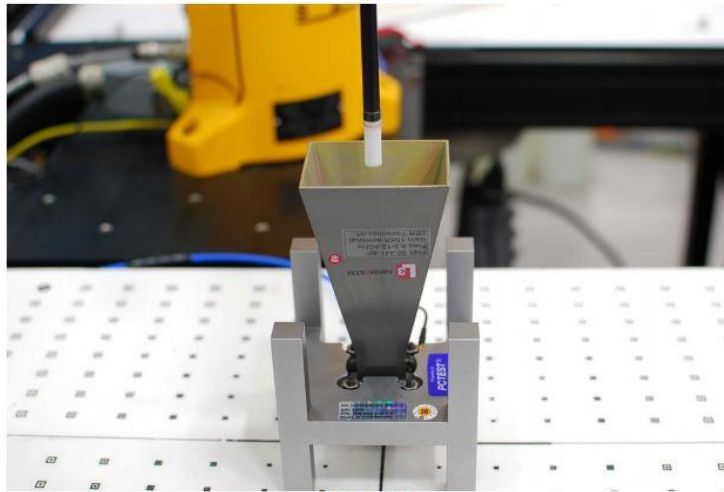


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

11. RF Exposure Positions

11.1 Ear and handset reference point

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

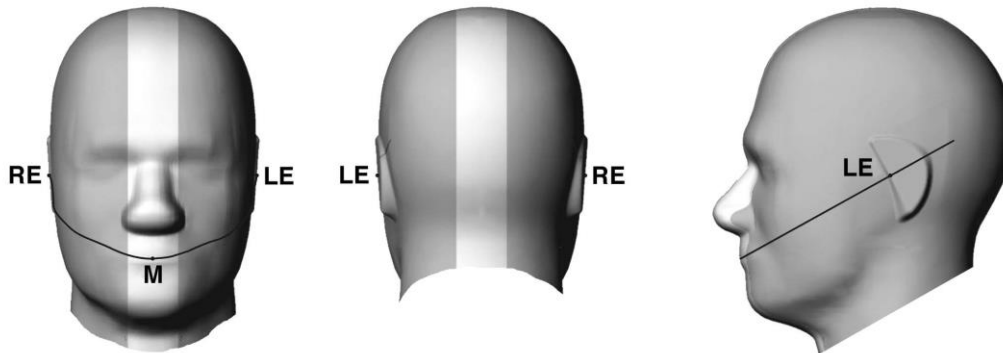


Fig 9.1.1 Front, back, and side views of SAM twin phantom

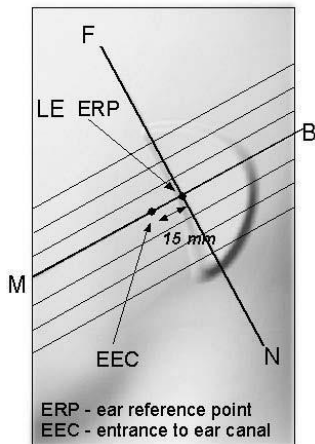


Fig 9.1.2 Close-up side view of phantom showing the ear region.

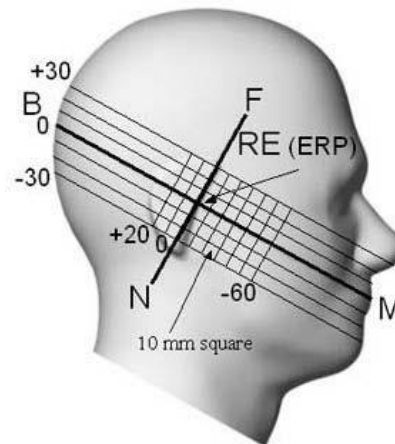


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

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

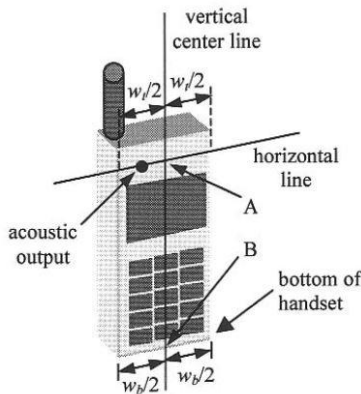


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

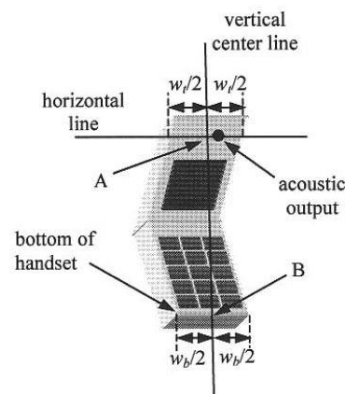


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

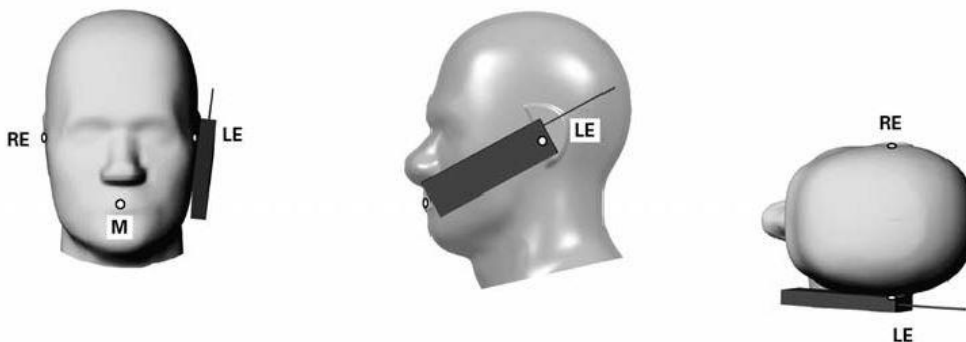


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

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

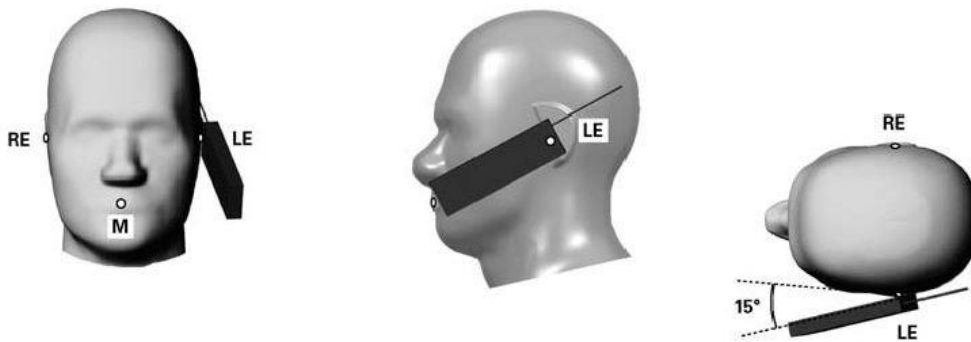


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

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

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

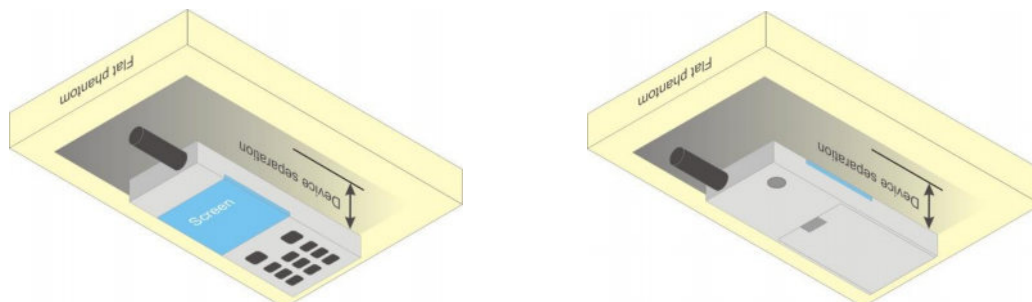


Fig 9.4 Body Worn Position

11.5 Product Specific Exposure

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

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

11.6 Wireless Router

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

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



12. Measurement procedure for output power and SAR

Detail output power measurement data is in the appendix D

<GSM Note>

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

<WCDMA Note>

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA.
3. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
4. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.

A summary of these settings is illustrated below:

HSDPA Setup Configuration:

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

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

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

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

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

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

Setup Configuration

HSUPA Setup Configuration:

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

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

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

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

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

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

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

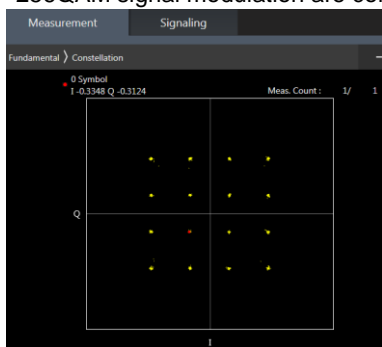
Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

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

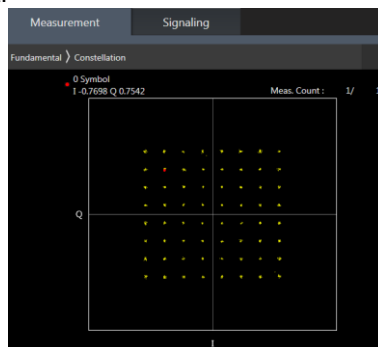
Setup Configuration

<LTE Note>

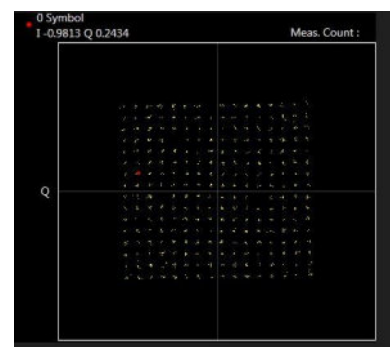
1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested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



16QAM



64QAM



256QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

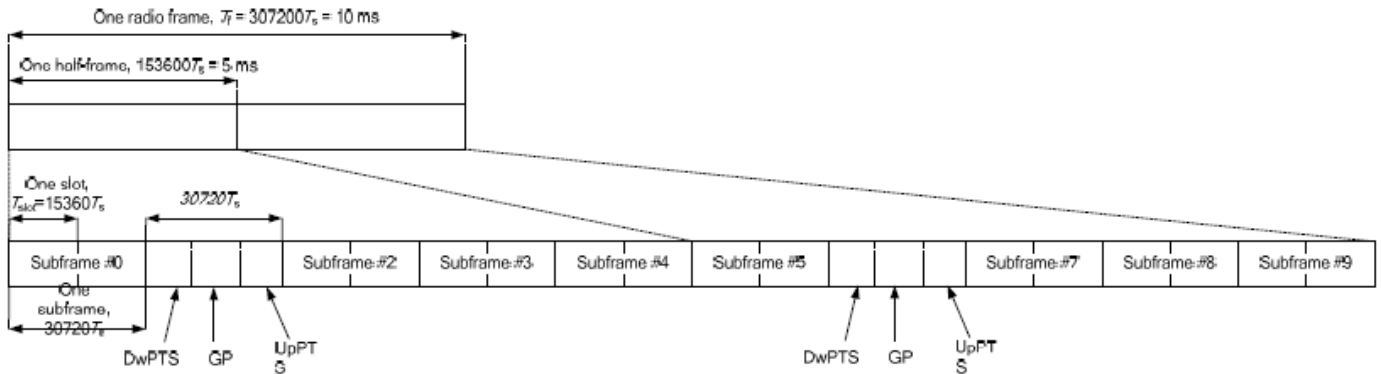


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

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

<5G FR1 Note>

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below
 - a. For DFT-OFDM output power measurement, full measurement was done for Pi/2 BPSK and QPSK and for the largest supported bandwidth, repeat test for 16QAM/64QAM/256QAM under 1RB 1Offset configuration. For smaller bandwidth, measure conducted power for Pi/2 BPSK and 1RB 1Offset configuration.
 - b. According to the tune-up, CP-OFDM output power is not ½ dB higher than DFT-OFDM mode, and the reported SAR of DFT-OFDM mode reported SAR is ≤ 1.45 W/kg, SAR test and thus conducted power for CP-OFDM mode is not required.
 - c. To start SAR test for the largest channel bandwidth for Pi/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for Pi/2 BPSK SAR testing using 1RB Pi/2 BPSK allocation procedure
 - d. For Pi/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - e. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not ½ dB higher than the same configuration in Pi/2 BPSK, also reported SAR for the Pi/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - f. Smaller bandwidth output power for each RB allocation configuration for this device is not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
2. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

<3GPP 38.101 MPR for EN-DC>

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

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

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

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

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

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

**<WLAN Note>**

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

<Bluetooth>

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 77.22 for ant 4, 76.83% for ant 3, ant 4+3 considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation, for the duty cycle figure and output power include in appendix D.



13. DL/UL carrier aggregation

<LTE Carrier Aggregation combinations>

General Note:

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

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

<Power verification when LTE Carrier Aggregation Active>

General Note:

- i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.
- ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.
- iii. The device supports downlink carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

<Two Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-17A	2	5	1852.5	18625	QPSK	1	12	17	10	740	5790	24.22	24.30
	CA_5A-25A	5	10	829	20450	QPSK	1	0	25	20	1960	8340	24.18	24.22



<Three Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-13A-46A	2	20	1900	19100	QPSK	1	0	13	10	751	5230	46	20	5537.5	50665	24.25	24.32
	CA_2A-14A-30A	2	20	1900	19100	QPSK	1	0	14	10	762	5330	30	10	2355	9820	24.29	24.32

<Four Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-2A-4A-71A	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	4	20	2132.5	2175	71	20	634.5	68761	24.30	24.32
	CA_2A-2A-5B	2	20	1900	19100	QPSK	1	0	2	5	1932.5	625	5	10	881.5	2525	5	10	891.4	2624	24.21	24.32

<Five Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				SCC3				SCC4				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-12A-30A-66A-66A	2	20	1900	19100	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.29	24.32
	CA_2A-13A-48A-48A-66A	2	20	1900	19100	QPSK	1	0	13	10	751	5230	48	20	3641	56150	48	5	3552.5	55265	66	20	2155	66886	24.26	24.32

<LTE Uplink carrier aggregation>

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

<Intra-band>

General Note:

- i. The device supports intra-band uplink carrier aggregation with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when not-contiguous RB allocation is implemented. The conducted power and MPR setting in this device are permanently implemented pre 3GPP requirement.
- ii. According TCB workshop, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.
- iii. Uplink CA is only operating with power class3, and additional SAR measurement for LTE UL CA whit other DL CA combinations active were not required since the maximum output power for this configuration was not > 0.25dB higher than the maximum output power for UL CA active.
- iv. For Intra-band, contiguous CA, the channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

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

TX 0

Index 1/2/3/4/5/6										
CA_5B										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	2	0	22.72	23.00
20575	20476	QPSK	1	0	1	49	2	0	22.99	23.00
20600	20501	QPSK	1	0	1	49	2	0	22.95	23.00

Index 1/2/3										
CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	22.98	23.00
21100	20902	QPSK	1	0	1	99	2	0	22.93	23.00
21350	21152	QPSK	1	0	1	99	2	0	22.94	23.00



Index 4										
CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	18.87	19.80
21100	20902	QPSK	1	0	1	99	2	0	18.86	19.80
21350	21152	QPSK	1	0	1	99	2	0	18.73	19.80

Index 5										
CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	19.93	21.50
21100	20902	QPSK	1	0	1	99	2	0	19.91	21.50
21350	21152	QPSK	1	0	1	99	2	0	19.90	21.50

Index 6										
CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	19.93	20.30
21100	20902	QPSK	1	0	1	99	2	0	19.91	20.30
21350	21152	QPSK	1	0	1	99	2	0	19.90	20.30

Index 1/2/3/5										
CA_66B										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	22.99	23.00
132322	132229	QPSK	1	0	1	24	2	0	22.94	23.00
132597	132504	QPSK	1	0	1	24	2	0	22.87	23.00

Index 4										
CA_66B										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	20.58	22.00
132322	132229	QPSK	1	0	1	24	2	0	20.56	22.00
132597	132504	QPSK	1	0	1	24	2	0	20.51	22.00

Index 6										
CA_66B										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	21.22	22.40
132322	132229	QPSK	1	0	1	24	2	0	21.31	22.40
132597	132504	QPSK	1	0	1	24	2	0	21.24	22.40



Index 1/2/3/5										
CA_66C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	22.88	23.00
132322	132124	QPSK	1	0	1	99	2	0	22.97	23.00
132572	132374	QPSK	1	0	1	99	2	0	22.99	23.00

Index 4										
CA_66C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	20.98	22.00
132322	132124	QPSK	1	0	1	99	2	0	21.07	22.00
132572	132374	QPSK	1	0	1	99	2	0	21.11	22.00

Index 6										
CA_66C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	21.25	22.40
132322	132124	QPSK	1	0	1	99	2	0	21.33	22.40
132572	132374	QPSK	1	0	1	99	2	0	21.42	22.40

Index 1/2/3/5/6										
CA_41C_PC3										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	22.95	23.00
40185	39987	QPSK	1	0	1	99	2	0	22.97	23.00
40620	40422	QPSK	1	0	1	99	2	0	22.99	23.00
41055	40857	QPSK	1	0	1	99	2	0	22.89	23.00
41490	41292	QPSK	1	0	1	99	2	0	22.93	23.00

Index 4										
CA_41C_PC3										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	20.98	22.10
40185	39987	QPSK	1	0	1	99	2	0	21.02	22.10
40620	40422	QPSK	1	0	1	99	2	0	20.97	22.10
41055	40857	QPSK	1	0	1	99	2	0	20.83	22.10
41490	41292	QPSK	1	0	1	99	2	0	20.90	22.10



TX 1

Index 1/2/3/4/5/6										
CA_5B										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	1	49	1	0	2	0	22.94	23.00
20575	20476	QPSK	1	0	1	49	2	0	22.95	23.00
20600	20501	QPSK	1	0	1	49	2	0	22.91	23.00

Index 1/2/3/4/5/6										
CA_7C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
20850	21048	QPSK	1	99	1	0	2	0	22.50	23.00
21100	20902	QPSK	1	0	1	99	2	0	22.42	23.00
21350	21152	QPSK	1	0	1	99	2	0	22.17	23.00

Index 1/2/3/4/5/6										
CA_66B										
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	1	74	1	0	2	0	22.55	23.00
132322	132229	QPSK	1	0	1	24	2	0	22.61	23.00
132597	132504	QPSK	1	0	1	24	2	0	22.24	23.00

Index 1/2/3/4/5/6										
CA_66C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	1	99	1	0	2	0	22.59	23.00
132322	132124	QPSK	1	0	1	99	2	0	22.51	23.00
132572	132374	QPSK	1	0	1	99	2	0	22.37	23.00

Index 1/2/3/4/5/6										
CA_41C_PC3										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	99	1	0	2	0	22.49	23.00
40185	39987	QPSK	1	0	1	99	2	0	22.44	23.00
40620	40422	QPSK	1	0	1	99	2	0	22.23	23.00
41055	40857	QPSK	1	0	1	99	2	0	22.19	23.00
41490	41292	QPSK	1	0	1	99	2	0	22.1	23.00

14. RF Exposure position consideration

Distance of the Antenna to the EUT surface/edge						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WWAN Ant 2	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 5	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WWAN Ant 6	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WLAN/BT Ant 4+3	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm

Positions for SAR tests; Hotspot mode						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 1	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 2	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 5	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 6	Yes	Yes	No	Yes	Yes	Yes
WLAN/BT Ant 4+3	Yes	Yes	Yes	No	Yes	Yes

General Note:

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



15. RF Exposure 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 KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold, for this device the GSM1900, WCDMA B2/4, LTE B7/25/30/66, FR1 n7/25/30/66 Bottom Side, WLAN 5.2GHz left side, WLAN 5.8GHz right side and WLAN 5.3GHz , 5.5GHz 6GHz product specific SAR is necessary.
6. For 5.3GHz / 5.5GHz / 6GHz WLAN product specific SAR is necessary too, due to an overall diagonal dimension is > 16 cm.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ 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, DC-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 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is \leq the larger band to qualify for the SAR test exclusion.
 - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 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 was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

**WLAN Note:**

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

WLAN PD Note:

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
4. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
6. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty $> 30\%$. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor.
7. The measurement procedure consists of measuring the PDinc at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPDn fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

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



15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	189	836.4	29.83	30.50	1.167	0.15	0.215	0.251
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2/3	189	836.4	29.83	30.50	1.167	-0.07	0.140	0.163
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	189	836.4	29.83	30.50	1.167	0.01	0.338	0.394
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	128	824.2	29.75	30.50	1.189	-0.1	0.339	0.403
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	251	848.8	29.53	30.50	1.250	0.12	0.314	0.393
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2/3	189	836.4	29.83	30.50	1.167	-0.05	0.215	0.251
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	128	824.2	26.76	28.30	1.426	0.07	0.765	1.091
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	189	836.4	26.57	28.30	1.489	-0.1	0.665	0.990
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2	251	848.8	26.85	28.30	1.396	-0.19	0.627	0.876
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	128	824.2	26.76	28.30	1.426	-0.09	0.759	1.082
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	189	836.4	26.57	28.30	1.489	-0.1	0.601	0.895
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2	251	848.8	26.85	28.30	1.396	-0.07	0.541	0.755
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2	128	824.2	26.76	28.30	1.426	-0.01	0.366	0.522
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2	128	824.2	26.76	28.30	1.426	-0.18	0.308	0.439
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	128	824.2	26.76	27.10	1.081	0.07	0.765	0.827
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	189	836.4	26.57	27.10	1.130	-0.1	0.665	0.751
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Index 3	251	848.8	26.85	27.10	1.059	-0.19	0.627	0.664
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	128	824.2	26.76	27.10	1.081	-0.09	0.759	0.821
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	189	836.4	26.57	27.10	1.130	-0.1	0.601	0.679
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Index 3	251	848.8	26.85	27.10	1.059	-0.07	0.541	0.573
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Index 3	128	824.2	26.76	27.10	1.081	-0.01	0.366	0.396
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Index 3	128	824.2	26.76	27.10	1.081	-0.18	0.308	0.333
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	512	1850.2	27.23	28.00	1.194	0.01	0.102	0.122
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	661	1880	27.01	28.00	1.256	0	0.091	0.114
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	810	1909.8	26.86	28.00	1.300	0.02	0.064	0.083
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2/3	512	1850.2	27.23	28.00	1.194	-0.01	0.061	0.073
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	512	1850.2	27.23	28.00	1.194	0.05	0.080	0.096
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2/3	512	1850.2	27.23	28.00	1.194	-0.03	0.064	0.076
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	Index 2/3	661	1880	26.78	27.70	1.236	-0.01	0.149	0.184
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	Index 2/3	661	1880	26.78	27.70	1.236	0	0.130	0.161
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	661	1880	26.78	27.70	1.236	0.03	0.313	0.387
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	512	1850.2	26.71	27.70	1.256	0.09	0.302	0.379
02	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Index 2/3	810	1909.8	26.60	27.70	1.288	-0.16	0.357	0.460
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	Index 2/3	661	1880	26.78	27.70	1.236	0	0.139	0.172



<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	Right Cheek	0mm	Index 2/3	9262	1852.4	24.82	25.00	1.042	-0.18	0.136	0.142
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	9400	1880	24.65	25.00	1.084	0.02	0.113	0.122
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	9538	1907.6	24.75	25.00	1.059	-0.05	0.110	0.117
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	9262	1852.4	24.82	25.00	1.042	0.11	0.001	0.001
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9262	1852.4	24.82	25.00	1.042	-0.08	0.125	0.130
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	9262	1852.4	24.82	25.00	1.042	0.06	0.042	0.044
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	9262	1852.4	24.35	24.70	1.084	0.01	0.127	0.138
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	9262	1852.4	24.35	24.70	1.084	-0.06	0.047	0.051
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9262	1852.4	24.35	24.70	1.084	0.08	0.395	0.428
03	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9400	1880	24.25	24.70	1.109	-0.06	0.424	0.470
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	9538	1907.6	24.34	24.70	1.086	0.09	0.405	0.440
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	9262	1852.4	24.35	24.70	1.084	-0.04	0.140	0.152
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1513	1752.6	24.63	25.00	1.089	-0.03	0.257	0.280
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1312	1712.4	24.62	25.00	1.091	0.05	0.193	0.211
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1413	1732.6	24.60	25.00	1.096	0.11	0.210	0.230
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	1513	1752.6	24.63	25.00	1.089	-0.06	0.001	0.001
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1513	1752.6	24.63	25.00	1.089	-0.14	0.126	0.137
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	1513	1752.6	24.63	25.00	1.089	0.02	0.001	0.001
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	1513	1752.6	24.14	24.70	1.138	0.01	0.158	0.180
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	1513	1752.6	24.14	24.70	1.138	0	0.127	0.144
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1513	1752.6	24.14	24.70	1.138	0.09	0.313	0.356
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1312	1712.4	24.08	24.70	1.153	-0.06	0.287	0.331
04	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	1413	1732.6	24.08	24.70	1.153	-0.03	0.311	0.359
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	1513	1752.6	24.14	24.70	1.138	0.07	0.148	0.168
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	4132	826.4	24.73	25.00	1.064	0.01	0.215	0.229
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	4132	826.4	24.73	25.00	1.064	-0.05	0.060	0.064
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4132	826.4	24.73	25.00	1.064	0.03	0.282	0.300
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4182	836.4	24.72	25.00	1.067	-0.1	0.301	0.321
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4233	846.6	24.64	25.00	1.086	0.1	0.295	0.320
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	4132	826.4	24.73	25.00	1.064	-0.05	0.115	0.122
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	4182	836.4	24.58	24.90	1.076	-0.04	0.295	0.318
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	4132	826.4	24.56	24.90	1.081	-0.03	0.353	0.382
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Index 2/3	4233	846.6	24.43	24.90	1.114	-0.06	0.431	0.480
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Index 2/3	4182	836.4	24.58	24.90	1.076	0.01	0.277	0.298
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Index 2/3	4182	836.4	24.58	24.90	1.076	0.02	0.184	0.198
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Index 2/3	4182	836.4	24.58	24.90	1.076	-0.09	0.173	0.186



<FDD 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 7_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	21350	2560	24.35	24.60	1.059	-0.17	0.425	0.450
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	20850	2510	24.34	24.60	1.062	0.01	0.354	0.376
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	21100	2535	24.33	24.60	1.064	0.06	0.399	0.425
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Cheek	0mm	Index 2/3	20850	2510	23.53	23.60	1.016	-0.08	0.277	0.282
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Tilted	0mm	Index 2/3	21350	2560	24.35	24.60	1.059	0.1	0.229	0.243
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Tilted	0mm	Index 2/3	20850	2510	23.53	23.60	1.016	0.06	0.149	0.151
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Cheek	0mm	Index 2/3	21350	2560	24.35	24.60	1.059	-0.19	0.295	0.312
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Cheek	0mm	Index 2/3	20850	2510	23.53	23.60	1.016	-0.1	0.203	0.206
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Tilted	0mm	Index 2/3	21350	2560	24.35	24.60	1.059	0.05	0.266	0.282
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Tilted	0mm	Index 2/3	20850	2510	23.53	23.60	1.016	0.19	0.133	0.135
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Right Cheek	0mm	Index 2/3	20850+21048	2510	22.98	23.00	1.005	0.1	0.260	0.261
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	21100	2535	23.16	24.00	1.213	0.05	0.159	0.193
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Cheek	0mm	Index 2/3	20850	2510	22.25	23.00	1.189	0.06	0.123	0.146
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	21100	2535	23.16	24.00	1.213	0.08	0.079	0.096
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Tilted	0mm	Index 2/3	20850	2510	22.25	23.00	1.189	0.01	0.062	0.074
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	21100	2535	23.16	24.00	1.213	-0.05	0.310	0.376
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	20850	2510	22.90	24.00	1.288	0.01	0.259	0.334
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	21350	2560	23.02	24.00	1.253	-0.03	0.347	0.435
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Cheek	0mm	Index 2/3	20850	2510	22.25	23.00	1.189	0.01	0.238	0.283
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	21100	2535	23.16	24.00	1.213	0.04	0.129	0.157
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Tilted	0mm	Index 2/3	20850	2510	22.25	23.00	1.189	0.08	0.100	0.119
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	Index 2/3	20850+21048	2510	22.50	23.00	1.122	0.06	0.264	0.296
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	23095	707.5	24.37	25.00	1.156	-0.09	0.180	0.208
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Cheek	0mm	Index 2/3	23095	707.5	23.43	24.00	1.140	0.05	0.148	0.169
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	23095	707.5	24.37	25.00	1.156	0.02	0.106	0.123
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Tilted	0mm	Index 2/3	23095	707.5	23.43	24.00	1.140	-0.05	0.088	0.100
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	23095	707.5	24.37	25.00	1.156	-0.1	0.250	0.289
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Cheek	0mm	Index 2/3	23095	707.5	23.43	24.00	1.140	-0.1	0.203	0.231
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	23095	707.5	24.37	25.00	1.156	-0.07	0.137	0.158
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Tilted	0mm	Index 2/3	23095	707.5	23.43	24.00	1.140	-0.1	0.115	0.131
07	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	23095	707.5	24.10	24.90	1.202	-0.04	0.569	0.684
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Cheek	0mm	Index 2/3	23095	707.5	23.20	23.90	1.175	0.02	0.388	0.456
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	23095	707.5	24.10	24.90	1.202	0	0.465	0.559
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Tilted	0mm	Index 2/3	23095	707.5	23.20	23.90	1.175	0.05	0.322	0.378
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	23095	707.5	24.10	24.90	1.202	-0.06	0.246	0.296
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Cheek	0mm	Index 2/3	23095	707.5	23.20	23.90	1.175	0.03	0.172	0.202
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	23095	707.5	24.10	24.90	1.202	0.01	0.241	0.290
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Tilted	0mm	Index 2/3	23095	707.5	23.20	23.90	1.175	0.09	0.171	0.201



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 13_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	23230	782	24.23	25.00	1.194	-0.09	0.201	0.240
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	Index 2/3	23230	782	23.29	24.00	1.178	0.07	0.167	0.197
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	23230	782	24.23	25.00	1.194	-0.04	0.127	0.152
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	Index 2/3	23230	782	23.29	24.00	1.178	-0.08	0.105	0.124
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	23230	782	24.23	25.00	1.194	-0.11	0.275	0.328
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	Index 2/3	23230	782	23.29	24.00	1.178	-0.1	0.234	0.276
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	23230	782	24.23	25.00	1.194	-0.03	0.184	0.220
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	Index 2/3	23230	782	23.29	24.00	1.178	-0.1	0.146	0.172
08	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 2	23230	782	24.02	24.90	1.225	-0.1	0.878	1.075
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Index 2	23230	782	23.11	23.90	1.199	-0.18	0.759	0.910
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	Index 2	23230	782	23.18	23.90	1.180	-0.05	0.758	0.895
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 2	23230	782	24.02	24.90	1.225	-0.01	0.863	1.057
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Index 2	23230	782	23.11	23.90	1.199	-0.03	0.695	0.834
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	Index 2	23230	782	23.18	23.90	1.180	-0.02	0.715	0.844
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 2	23230	782	24.02	24.90	1.225	-0.09	0.403	0.494
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Index 2	23230	782	23.11	23.90	1.199	-0.09	0.326	0.391
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 2	23230	782	24.02	24.90	1.225	-0.09	0.344	0.421
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Index 2	23230	782	23.11	23.90	1.199	-0.11	0.280	0.336
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 3	23230	782	24.02	24.10	1.019	-0.1	0.878	0.894
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Index 3	23230	782	23.11	23.90	1.199	0.07	0.759	0.910
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	Index 3	23230	782	23.18	23.90	1.180	-0.05	0.758	0.895
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Index 3	23230	782	24.02	24.10	1.019	-0.01	0.863	0.879
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Index 3	23230	782	23.11	23.90	1.199	-0.03	0.695	0.834
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	Index 3	23230	782	23.18	23.90	1.180	-0.02	0.715	0.844
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Index 3	23230	782	24.02	24.10	1.019	-0.09	0.403	0.410
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Index 3	23230	782	23.11	23.90	1.199	-0.09	0.326	0.391
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Index 3	23230	782	24.02	24.10	1.019	-0.09	0.344	0.350
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Index 3	23230	782	23.11	23.90	1.199	-0.11	0.280	0.336



Table with 16 columns: 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). Rows include LTE Band 14_Ant 0, 1, 2, 25_Ant 2, and 25_Ant 0.



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	Index 2/3	26865	831.5	24.22	25.00	1.197	0.05	0.179	0.214
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Cheek	0mm	Index 2/3	26865	831.5	23.29	24.00	1.178	-0.02	0.146	0.172
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	Index 2/3	26865	831.5	24.22	25.00	1.197	0.01	0.118	0.141
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Tilted	0mm	Index 2/3	26865	831.5	23.29	24.00	1.178	0	0.087	0.102
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	Index 2/3	26865	831.5	24.22	25.00	1.197	-0.13	0.258	0.309
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Cheek	0mm	Index 2/3	26865	831.5	23.29	24.00	1.178	0.03	0.210	0.247
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	Index 2/3	26865	831.5	24.22	25.00	1.197	-0.08	0.132	0.158
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Tilted	0mm	Index 2/3	26865	831.5	23.29	24.00	1.178	0.01	0.111	0.131
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	20575+20476	841.5	22.99	23.00	1.002	-0.13	0.287	0.288
11	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Index 2	26865	831.5	23.99	24.90	1.233	-0.09	0.933	1.150
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Cheek	0mm	Index 2	26865	831.5	23.07	23.90	1.211	-0.17	0.691	0.837
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	Index 2	26865	831.5	22.99	23.90	1.233	-0.17	0.705	0.869
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	Index 2	26865	831.5	23.99	24.90	1.233	-0.17	0.846	1.043
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Tilted	0mm	Index 2	26865	831.5	23.07	23.90	1.211	-0.19	0.621	0.752
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Tilted	0mm	Index 2	26865	831.5	22.99	23.90	1.233	-0.18	0.637	0.785
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	Index 2	26865	831.5	23.99	24.90	1.233	-0.09	0.481	0.593
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Cheek	0mm	Index 2	26865	831.5	23.07	23.90	1.211	-0.09	0.379	0.459
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	Index 2	26865	831.5	23.99	24.90	1.233	-0.1	0.395	0.487
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Tilted	0mm	Index 2	26865	831.5	23.07	23.90	1.211	-0.04	0.309	0.374
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index 2	20575+20476	841.5	22.95	23.00	1.012	-0.19	0.677	0.685
	LTE Band 5B_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Index 3	26865	831.5	23.26	24.20	1.242	-0.18	0.715	0.888
	LTE Band 5B_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	Index 3	26865	831.5	23.33	23.70	1.089	-0.17	0.708	0.771
	LTE Band 5B_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	Index 3	26865	831.5	23.26	23.70	1.107	-0.13	0.667	0.738
	LTE Band 5B_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	Index 3	26865	831.5	23.26	24.20	1.242	-0.15	0.679	0.843
	LTE Band 5B_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	Index 3	26865	831.5	23.33	23.70	1.089	-0.15	0.671	0.731
	LTE Band 5B_Ant 1	15M	QPSK	75	0	Right Tilted	0mm	Index 3	26865	831.5	23.26	23.70	1.107	-0.16	0.627	0.694
	LTE Band 5B_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	Index 3	26865	831.5	23.26	24.20	1.242	0.14	0.352	0.437
	LTE Band 5B_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	Index 3	26865	831.5	23.33	23.70	1.089	-0.1	0.362	0.394
	LTE Band 5B_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	Index 3	26865	831.5	23.26	24.20	1.242	-0.09	0.304	0.377
	LTE Band 5B_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	Index 3	26865	831.5	23.33	23.70	1.089	-0.07	0.319	0.347
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	27710	2310	24.24	25.00	1.191	-0.03	0.191	0.228
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Cheek	0mm	Index 2/3	27710	2310	23.18	24.00	1.208	0.16	0.151	0.182
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	27710	2310	24.24	25.00	1.191	0.16	0.081	0.096
	LTE Band 30_Ant 2	10M	QPSK	25	25	Right Tilted	0mm	Index 2/3	27710	2310	23.18	24.00	1.208	0.13	0.068	0.082
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	27710	2310	24.24	25.00	1.191	0.09	0.097	0.116
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Cheek	0mm	Index 2/3	27710	2310	23.18	24.00	1.208	0.02	0.075	0.091
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	27710	2310	24.24	25.00	1.191	0.14	0.085	0.101
	LTE Band 30_Ant 2	10M	QPSK	25	25	Left Tilted	0mm	Index 2/3	27710	2310	23.18	24.00	1.208	0.01	0.069	0.083
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Index 2/3	27710	2310	23.72	24.40	1.169	0.07	0.138	0.161
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	Index 2/3	27710	2310	22.75	23.40	1.161	0.17	0.105	0.122
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Index 2/3	27710	2310	23.72	24.40	1.169	0.03	0.119	0.139
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	Index 2/3	27710	2310	22.75	23.40	1.161	0.07	0.091	0.106
12	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Index 2/3	27710	2310	23.72	24.40	1.169	-0.09	0.328	0.384
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	Index 2/3	27710	2310	22.75	23.40	1.161	0.17	0.248	0.288
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Index 2/3	27710	2310	23.72	24.40	1.169	0.1	0.094	0.110
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	Index 2/3	27710	2310	22.75	23.40	1.161	0.07	0.076	0.088



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	Right Cheek	0mm	Index 2/3	132322	1745	24.29	25.00	1.178	0.07	0.162	0.191
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132072	1720	24.19	25.00	1.205	0.1	0.119	0.143
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132572	1770	24.25	25.00	1.189	-0.11	0.175	0.208
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	Index 2/3	132322	1745	23.37	24.00	1.156	-0.05	0.141	0.163
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	132322	1745	24.29	25.00	1.178	0.13	0.110	0.130
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	Index 2/3	132322	1745	23.37	24.00	1.156	0.11	0.086	0.099
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	132322	1745	24.29	25.00	1.178	0.02	0.117	0.138
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	Index 2/3	132322	1745	23.37	24.00	1.156	0.07	0.103	0.119
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	132322	1745	24.29	25.00	1.178	-0.09	0.095	0.112
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	Index 2/3	132322	1745	23.37	24.00	1.156	-0.05	0.082	0.095
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Right Cheek	0mm	Index 2/3	132047+132140	1717.5	22.99	23.00	1.002	-0.11	0.155	0.155
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	132572+132374	1770	22.99	23.00	1.002	-0.13	0.188	0.188
	LTE Band 66_Ant 0	20M	QPSK	1	49	Right Cheek	0mm	Index 2/3	132072	1720	23.84	24.70	1.219	-0.01	0.198	0.241
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	132072	1720	22.86	23.70	1.213	0	0.191	0.232
	LTE Band 66_Ant 0	20M	QPSK	1	49	Right Tilted	0mm	Index 2/3	132072	1720	23.84	24.70	1.219	0.03	0.165	0.201
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	132072	1720	22.86	23.70	1.213	0.15	0.121	0.147
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Cheek	0mm	Index 2/3	132072	1720	23.84	24.70	1.219	-0.09	0.357	0.435
13	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	132322	1745	23.68	24.70	1.265	0.05	0.369	0.467
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	132572	1770	23.55	24.70	1.303	-0.11	0.348	0.454
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	132072	1720	22.86	23.70	1.213	-0.16	0.332	0.403
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Tilted	0mm	Index 2/3	132072	1720	23.84	24.70	1.219	-0.02	0.157	0.191
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	132072	1720	22.86	23.70	1.213	0.08	0.130	0.158
	LTE Band 66B_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	Index 2/3	132322+132229	1745	22.61	23.00	1.094	0.15	0.279	0.305
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Left Cheek	0mm	Index 2/3	132072+132270	1720	22.59	23.00	1.099	0.02	0.286	0.314
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	133322	683	24.35	25.00	1.161	-0.03	0.176	0.204
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	133322	683	23.38	24.00	1.153	-0.04	0.143	0.165
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	133322	683	24.35	25.00	1.161	0.02	0.097	0.113
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	133322	683	23.38	24.00	1.153	0.01	0.077	0.089
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	133322	683	24.35	25.00	1.161	0.11	0.238	0.276
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	133322	683	23.38	24.00	1.153	0.01	0.181	0.209
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	133322	683	24.35	25.00	1.161	0.08	0.128	0.149
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	133322	683	23.38	24.00	1.153	-0.01	0.096	0.111
14	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Index 2/3	133322	683	24.08	24.90	1.208	0.04	0.705	0.852
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	Index 2/3	133322	683	23.11	23.90	1.199	-0.15	0.532	0.638
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	Index 2/3	133322	683	23.06	23.90	1.213	-0.1	0.521	0.632
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Index 2/3	133322	683	24.08	24.90	1.208	-0.11	0.508	0.614
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	Index 2/3	133322	683	23.11	23.90	1.199	-0.11	0.436	0.523
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Index 2/3	133322	683	24.08	24.90	1.208	-0.11	0.173	0.209
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	Index 2/3	133322	683	23.11	23.90	1.199	-0.12	0.168	0.202
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Index 2/3	133322	683	24.08	24.90	1.208	-0.07	0.140	0.169
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	Index 2/3	133322	683	23.11	23.90	1.199	-0.13	0.134	0.161



<TDD LTE SAR>

Table with columns: 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). Rows include various LTE bands (41, 48) and antennas (Ant 0, Ant 2) with SAR values.



<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 n5_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	167300	836.5	24.87	25.00	1.030	-0.11	0.192	0.198
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	167300	836.5	24.71	25.00	1.069	-0.06	0.195	0.208
	FR1 n5_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	167300	836.5	24.87	25.00	1.030	0.03	0.113	0.116
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	167300	836.5	24.71	25.00	1.069	-0.05	0.119	0.127
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	167300	836.5	24.87	25.00	1.030	0.02	0.252	0.260
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	167300	836.5	24.71	25.00	1.069	-0.04	0.263	0.281
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	167300	836.5	24.87	25.00	1.030	0.01	0.144	0.148
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	167300	836.5	24.71	25.00	1.069	0	0.157	0.168
17	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 2	167300	836.5	24.62	24.90	1.067	-0.04	0.883	0.942
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 2	167300	836.5	24.47	24.90	1.104	-0.13	0.852	0.941
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	Index 2	167300	836.5	23.97	24.40	1.104	-0.18	0.596	0.658
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 2	167300	836.5	24.62	24.90	1.067	-0.14	0.596	0.636
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 2	167300	836.5	24.47	24.90	1.104	-0.14	0.617	0.681
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 2	167300	836.5	24.62	24.90	1.067	-0.11	0.295	0.315
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 2	167300	836.5	24.47	24.90	1.104	-0.12	0.285	0.315
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 2	167300	836.5	24.62	24.90	1.067	-0.12	0.228	0.243
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 2	167300	836.5	24.47	24.90	1.104	-0.15	0.230	0.254
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 3	167300	836.5	24.62	24.70	1.019	-0.04	0.883	0.899
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 3	167300	836.5	24.47	24.70	1.054	-0.13	0.852	0.898
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	Index 3	167300	836.5	23.97	24.20	1.054	-0.18	0.596	0.628
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 3	167300	836.5	24.62	24.70	1.019	-0.14	0.596	0.607
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 3	167300	836.5	24.47	24.70	1.054	-0.14	0.617	0.651
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 3	167300	836.5	24.62	24.70	1.019	-0.11	0.295	0.300
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 3	167300	836.5	24.47	24.70	1.054	-0.12	0.285	0.301
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 3	167300	836.5	24.62	24.70	1.019	-0.12	0.228	0.232
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 3	167300	836.5	24.47	24.70	1.054	-0.15	0.230	0.243
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	502000	2510	23.96	24.60	1.159	0.01	0.231	0.268
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	507000	2535	23.86	24.60	1.186	-0.02	0.300	0.356
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	512000	2560	23.80	24.60	1.202	0	0.262	0.315
	FR1 n7_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	502000	2510	23.83	24.60	1.194	0.05	0.223	0.266
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	502000	2510	23.96	24.60	1.159	-0.04	0.139	0.161
	FR1 n7_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	502000	2510	23.83	24.60	1.194	0.03	0.137	0.164
	FR1 n7_Ant 2	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	502000	2510	23.96	24.60	1.159	-0.09	0.066	0.076
	FR1 n7_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	502000	2510	23.83	24.60	1.194	0.1	0.063	0.075
	FR1 n7_Ant 2	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	502000	2510	23.96	24.60	1.159	0.02	0.058	0.067
	FR1 n7_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	502000	2510	23.83	24.60	1.194	-0.07	0.054	0.064
	FR1 n7_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	502000	2510	23.39	24.00	1.151	0.02	0.115	0.132
	FR1 n7_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	502000	2510	23.25	24.00	1.189	-0.01	0.113	0.134
	FR1 n7_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	502000	2510	23.39	24.00	1.151	0	0.074	0.085
	FR1 n7_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	502000	2510	23.25	24.00	1.189	0.05	0.071	0.084
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	502000	2510	23.39	24.00	1.151	-0.06	0.246	0.283
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	502000	2510	23.25	24.00	1.189	-0.09	0.245	0.291
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	507000	2535	23.10	24.00	1.230	0.1	0.276	0.340
18	FR1 n7_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	512000	2560	23.06	24.00	1.242	-0.03	0.292	0.363
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	502000	2510	23.39	24.00	1.151	0.08	0.130	0.150
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	502000	2510	23.25	24.00	1.189	0.04	0.126	0.150



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	77	Right Cheek	0mm	Index 2/3	141500	707.5	24.70	25.00	1.072	0.01	0.165	0.177
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	Index 2/3	141500	707.5	24.69	25.00	1.074	0	0.155	0.166
	FR1 n12_Ant 0	15M	BPSK	1	77	Right Tilted	0mm	Index 2/3	141500	707.5	24.70	25.00	1.072	0.05	0.105	0.113
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	Index 2/3	141500	707.5	24.69	25.00	1.074	-0.04	0.098	0.105
	FR1 n12_Ant 0	15M	BPSK	1	77	Left Cheek	0mm	Index 2/3	141500	707.5	24.70	25.00	1.072	-0.02	0.226	0.242
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	Index 2/3	141500	707.5	24.69	25.00	1.074	0.03	0.211	0.227
	FR1 n12_Ant 0	15M	BPSK	1	77	Left Tilted	0mm	Index 2/3	141500	707.5	24.70	25.00	1.072	0.06	0.143	0.153
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	Index 2/3	141500	707.5	24.69	25.00	1.074	-0.08	0.128	0.137
19	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	Index 2/3	141500	707.5	24.47	24.90	1.104	-0.02	0.605	0.668
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	Index 2/3	141500	707.5	24.45	24.90	1.109	0.01	0.536	0.595
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	Index 2/3	141500	707.5	24.47	24.90	1.104	0.05	0.522	0.576
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	Index 2/3	141500	707.5	24.45	24.90	1.109	-0.04	0.421	0.467
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	Index 2/3	141500	707.5	24.47	24.90	1.104	-0.03	0.270	0.298
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	Index 2/3	141500	707.5	24.45	24.90	1.109	0.02	0.209	0.232
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	Index 2/3	141500	707.5	24.47	24.90	1.104	0	0.299	0.330
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	Index 2/3	141500	707.5	24.45	24.90	1.109	0.08	0.223	0.247
	FR1 n25_Ant 2	20M	BPSK	1	1	Right Cheek	0mm	Index 2/3	376500	1882.5	24.40	25.00	1.148	0.02	0.088	0.101
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	376500	1882.5	24.39	25.00	1.151	-0.03	0.069	0.079
	FR1 n25_Ant 2	20M	BPSK	1	1	Right Tilted	0mm	Index 2/3	376500	1882.5	24.40	25.00	1.148	0	0.058	0.067
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	376500	1882.5	24.39	25.00	1.151	0.01	0.048	0.055
	FR1 n25_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	Index 2/3	376500	1882.5	24.40	25.00	1.148	0.1	0.095	0.109
	FR1 n25_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	Index 2/3	372000	1860	24.36	25.00	1.159	-0.16	0.104	0.121
	FR1 n25_Ant 2	20M	BPSK	1	1	Left Cheek	0mm	Index 2/3	381000	1905	24.39	25.00	1.151	-0.08	0.081	0.093
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	376500	1882.5	24.39	25.00	1.151	0.07	0.096	0.110
	FR1 n25_Ant 2	20M	BPSK	1	1	Left Tilted	0mm	Index 2/3	376500	1882.5	24.40	25.00	1.148	0.09	0.076	0.087
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	376500	1882.5	24.39	25.00	1.151	-0.11	0.085	0.098
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	372000	1860	24.26	24.70	1.107	0.01	0.170	0.188
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	372000	1860	24.12	24.70	1.143	0	0.168	0.192
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	372000	1860	24.26	24.70	1.107	0.03	0.142	0.157
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	372000	1860	24.12	24.70	1.143	-0.04	0.140	0.160
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	372000	1860	24.26	24.70	1.107	0.05	0.377	0.417
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	376500	1882.5	24.02	24.70	1.169	-0.09	0.382	0.447
20	FR1 n25_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	381000	1905	23.71	24.70	1.256	-0.07	0.386	0.485
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	372000	1860	24.12	24.70	1.143	0.1	0.365	0.417
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	372000	1860	24.26	24.70	1.107	0.08	0.172	0.190
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	372000	1860	24.12	24.70	1.143	-0.07	0.168	0.192
	FR1 n30_Ant 2	10M	BPSK	1	26	Right Cheek	0mm	Index 2/3	462000	2310	24.08	25.00	1.236	0.02	0.162	0.200
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Cheek	0mm	Index 2/3	462000	2310	23.97	25.00	1.268	-0.05	0.158	0.200
	FR1 n30_Ant 2	10M	BPSK	1	26	Right Tilted	0mm	Index 2/3	462000	2310	24.08	25.00	1.236	-0.01	0.068	0.084
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Tilted	0mm	Index 2/3	462000	2310	23.97	25.00	1.268	0.05	0.010	0.013
	FR1 n30_Ant 2	10M	BPSK	1	26	Left Cheek	0mm	Index 2/3	462000	2310	24.08	25.00	1.236	-0.04	0.090	0.111
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Cheek	0mm	Index 2/3	462000	2310	23.97	25.00	1.268	-0.03	0.092	0.117
	FR1 n30_Ant 2	10M	BPSK	1	26	Left Tilted	0mm	Index 2/3	462000	2310	24.08	25.00	1.236	0.1	0.094	0.116
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Tilted	0mm	Index 2/3	462000	2310	23.97	25.00	1.268	0.07	0.094	0.119
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Cheek	0mm	Index 2/3	462000	2310	23.38	24.40	1.265	0.01	0.121	0.153
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Cheek	0mm	Index 2/3	462000	2310	23.25	24.40	1.303	-0.04	0.119	0.155
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Tilted	0mm	Index 2/3	462000	2310	23.38	24.40	1.265	0.03	0.099	0.125
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Tilted	0mm	Index 2/3	462000	2310	23.25	24.40	1.303	0.02	0.099	0.129
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Cheek	0mm	Index 2/3	462000	2310	23.38	24.40	1.265	-0.09	0.247	0.312
21	FR1 n30_Ant 0	10M	BPSK	25	14	Left Cheek	0mm	Index 2/3	462000	2310	23.25	24.40	1.303	-0.05	0.240	0.313
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Tilted	0mm	Index 2/3	462000	2310	23.38	24.40	1.265	0	0.075	0.095
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Tilted	0mm	Index 2/3	462000	2310	23.25	24.40	1.303	0.08	0.072	0.094



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 n66_Ant 2	40M	BPSK	1	108	Right Cheek	0mm	Index 2/3	349000	1745	24.49	25.00	1.125	0.02	0.196	0.220
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	Index 2/3	349000	1745	24.24	25.00	1.191	-0.04	0.189	0.225
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Tilted	0mm	Index 2/3	349000	1745	24.49	25.00	1.125	-0.01	0.137	0.154
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	Index 2/3	349000	1745	24.24	25.00	1.191	0	0.132	0.157
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Cheek	0mm	Index 2/3	349000	1745	24.49	25.00	1.125	0.08	0.142	0.160
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	Index 2/3	349000	1745	24.24	25.00	1.191	-0.06	0.132	0.157
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Tilted	0mm	Index 2/3	349000	1745	24.49	25.00	1.125	0.07	0.101	0.114
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	Index 2/3	349000	1745	24.24	25.00	1.191	-0.1	0.099	0.118
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Cheek	0mm	Index 2/3	349000	1745	24.21	24.70	1.119	0.02	0.160	0.179
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Cheek	0mm	Index 2/3	349000	1745	24.05	24.70	1.161	-0.01	0.155	0.180
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Tilted	0mm	Index 2/3	349000	1745	24.21	24.70	1.119	0	0.156	0.175
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Tilted	0mm	Index 2/3	349000	1745	24.05	24.70	1.161	0.05	0.149	0.173
22	FR1 n66_Ant 0	40M	BPSK	1	108	Left Cheek	0mm	Index 2/3	349000	1745	24.21	24.70	1.119	-0.03	0.349	0.391
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Cheek	0mm	Index 2/3	349000	1745	24.05	24.70	1.161	-0.06	0.334	0.388
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Tilted	0mm	Index 2/3	349000	1745	24.21	24.70	1.119	0.09	0.174	0.195
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Tilted	0mm	Index 2/3	349000	1745	24.05	24.70	1.161	-0.1	0.166	0.193
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	136100	680.5	24.80	25.00	1.047	-0.07	0.176	0.184
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	136100	680.5	24.69	25.00	1.074	0.1	0.170	0.183
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	136100	680.5	24.80	25.00	1.047	-0.06	0.101	0.106
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	136100	680.5	24.69	25.00	1.074	-0.04	0.097	0.104
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	136100	680.5	24.80	25.00	1.047	0.05	0.233	0.244
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	136100	680.5	24.69	25.00	1.074	-0.08	0.227	0.244
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	136100	680.5	24.80	25.00	1.047	0.02	0.139	0.146
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	136100	680.5	24.69	25.00	1.074	0	0.135	0.145
23	FR1 n71_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	Index 2/3	136100	680.5	24.01	24.90	1.227	-0.08	0.714	0.876
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Index 2/3	136100	680.5	23.87	24.90	1.268	-0.16	0.522	0.662
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	Index 2/3	136100	680.5	23.77	24.40	1.156	-0.14	0.489	0.565
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	Index 2/3	136100	680.5	24.01	24.90	1.227	-0.14	0.593	0.728
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Index 2/3	136100	680.5	23.87	24.90	1.268	-0.17	0.448	0.568
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	Index 2/3	136100	680.5	24.01	24.90	1.227	-0.11	0.163	0.200
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Index 2/3	136100	680.5	23.87	24.90	1.268	-0.16	0.160	0.203
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	Index 2/3	136100	680.5	24.01	24.90	1.227	-0.16	0.132	0.162
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Index 2/3	136100	680.5	23.87	24.90	1.268	-0.14	0.130	0.165



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 5	100M	BPSK	1	137	Right Cheek	0mm	Index 2	518598	2592.99	17.07	18.00	1.239	0.07	0.346	0.429
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Index 2	518598	2592.99	17.02	18.00	1.253	-0.18	0.338	0.424
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	Index 2	518598	2592.99	17.07	18.00	1.239	-0.01	0.092	0.114
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Index 2	518598	2592.99	17.02	18.00	1.253	-0.02	0.092	0.115
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	Index 2	518598	2592.99	17.07	18.00	1.239	0.01	0.924	1.145
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Index 2	518598	2592.99	17.02	18.00	1.253	-0.17	0.929	1.164
24	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 2	518598	2592.99	17.00	18.00	1.259	-0.18	0.931	1.172
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	Index 2	518598	2592.99	17.07	18.00	1.239	-0.1	0.246	0.305
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Index 2	518598	2592.99	17.02	18.00	1.253	-0.1	0.233	0.292
	FR1 n41 HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 2	518598	2592.99	19.87	21.00	1.297	-0.11	0.855	1.109
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Cheek	0mm	Index 3	518598	2592.99	16.15	16.80	1.161	-0.19	0.274	0.318
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Index 3	518598	2592.99	16.12	16.80	1.169	-0.13	0.237	0.277
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	Index 3	518598	2592.99	16.15	16.80	1.161	-0.11	0.073	0.085
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Index 3	518598	2592.99	16.12	16.80	1.169	-0.12	0.069	0.081
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	Index 3	518598	2592.99	16.15	16.80	1.161	-0.15	0.694	0.806
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Index 3	518598	2592.99	16.12	16.80	1.169	-0.02	0.754	0.882
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 3	518598	2592.99	16.18	16.80	1.180	-0.04	0.761	0.898
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	Index 3	518598	2592.99	16.15	16.80	1.161	-0.07	0.174	0.202
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Index 3	518598	2592.99	16.12	16.80	1.169	-0.04	0.183	0.214
	FR1 n41 HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	Index 3	518598	2592.99	19.06	19.80	1.186	-0.01	0.724	0.858
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Cheek	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	-0.01	0.775	1.090
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	0	0.753	1.059
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	Index 2	518598	2592.99	16.55	18.20	1.462	0.03	0.677	0.990
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Tilted	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	-0.12	0.584	0.821
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	-0.08	0.601	0.845
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Cheek	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	0.13	0.127	0.179
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	-0.12	0.121	0.170
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Tilted	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	-0.11	0.120	0.169
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	Index 2	518598	2592.99	16.72	18.20	1.406	-0.09	0.113	0.159
	FR1 n41 HPUE_Ant 1	100M	BPSK	1	137	Right Cheek	0mm	Index 2	518598	2592.99	19.62	21.20	1.439	0.18	0.774	1.114
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Cheek	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	-0.01	0.775	0.827
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	0	0.753	0.803
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	Index 3	518598	2592.99	16.55	17.00	1.109	0.03	0.677	0.751
	FR1 n41_Ant 1	100M	BPSK	1	137	Right Tilted	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	-0.12	0.584	0.623
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	-0.08	0.601	0.641
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Cheek	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	0.13	0.127	0.135
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	-0.12	0.121	0.129
	FR1 n41_Ant 1	100M	BPSK	1	137	Left Tilted	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	-0.11	0.120	0.128
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	Index 3	518598	2592.99	16.72	17.00	1.067	-0.09	0.113	0.121
	FR1 n41 HPUE_Ant 1	100M	BPSK	1	137	Right Cheek	0mm	Index 3	518598	2592.99	19.62	20.00	1.091	0.18	0.774	0.845



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	137	Right Cheek	0mm	Index 2	656000	3840	23.45	25.00	1.429	0.01	0.419	0.599
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	Index 2	656000	3840	23.36	25.00	1.459	0.02	0.390	0.569
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Tilted	0mm	Index 2	656000	3840	23.45	25.00	1.429	-0.11	0.303	0.433
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	Index 2	656000	3840	23.36	25.00	1.459	0.03	0.291	0.425
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Cheek	0mm	Index 2	656000	3840	23.45	25.00	1.429	-0.04	0.491	0.702
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 2	656000	3840	23.36	25.00	1.459	0.01	0.636	0.928
	FR1 n77_Ant 6	100M	BPSK	270	0	Left Cheek	0mm	Index 2	656000	3840	23.37	24.00	1.156	0.09	0.469	0.542
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Tilted	0mm	Index 2	656000	3840	23.45	25.00	1.429	-0.1	0.230	0.329
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	Index 2	656000	3840	23.36	25.00	1.459	0.02	0.212	0.309
	FR1 n77_HPUE_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 2	656000	3840	25.78	27.00	1.324	-0.09	0.523	0.693
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Cheek	0mm	Index 3	656000	3840	23.45	24.60	1.303	0.01	0.419	0.546
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	Index 3	656000	3840	23.36	24.60	1.330	0.02	0.390	0.519
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Tilted	0mm	Index 3	656000	3840	23.45	24.60	1.303	-0.11	0.303	0.395
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	Index 3	656000	3840	23.36	24.60	1.330	0.03	0.291	0.387
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Cheek	0mm	Index 3	656000	3840	23.45	24.60	1.303	-0.04	0.491	0.640
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 3	656000	3840	23.36	24.60	1.330	0.01	0.636	0.846
	FR1 n77_Ant 6	100M	BPSK	270	0	Left Cheek	0mm	Index 3	656000	3840	23.37	23.60	1.054	0.09	0.469	0.495
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Tilted	0mm	Index 3	656000	3840	23.45	24.60	1.303	-0.1	0.230	0.300
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	Index 3	656000	3840	23.36	24.60	1.330	0.02	0.212	0.282
	FR1 n77_HPUE_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 3	656000	3840	25.78	27.00	1.324	-0.09	0.523	0.693
	FR1 n77_Ant 6	100M	BPSK	1	271	Right Cheek	0mm	Index 2	633332	3499.98	23.43	25.00	1.435	-0.03	0.241	0.346
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	Index 2	633332	3499.98	23.39	25.00	1.449	-0.01	0.231	0.335
	FR1 n77_Ant 6	100M	BPSK	1	271	Right Tilted	0mm	Index 2	633332	3499.98	23.43	25.00	1.435	0.08	0.147	0.211
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	Index 2	633332	3499.98	23.39	25.00	1.449	0.06	0.172	0.249
	FR1 n77_Ant 6	100M	BPSK	1	271	Left Cheek	0mm	Index 2	633332	3499.98	23.43	25.00	1.435	0.05	0.520	0.746
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 2	633332	3499.98	23.39	25.00	1.449	-0.02	0.467	0.677
	FR1 n77_Ant 6	100M	BPSK	1	271	Left Tilted	0mm	Index 2	633332	3499.98	23.43	25.00	1.435	-0.06	0.096	0.138
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	Index 2	633332	3499.98	23.39	25.00	1.449	0.02	0.090	0.130
	FR1 n77_HPUE_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 2	633332	3499.98	25.82	27.00	1.312	-0.02	0.427	0.560
	FR1 n77_Ant 6	100M	BPSK	1	271	Right Cheek	0mm	Index 3	633332	3499.98	23.43	24.60	1.309	-0.03	0.241	0.316
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	Index 3	633332	3499.98	23.39	24.60	1.321	-0.01	0.231	0.305
	FR1 n77_Ant 6	100M	BPSK	1	271	Right Tilted	0mm	Index 3	633332	3499.98	23.43	24.60	1.309	0.08	0.147	0.192
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	Index 3	633332	3499.98	23.39	24.60	1.321	0.06	0.172	0.227
	FR1 n77_Ant 6	100M	BPSK	1	271	Left Cheek	0mm	Index 3	633332	3499.98	23.43	24.60	1.309	0.05	0.520	0.681
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 3	633332	3499.98	23.39	24.60	1.321	-0.02	0.467	0.617
	FR1 n77_Ant 6	100M	BPSK	1	271	Left Tilted	0mm	Index 3	633332	3499.98	23.43	24.60	1.309	-0.06	0.096	0.126
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	Index 3	633332	3499.98	23.39	24.60	1.321	0.02	0.090	0.119
	FR1 n77_HPUE_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	Index 3	633332	3499.98	25.82	27.00	1.312	-0.02	0.427	0.560



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 2	100M	BPSK	1	1	Right Cheek	0mm	Index 2	656000	3840	23.58	25.00	1.387	-0.16	0.339	0.470
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 2	656000	3840	23.21	25.00	1.510	-0.11	0.144	0.217
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Index 2	656000	3840	23.58	25.00	1.387	0.14	0.160	0.222
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	Index 2	656000	3840	23.21	25.00	1.510	-0.16	0.107	0.162
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	Index 2	656000	3840	23.58	25.00	1.387	0.13	0.147	0.204
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	Index 2	656000	3840	23.21	25.00	1.510	-0.1	0.113	0.171
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	Index 2	656000	3840	23.58	25.00	1.387	0.11	0.217	0.301
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	Index 2	656000	3840	23.21	25.00	1.510	0.06	0.175	0.264
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	Index 2	656000	3840	25.91	27.00	1.285	0.03	0.280	0.360
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	Index 3	656000	3840	23.58	24.20	1.153	-0.16	0.339	0.391
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 3	656000	3840	23.21	24.20	1.256	-0.11	0.144	0.181
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Index 3	656000	3840	23.58	24.20	1.153	0.14	0.160	0.185
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	Index 3	656000	3840	23.21	24.20	1.256	-0.16	0.107	0.134
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	Index 3	656000	3840	23.58	24.20	1.153	0.13	0.147	0.170
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	Index 3	656000	3840	23.21	24.20	1.256	-0.1	0.113	0.142
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	Index 3	656000	3840	23.58	24.20	1.153	0.11	0.217	0.250
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	Index 3	656000	3840	23.21	24.20	1.256	0.06	0.175	0.220
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	Index 3	656000	3840	25.91	27.00	1.285	0.03	0.280	0.360
25	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	Index 2	633332	3499.98	23.06	25.00	1.563	-0.11	0.680	1.063
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 2	633332	3499.98	23.00	25.00	1.585	-0.01	0.670	1.062
	FR1 n77_Ant 2	100M	BPSK	270	0	Right Cheek	0mm	Index 2	633332	3499.98	22.55	24.00	1.396	0.1	0.601	0.839
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Index 2	633332	3499.98	23.06	25.00	1.563	-0.17	0.235	0.367
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	Index 2	633332	3499.98	23.00	25.00	1.585	-0.09	0.298	0.472
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	Index 2	633332	3499.98	23.06	25.00	1.563	-0.01	0.383	0.599
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	Index 2	633332	3499.98	23.00	25.00	1.585	-0.07	0.442	0.701
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	Index 2	633332	3499.98	23.06	25.00	1.563	-0.12	0.461	0.721
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	Index 2	633332	3499.98	23.00	25.00	1.585	-0.02	0.452	0.716
	FR1 n77_HPUE_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 2	633332	3499.98	25.84	27.00	1.306	-0.08	0.601	0.785
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	Index 3	633332	3499.98	23.06	24.20	1.300	-0.11	0.680	0.884
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 3	633332	3499.98	23.00	24.20	1.318	-0.01	0.670	0.883
	FR1 n77_Ant 2	100M	BPSK	270	0	Right Cheek	0mm	Index 3	633332	3499.98	22.55	23.70	1.303	0.1	0.601	0.783
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	Index 3	633332	3499.98	23.06	24.20	1.300	-0.17	0.235	0.306
	FR1 n77_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	Index 3	633332	3499.98	23.00	24.20	1.318	-0.09	0.298	0.393
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	Index 3	633332	3499.98	23.06	24.20	1.300	-0.01	0.383	0.498
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	Index 3	633332	3499.98	23.00	24.20	1.318	-0.07	0.442	0.583
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	Index 3	633332	3499.98	23.06	24.20	1.300	-0.12	0.461	0.599
	FR1 n77_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	Index 3	633332	3499.98	23.00	24.20	1.318	-0.02	0.452	0.596
	FR1 n77_HPUE_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	Index 3	633332	3499.98	25.84	27.00	1.306	-0.08	0.601	0.785



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	6	2437	16.50	16.50	1.000	98.90	1.011	0.01	0.328	0.332
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	6	2437	16.35	16.50	1.035	98.90	1.011	0.01	0.923	0.966
26	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	1	2412	16.15	16.50	1.084	98.90	1.011	0.14	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	1	2412	16.05	16.50	1.109	98.90	1.011	0.14	1.060	1.189
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	11	2462	16.50	16.50	1.000	98.90	1.011	0.01	0.394	0.398
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	11	2462	16.25	16.50	1.059	98.90	1.011	0.01	0.805	0.862
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	12	2467	16.35	16.50	1.035	98.90	1.011	-0.1	0.359	0.376
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	12	2467	16.05	16.50	1.109	98.90	1.011	-0.1	0.795	0.891
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	13	2472	16.35	16.50	1.035	98.90	1.011	-0.11	0.331	0.346
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	13	2472	16.05	16.50	1.109	98.90	1.011	-0.11	0.992	1.112
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	6	2437	16.50	16.50	1.000	98.90	1.011	-0.03	0.264	0.267
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	6	2437	16.35	16.50	1.035	98.90	1.011	-0.03	0.923	0.966
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	1	2412	16.15	16.50	1.084	98.90	1.011	-0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	1	2412	16.05	16.50	1.109	98.90	1.011	-0.17	0.744	0.834
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	11	2462	16.50	16.50	1.000	98.90	1.011	0.09	0.259	0.262
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	11	2462	16.25	16.50	1.059	98.90	1.011	0.09	0.908	0.972
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	Ant 4+3(4)	6	2437	16.50	16.50	1.000	98.90	1.011	-0.09	0.611	0.618
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	Ant 4+3(3)	6	2437	16.35	16.50	1.035	98.90	1.011	-0.09	0.351	0.367
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4+3(4)	6	2437	16.50	16.50	1.000	98.90	1.011	-0.13	0.581	0.587
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4+3(3)	6	2437	16.35	16.50	1.035	98.90	1.011	-0.13	0.490	0.513
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(4)	6	2437	12.95	13.00	1.012	98.90	1.011	-0.08	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(3)	6	2437	12.75	13.00	1.059	98.90	1.011	-0.08	0.540	0.578
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(4)	1	2412	12.65	13.00	1.084	98.90	1.011	0.08	0.131	0.144
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(3)	1	2412	12.35	13.00	1.161	98.90	1.011	0.08	0.425	0.499
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(4)	11	2462	12.90	13.00	1.023	98.90	1.011	0.13	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(3)	11	2462	12.70	13.00	1.072	98.90	1.011	0.13	0.463	0.502
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(4)	12	2467	12.85	13.00	1.035	98.90	1.011	0.04	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(3)	12	2467	12.45	13.00	1.135	98.90	1.011	0.04	0.481	0.552
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(4)	13	2472	12.85	13.00	1.035	98.90	1.011	-0.12	0.135	0.141
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2	Ant 4+3(3)	13	2472	12.65	13.00	1.084	98.90	1.011	-0.12	0.438	0.480
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(4)	6	2437	12.95	13.00	1.012	98.90	1.011	-0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2	Ant 4+3(3)	6	2437	12.75	13.00	1.059	98.90	1.011	-0.17	0.587	0.629
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	2	Ant 4+3(4)	6	2437	12.95	13.00	1.012	98.90	1.011	-0.08	0.310	0.317
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	2	Ant 4+3(3)	6	2437	12.75	13.00	1.059	98.90	1.011	-0.08	0.175	0.187
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	2	Ant 4+3(4)	6	2437	12.95	13.00	1.012	98.90	1.011	-0.04	0.358	0.366
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	2	Ant 4+3(3)	6	2437	12.75	13.00	1.059	98.90	1.011	-0.04	0.094	0.101



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(4)	6	2437	12.95	13.50	1.135	98.90	1.011	-0.08	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(3)	6	2437	12.75	13.50	1.189	98.90	1.011	-0.08	0.540	0.649
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(4)	1	2412	12.65	13.50	1.216	98.90	1.011	0.08	0.131	0.144
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(3)	1	2412	12.35	13.50	1.303	98.90	1.011	0.08	0.425	0.560
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(4)	11	2462	12.90	13.50	1.148	98.90	1.011	0.13	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(3)	11	2462	12.70	13.50	1.202	98.90	1.011	0.13	0.463	0.563
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(4)	12	2467	12.85	13.50	1.161	98.90	1.011	0.04	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(3)	12	2467	12.45	13.50	1.274	98.90	1.011	0.04	0.481	0.619
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(4)	13	2472	12.85	13.50	1.161	98.90	1.011	-0.12	0.135	0.159
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	3	Ant 4+3(3)	13	2472	12.65	13.50	1.216	98.90	1.011	-0.12	0.438	0.539
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(4)	6	2437	12.95	13.50	1.135	98.90	1.011	-0.17	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	3	Ant 4+3(3)	6	2437	12.75	13.50	1.189	98.90	1.011	-0.17	0.587	0.705
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	3	Ant 4+3(4)	6	2437	12.95	13.50	1.135	98.90	1.011	-0.08	0.310	0.356
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	3	Ant 4+3(3)	6	2437	12.75	13.50	1.189	98.90	1.011	-0.08	0.175	0.210
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	3	Ant 4+3(4)	6	2437	12.95	13.50	1.135	98.90	1.011	-0.04	0.358	0.411
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	3	Ant 4+3(3)	6	2437	12.75	13.50	1.189	98.90	1.011	-0.04	0.094	0.113
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(4)	6	2437	7.50	7.50	1.000	98.90	1.011	0.14	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(3)	6	2437	7.45	7.50	1.012	98.90	1.011	0.14	0.124	0.127
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(4)	1	2412	6.75	7.50	1.189	98.90	1.011	0.03	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(3)	1	2412	5.95	7.50	1.429	98.90	1.011	0.03	0.088	0.127
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(4)	11	2462	6.75	7.50	1.189	98.90	1.011	-0.09	0.035	0.042
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(3)	11	2462	6.75	7.50	1.189	98.90	1.011	-0.09	0.087	0.105
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(4)	12	2467	6.75	7.50	1.189	98.90	1.011	0.04	0.015	0.018
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(3)	12	2467	7.05	7.50	1.109	98.90	1.011	0.04	0.114	0.128
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(4)	13	2472	7.15	7.50	1.084	98.90	1.011	0.06	0.039	0.043
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4+3(3)	13	2472	6.95	7.50	1.135	98.90	1.011	0.06	0.093	0.107
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	4	Ant 4+3(4)	6	2437	7.50	7.50	1.000	98.90	1.011	0.01	0.040	0.040
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	4	Ant 4+3(3)	6	2437	7.45	7.50	1.012	98.90	1.011	0.01	0.099	0.101
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	4	Ant 4+3(4)	6	2437	7.50	7.50	1.000	98.90	1.011	-0.17	0.075	0.076
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	4	Ant 4+3(3)	6	2437	7.45	7.50	1.012	98.90	1.011	-0.17	0.045	0.046
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(4)	6	2437	7.50	7.50	1.000	98.90	1.011	0.17	0.071	0.072
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4+3(3)	6	2437	7.45	7.50	1.012	98.90	1.011	0.17	0.070	0.072



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
27	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	50	5250	15.00	15.50	1.122	86.90	1.151	-0.03	0.282	0.364
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	50	5250	14.65	15.50	1.216	86.90	1.151	-0.03	0.798	1.117
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	58	5290	14.50	15.00	1.122	88.00	1.136	0.09	0.310	0.395
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	58	5290	14.45	15.00	1.135	88.00	1.136	0.09	0.832	1.073
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	50	5250	15.00	15.50	1.122	86.90	1.151	-0.09	0.435	0.562
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	50	5250	14.65	15.50	1.216	86.90	1.151	-0.09	0.522	0.731
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	50	5250	15.00	15.50	1.122	86.90	1.151	-0.05	0.492	0.635
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	50	5250	14.65	15.50	1.216	86.90	1.151	-0.05	0.215	0.301
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	50	5250	15.00	15.50	1.122	86.90	1.151	-0.05	0.588	0.759
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	50	5250	14.65	15.50	1.216	86.90	1.151	-0.05	0.282	0.395
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	50	5250	15.00	15.00	1.000	86.90	1.151	-0.03	0.282	0.325
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	50	5250	14.65	15.00	1.084	86.90	1.151	-0.03	0.798	0.996
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	58	5290	14.50	14.50	1.000	88.00	1.136	-0.14	0.310	0.352
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	58	5290	14.45	14.50	1.012	88.00	1.136	-0.14	0.832	0.956
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	50	5250	15.00	15.00	1.000	86.90	1.151	-0.09	0.435	0.501
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	50	5250	14.65	15.00	1.084	86.90	1.151	-0.09	0.522	0.651
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	50	5250	15.00	15.00	1.000	86.90	1.151	-0.05	0.492	0.566
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	50	5250	14.65	15.00	1.084	86.90	1.151	-0.05	0.215	0.268
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	50	5250	15.00	15.00	1.000	86.90	1.151	-0.05	0.588	0.677
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	50	5250	14.65	15.00	1.084	86.90	1.151	-0.05	0.282	0.352
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	50	5250	10.40	10.50	1.023	86.90	1.151	-0.09	0.113	0.133
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	50	5250	9.90	10.50	1.148	86.90	1.151	-0.09	0.309	0.408
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	50	5250	10.40	10.50	1.023	86.90	1.151	-0.09	0.132	0.155
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	50	5250	9.90	10.50	1.148	86.90	1.151	-0.09	0.179	0.237
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	50	5250	10.40	10.50	1.023	86.90	1.151	-0.05	0.195	0.230
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	50	5250	9.90	10.50	1.148	86.90	1.151	-0.05	0.080	0.106
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	50	5250	10.40	10.50	1.023	86.90	1.151	0.12	0.188	0.221
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	50	5250	9.90	10.50	1.148	86.90	1.151	0.12	0.094	0.124
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	50	5250	10.40	11.50	1.288	86.90	1.151	-0.09	0.113	0.168
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	50	5250	9.90	11.50	1.445	86.90	1.151	-0.09	0.309	0.514
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	50	5250	10.40	11.50	1.288	86.90	1.151	-0.09	0.132	0.196
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	50	5250	9.90	11.50	1.445	86.90	1.151	-0.09	0.179	0.298
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	50	5250	10.40	11.50	1.288	86.90	1.151	-0.05	0.195	0.289
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(3)	50	5250	9.90	11.50	1.445	86.90	1.151	-0.05	0.080	0.133
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	50	5250	10.40	11.50	1.288	86.90	1.151	0.12	0.188	0.279
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	50	5250	9.90	11.50	1.445	86.90	1.151	0.12	0.094	0.156



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
28	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	114	5570	15.00	15.50	1.122	86.90	1.151	-0.1	0.347	0.448
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	114	5570	14.95	15.50	1.135	86.90	1.151	-0.1	0.834	1.090
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	106	5530	15.00	15.50	1.122	88.00	1.136	-0.05	0.249	0.317
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	106	5530	14.95	15.50	1.135	88.00	1.136	-0.05	0.823	1.061
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	114	5570	15.00	15.50	1.122	86.90	1.151	-0.12	0.001	0.001
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	114	5570	14.95	15.50	1.135	86.90	1.151	-0.12	0.303	0.396
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	114	5570	15.00	15.50	1.122	86.90	1.151	-0.05	0.601	0.776
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	114	5570	14.95	15.50	1.135	86.90	1.151	-0.05	0.232	0.303
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	114	5570	15.00	15.50	1.122	86.90	1.151	-0.01	0.548	0.708
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	114	5570	14.95	15.50	1.135	86.90	1.151	0.16	0.257	0.336
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	114	5570	15.00	15.00	1.000	86.90	1.151	-0.1	0.347	0.399
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	114	5570	14.95	15.00	1.012	86.90	1.151	-0.1	0.834	0.971
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	106	5530	15.00	15.00	1.000	88.00	1.136	-0.05	0.249	0.283
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	106	5530	14.95	15.00	1.012	88.00	1.136	-0.05	0.823	0.946
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	114	5570	15.00	15.00	1.000	86.90	1.151	-0.12	0.001	0.001
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	114	5570	14.95	15.00	1.012	86.90	1.151	-0.12	0.303	0.353
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	114	5570	15.00	15.00	1.000	86.90	1.151	-0.05	0.601	0.692
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	114	5570	14.95	15.00	1.012	86.90	1.151	-0.05	0.232	0.270
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	114	5570	15.00	15.00	1.000	86.90	1.151	-0.01	0.548	0.631
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	114	5570	14.95	15.00	1.012	86.90	1.151	0.16	0.257	0.299
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	114	5570	11.50	11.50	1.000	86.90	1.151	-0.13	0.122	0.140
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	114	5570	11.30	11.50	1.047	86.90	1.151	-0.13	0.266	0.321
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	114	5570	11.50	11.50	1.000	86.90	1.151	-0.18	0.136	0.157
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	114	5570	11.30	11.50	1.047	86.90	1.151	-0.18	0.102	0.123
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	114	5570	11.50	11.50	1.000	86.90	1.151	-0.11	0.269	0.310
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	114	5570	11.30	11.50	1.047	86.90	1.151	-0.11	0.095	0.114
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	114	5570	11.50	11.50	1.000	86.90	1.151	0.18	0.285	0.328
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	114	5570	11.30	11.50	1.047	86.90	1.151	0.18	0.285	0.343
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	114	5570	11.50	12.50	1.259	86.90	1.151	-0.13	0.122	0.177
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	114	5570	11.30	12.50	1.318	86.90	1.151	-0.13	0.266	0.404
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	114	5570	11.50	12.50	1.259	86.90	1.151	-0.18	0.136	0.197
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	114	5570	11.30	12.50	1.318	86.90	1.151	-0.18	0.102	0.155
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	114	5570	11.50	12.50	1.259	86.90	1.151	-0.11	0.269	0.390
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(3)	114	5570	11.30	12.50	1.318	86.90	1.151	-0.11	0.095	0.144
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	114	5570	11.50	12.50	1.259	86.90	1.151	0.18	0.285	0.413
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	114	5570	11.30	12.50	1.318	86.90	1.151	0.18	0.285	0.432



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	155	5775	15.35	16.50	1.303	88.00	1.136	-0.09	0.423	0.626
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	155	5775	15.05	16.50	1.396	88.00	1.136	-0.09	0.474	0.752
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	155	5775	15.35	16.50	1.303	88.00	1.136	-0.1	0.406	0.601
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	155	5775	15.05	16.50	1.396	88.00	1.136	-0.1	0.305	0.484
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	155	5775	15.35	16.50	1.303	88.00	1.136	0.16	0.725	1.073
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	155	5775	15.05	16.50	1.396	88.00	1.136	0.16	0.163	0.259
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	151	5755	15.45	16.50	1.274	96.10	1.041	-0.12	0.676	0.896
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	151	5755	15.05	16.50	1.396	96.10	1.041	-0.12	0.138	0.201
29	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	155	5775	15.35	16.50	1.303	88.00	1.136	-0.12	0.782	1.158
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	155	5775	15.05	16.50	1.396	88.00	1.136	-0.12	0.001	0.002
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	151	5755	15.45	16.50	1.274	96.10	1.041	-0.13	0.823	1.091
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	151	5755	15.05	16.50	1.396	96.10	1.041	-0.13	0.259	0.376
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	155	5775	15.35	15.50	1.035	88.00	1.136	-0.09	0.423	0.497
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	155	5775	15.05	15.50	1.109	88.00	1.136	-0.09	0.474	0.597
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	155	5775	15.35	15.50	1.035	88.00	1.136	-0.1	0.406	0.477
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	155	5775	15.05	15.50	1.109	88.00	1.136	-0.1	0.305	0.384
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	155	5775	15.35	15.50	1.035	88.00	1.136	0.16	0.725	0.853
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	155	5775	15.05	15.50	1.109	88.00	1.136	0.16	0.163	0.205
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	151	5755	15.45	15.50	1.012	96.10	1.041	-0.12	0.676	0.712
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	151	5755	15.05	15.50	1.109	96.10	1.041	-0.12	0.138	0.159
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	155	5775	15.35	15.50	1.035	88.00	1.136	-0.12	0.782	0.920
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	155	5775	15.05	15.50	1.109	88.00	1.136	-0.12	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	151	5755	15.45	15.50	1.012	96.10	1.041	-0.13	0.823	0.867
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	151	5755	15.05	15.50	1.109	96.10	1.041	-0.13	0.259	0.299
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	155	5775	11.35	11.50	1.035	88.00	1.136	-0.16	0.148	0.174
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	155	5775	11.05	11.50	1.109	88.00	1.136	-0.16	0.220	0.277
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	155	5775	11.35	11.50	1.035	88.00	1.136	0.16	0.203	0.239
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	155	5775	11.05	11.50	1.109	88.00	1.136	0.16	0.122	0.154
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	155	5775	11.35	11.50	1.035	88.00	1.136	-0.15	0.285	0.335
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	155	5775	11.05	11.50	1.109	88.00	1.136	-0.15	0.051	0.064
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	155	5775	11.35	11.50	1.035	88.00	1.136	-0.02	0.302	0.355
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	155	5775	11.05	11.50	1.109	88.00	1.136	-0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	155	5775	11.35	12.50	1.303	88.00	1.136	-0.16	0.148	0.219
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	155	5775	11.05	12.50	1.396	88.00	1.136	-0.16	0.220	0.349
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	155	5775	11.35	12.50	1.303	88.00	1.136	0.16	0.203	0.301
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	155	5775	11.05	12.50	1.396	88.00	1.136	0.16	0.122	0.194
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	155	5775	11.35	12.50	1.303	88.00	1.136	-0.15	0.285	0.422
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	4	Ant 4+3(3)	155	5775	11.05	12.50	1.396	88.00	1.136	-0.15	0.051	0.081
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	155	5775	11.35	12.50	1.303	88.00	1.136	-0.02	0.302	0.447
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	155	5775	11.05	12.50	1.396	88.00	1.136	-0.02	0.001	0.002

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4	39	2441	11.55	12.00	1.109	77.22	1.079	-0.15	0.048	0.057
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4	39	2441	11.55	12.00	1.109	77.22	1.079	-0.17	0.063	0.075
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4	39	2441	11.55	12.00	1.109	77.22	1.079	-0.11	0.112	0.134
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	39	2441	11.55	12.00	1.109	77.22	1.079	-0.09	0.096	0.115
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 3	39	2441	11.63	12.00	1.089	76.83	1.084	0.15	0.160	0.189
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 3	39	2441	11.63	12.00	1.089	76.83	1.084	0.09	0.136	0.161
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 3	39	2441	11.63	12.00	1.089	76.83	1.084	-0.01	0.039	0.046
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 3	39	2441	11.63	12.00	1.089	76.83	1.084	-0.17	0.040	0.047
30	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	78	2480	11.83	12.00	1.040	76.83	1.084	-0.1	0.067	0.076
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	78	2480	11.94	12.00	1.014	76.83	1.084	-0.1	0.177	0.195
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	78	2480	11.83	12.00	1.040	76.83	1.084	-0.11	0.083	0.094
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	78	2480	11.94	12.00	1.014	76.83	1.084	-0.11	0.167	0.184
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4+3(4)	78	2480	11.83	12.00	1.040	76.83	1.084	-0.11	0.172	0.194
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4+3(3)	78	2480	11.94	12.00	1.014	76.83	1.084	-0.11	0.053	0.058
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4+3(4)	78	2480	11.83	12.00	1.040	76.83	1.084	-0.05	0.164	0.185
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4+3(3)	78	2480	11.94	12.00	1.014	76.83	1.084	-0.05	0.049	0.054

<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	APD
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	15	6025	13.00	13.50	1.122	91.3	1.095	0.1	0.240	0.295	2.38
					Ant 4+3(3)				13.50	13.50	1.000	91.3	1.095		0.358	0.392	3.08
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	15	6025	13.00	13.50	1.122	91.3	1.095	0.18	0.276	0.339	2.78
					Ant 4+3(3)				13.50	13.50	1.000	91.3	1.095		0.133	0.146	1.25
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	15	6025	13.00	13.50	1.122	91.3	1.095	-0.17	0.324	0.398	2.85
					Ant 4+3(3)				13.50	13.50	1.000	91.3	1.095		0.148	0.162	1.40
31	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	15	6025	13.00	13.50	1.122	91.3	1.095	-0.08	0.429	0.527	3.25
					Ant 4+3(3)				13.50	13.50	1.000	91.3	1.095		0.093	0.102	0.85
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	47	6185	12.70	13.50	1.202	91.3	1.095	0.15	0.357	0.470	2.70
					Ant 4+3(3)				13.40	13.50	1.023	91.3	1.095		0.078	0.087	0.63
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	111	6505	11.70	12.00	1.072	91.3	1.095	-0.15	0.157	0.184	1.25
					Ant 4+3(3)				11.90	12.00	1.023	91.3	1.095		0.042	0.047	0.40
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	175	6825	11.40	12.00	1.148	91.3	1.095	-0.18	0.174	0.219	1.75
					Ant 4+3(3)				11.60	12.00	1.096	91.3	1.095		0.114	0.137	1.13
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	207	6985	12.30	12.50	1.047	91.3	1.095	0.17	0.152	0.174	1.13
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.106	0.116	0.78
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	207	6985	12.30	12.50	1.047	91.3	1.095	-0.13	0.119	0.136	1.02
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.253	0.277	1.78
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	3/4	207	6985	12.30	12.50	1.047	91.3	1.095	0.11	0.164	0.188	1.37
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.276	0.302	1.78
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	207	6985	12.30	12.50	1.047	91.3	1.095	0.11	0.137	0.157	1.17
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.140	0.153	0.99
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	3/4	207	6985	12.30	12.50	1.047	91.3	1.095	0.17	0.152	0.174	1.13
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.106	0.116	0.78



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	Index 4	189	836.4	29.83	30.50	1.167	0.12	0.406	0.474
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 4	128	824.2	29.75	30.50	1.189	-0.09	0.463	0.550
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 4	251	848.8	29.53	30.50	1.250	-0.1	0.422	0.528
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 4	189	836.4	29.83	30.50	1.167	-0.05	0.368	0.429
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	Index 4	189	836.4	29.83	30.50	1.167	0.15	0.422	0.493
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	Index 4	128	824.2	29.75	30.50	1.189	-0.01	0.648	0.770
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	Index 4	251	848.8	29.53	30.50	1.250	0.07	0.518	0.648
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	Index 4	189	836.4	29.83	30.50	1.167	0.09	0.322	0.376
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	189	836.4	29.83	30.50	1.167	-0.07	0.518	0.604
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	Index 4	128	824.2	29.16	30.40	1.330	-0.15	0.273	0.363
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	128	824.2	29.16	30.40	1.330	-0.16	0.407	0.541
32	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	189	836.4	28.69	30.40	1.483	-0.05	0.552	0.818
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 4	251	848.8	28.42	30.40	1.578	-0.18	0.339	0.535
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	Index 4	128	824.2	29.16	30.40	1.330	-0.14	0.167	0.222
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	Index 4	128	824.2	29.16	30.40	1.330	0.14	0.112	0.149
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	Index 4	128	824.2	29.16	30.40	1.330	-0.04	0.288	0.383
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 4	512	1850.2	24.30	24.30	1.000	-0.14	0.661	0.661
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 4	512	1850.2	24.30	24.30	1.000	-0.08	0.729	0.729
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	Index 4	512	1850.2	24.30	24.30	1.000	-0.11	0.081	0.081
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	Index 4	512	1850.2	24.30	24.30	1.000	0.01	0.549	0.549
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	512	1850.2	24.30	24.30	1.000	-0.14	0.819	0.819
33	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	661	1880	24.10	24.30	1.047	-0.15	0.863	0.904
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	810	1909.8	23.80	24.30	1.122	-0.16	0.755	0.847
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 4	810	1909.8	26.30	26.30	1.000	-0.1	0.738	0.738
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 4	810	1909.8	26.30	26.30	1.000	-0.18	0.654	0.654
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	Index 4	810	1909.8	26.30	26.30	1.000	-0.14	0.077	0.077
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	Index 4	810	1909.8	26.30	26.30	1.000	0.07	0.633	0.633
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	810	1909.8	26.30	26.30	1.000	-0.16	0.887	0.887
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	512	1850.2	26.26	26.30	1.009	-0.11	0.597	0.603
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	Index 4	661	1880	26.26	26.30	1.009	-0.15	0.705	0.712

<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	Index 4	9262	1852.4	21.10	21.20	1.023	-0.1	0.741	0.758
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	9262	1852.4	21.10	21.20	1.023	-0.16	0.666	0.682
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	Index 4	9262	1852.4	21.10	21.20	1.023	-0.05	0.077	0.079
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	Index 4	9262	1852.4	21.10	21.20	1.023	-0.17	0.448	0.458
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9262	1852.4	21.10	21.20	1.023	-0.19	0.841	0.861
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9400	1880	20.97	21.20	1.054	-0.17	0.856	0.903
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9538	1907.6	21.00	21.20	1.047	-0.16	0.834	0.873
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	9262	1852.4	22.38	22.60	1.052	-0.11	0.525	0.552
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	9262	1852.4	22.38	22.60	1.052	-0.15	0.680	0.715
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	9262	1852.4	22.38	22.60	1.052	-0.11	0.632	0.665
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	Index 4	9262	1852.4	22.38	22.60	1.052	-0.12	0.037	0.039
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9262	1852.4	22.38	22.60	1.052	-0.16	0.738	0.776
34	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9400	1880	22.20	22.60	1.096	-0.14	0.827	0.907
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	9538	1907.6	22.37	22.60	1.054	-0.1	0.848	0.894
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Index 4	1513	1752.6	22.25	22.40	1.035	-0.01	0.714	0.739
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 4	1513	1752.6	22.25	22.40	1.035	-0.07	0.644	0.667
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	Index 4	1513	1752.6	22.25	22.40	1.035	-0.19	0.284	0.294
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	Index 4	1513	1752.6	22.25	22.40	1.035	-0.19	0.536	0.555
35	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1513	1752.6	22.25	22.40	1.035	-0.17	0.864	0.894
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1312	1712.4	22.17	22.40	1.054	-0.17	0.728	0.768
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1413	1732.6	22.19	22.40	1.050	-0.11	0.775	0.813
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	1513	1752.6	24.14	24.70	1.138	-0.07	0.443	0.504
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	1513	1752.6	24.14	24.70	1.138	-0.08	0.514	0.585
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	1312	1712.4	24.08	24.70	1.153	-0.03	0.480	0.554
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	1413	1732.6	24.08	24.70	1.153	-0.08	0.464	0.535
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	1513	1752.6	24.14	24.70	1.138	-0.08	0.709	0.807
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	1312	1712.4	24.08	24.70	1.153	-0.1	0.560	0.646
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	1413	1732.6	24.08	24.70	1.153	-0.09	0.603	0.696
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	Index 4	1513	1752.6	24.14	24.70	1.138	-0.15	0.083	0.094
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	1513	1752.6	24.14	24.70	1.138	-0.13	0.352	0.400
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	4132	826.4	24.73	25.00	1.064	-0.06	0.187	0.199
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	4182	836.4	24.72	25.00	1.067	0.01	0.195	0.208
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 4	4233	846.6	24.64	25.00	1.086	-0.03	0.259	0.281
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 4	4132	826.4	24.73	25.00	1.064	0.15	0.179	0.190
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	4233	846.6	24.64	25.00	1.086	-0.07	0.274	0.298
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	4182	836.4	24.72	25.00	1.067	-0.03	0.247	0.263
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	Index 4	4233	846.6	24.64	25.00	1.086	0.06	0.232	0.252
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	Index 4	4132	826.4	24.73	25.00	1.064	0.01	0.130	0.138
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Index 4	4132	826.4	24.73	25.00	1.064	-0.09	0.104	0.111
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Index 4	4182	836.4	24.58	24.90	1.076	0.04	0.226	0.243
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4182	836.4	24.58	24.90	1.076	0.01	0.341	0.367
36	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4132	826.4	24.56	24.90	1.081	-0.06	0.349	0.377
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 4	4233	846.6	24.43	24.90	1.114	-0.01	0.291	0.324
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	Index 4	4182	836.4	24.58	24.90	1.076	0.02	0.166	0.179
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	Index 4	4182	836.4	24.58	24.90	1.076	0.09	0.081	0.087
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	Index 4	4182	836.4	24.58	24.90	1.076	-0.02	0.212	0.228



<FDD 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)
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 4	20850	2510	19.06	19.80	1.186	0.16	0.487	0.577
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	Index 4	20850	2510	19.19	19.80	1.151	-0.1	0.444	0.511
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 4	20850	2510	19.06	19.80	1.186	-0.02	0.495	0.587
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 4	20850	2510	19.19	19.80	1.151	-0.06	0.494	0.568
	LTE Band 7_Ant 2	20M	QPSK	1	99	Left Side	10mm	Index 4	20850	2510	19.06	19.80	1.186	-0.13	0.030	0.036
	LTE Band 7_Ant 2	20M	QPSK	50	50	Left Side	10mm	Index 4	20850	2510	19.19	19.80	1.151	-0.09	0.033	0.038
	LTE Band 7_Ant 2	20M	QPSK	1	99	Right Side	10mm	Index 4	20850	2510	19.06	19.80	1.186	0.12	0.355	0.421
	LTE Band 7_Ant 2	20M	QPSK	50	50	Right Side	10mm	Index 4	20850	2510	19.19	19.80	1.151	0.17	0.351	0.404
	LTE Band 7_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	20850	2510	19.06	19.80	1.186	-0.01	0.655	0.777
	LTE Band 7_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	21100	2535	18.97	19.80	1.211	-0.14	0.695	0.841
	LTE Band 7_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	21350	2560	19.04	19.80	1.191	-0.01	0.704	0.839
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	20850	2510	19.19	19.80	1.151	-0.12	0.693	0.798
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	21100	2535	19.08	19.80	1.180	-0.07	0.723	0.853
37	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	Index 4	21350	2560	19.16	19.80	1.159	-0.09	0.747	0.866
	LTE Band 7_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Index 4	20850	2510	19.08	19.80	1.180	-0.11	0.684	0.807
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	20850+21048	2510	18.87	19.80	1.239	-0.12	0.637	0.789
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	Index 4	21100	2535	23.16	24.00	1.213	-0.02	0.351	0.426
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	Index 4	20850	2510	22.25	23.00	1.189	-0.18	0.277	0.329
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	21100	2535	23.16	24.00	1.213	-0.03	0.378	0.459
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	Index 4	20850	2510	22.91	24.00	1.285	-0.06	0.359	0.461
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	21350	2560	23.02	24.00	1.253	-0.18	0.399	0.500
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	Index 4	20850	2510	22.25	23.00	1.189	-0.17	0.288	0.342
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	21100	2535	23.16	24.00	1.213	-0.03	0.523	0.635
	LTE Band 7_Ant 0	20M	QPSK	1	99	Left Side	10mm	Index 4	20850	2510	22.91	24.00	1.285	-0.02	0.509	0.654
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	21350	2560	23.02	24.00	1.253	-0.15	0.628	0.787
	LTE Band 7_Ant 0	20M	QPSK	50	50	Left Side	10mm	Index 4	20850	2510	22.25	23.00	1.189	-0.16	0.432	0.513
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Side	10mm	Index 4	21100	2535	23.16	24.00	1.213	-0.16	0.057	0.069
	LTE Band 7_Ant 0	20M	QPSK	50	50	Right Side	10mm	Index 4	20850	2510	22.25	23.00	1.189	-0.18	0.041	0.049
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	Index 4	21100	2535	23.16	24.00	1.213	0.18	0.255	0.309
	LTE Band 7_Ant 0	20M	QPSK	50	50	Bottom Side	10mm	Index 4	20850	2510	22.25	23.00	1.189	0	0.181	0.215
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Left Side	10mm	Index 4	20850+21048	2510	22.50	23.00	1.122	-0.15	0.393	0.441



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	Index 4	23095	707.5	24.37	25.00	1.156	0.06	0.254	0.294
	LTE Band 12_Ant 0	10M	QPSK	25	12	Front	10mm	Index 4	23095	707.5	23.43	24.00	1.140	0.01	0.204	0.233
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	23095	707.5	24.37	25.00	1.156	-0.04	0.270	0.312
	LTE Band 12_Ant 0	10M	QPSK	25	12	Back	10mm	Index 4	23095	707.5	23.43	24.00	1.140	0.01	0.217	0.247
38	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	23095	707.5	24.37	25.00	1.156	0.01	0.438	0.506
	LTE Band 12_Ant 0	10M	QPSK	25	12	Left Side	10mm	Index 4	23095	707.5	23.43	24.00	1.140	0.03	0.360	0.410
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	Index 4	23095	707.5	24.37	25.00	1.156	-0.07	0.267	0.309
	LTE Band 12_Ant 0	10M	QPSK	25	12	Right Side	10mm	Index 4	23095	707.5	23.43	24.00	1.140	0.05	0.223	0.254
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Index 4	23095	707.5	24.37	25.00	1.156	-0.03	0.096	0.111
	LTE Band 12_Ant 0	10M	QPSK	25	12	Bottom Side	10mm	Index 4	23095	707.5	23.43	24.00	1.140	-0.02	0.070	0.080
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	Index 4	23095	707.5	24.10	24.90	1.202	0.01	0.149	0.179
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	Index 4	23095	707.5	23.20	23.90	1.175	0.19	0.109	0.128
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Index 4	23095	707.5	24.10	24.90	1.202	-0.15	0.194	0.233
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	Index 4	23095	707.5	23.20	23.90	1.175	0.09	0.142	0.167
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	Index 4	23095	707.5	24.10	24.90	1.202	-0.08	0.144	0.173
	LTE Band 12_Ant 1	10M	QPSK	25	25	Left Side	10mm	Index 4	23095	707.5	23.20	23.90	1.175	-0.11	0.115	0.135
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Side	10mm	Index 4	23095	707.5	24.10	24.90	1.202	0.15	0.046	0.055
	LTE Band 12_Ant 1	10M	QPSK	25	25	Right Side	10mm	Index 4	23095	707.5	23.20	23.90	1.175	-0.02	0.045	0.053
	LTE Band 12_Ant 1	10M	QPSK	1	0	Top Side	10mm	Index 4	23095	707.5	24.10	24.90	1.202	0.05	0.174	0.209
	LTE Band 12_Ant 1	10M	QPSK	25	25	Top Side	10mm	Index 4	23095	707.5	23.20	23.90	1.175	0.08	0.123	0.145
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Index 4	23230	782	24.23	25.00	1.194	-0.04	0.323	0.386
	LTE Band 13_Ant 0	10M	QPSK	25	0	Front	10mm	Index 4	23230	782	23.29	24.00	1.178	-0.04	0.267	0.314
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	23230	782	24.23	25.00	1.194	0.06	0.320	0.382
	LTE Band 13_Ant 0	10M	QPSK	25	0	Back	10mm	Index 4	23230	782	23.29	24.00	1.178	-0.07	0.266	0.313
39	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	23230	782	24.23	25.00	1.194	-0.18	0.384	0.458
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Side	10mm	Index 4	23230	782	23.29	24.00	1.178	-0.1	0.310	0.365
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Side	10mm	Index 4	23230	782	24.23	25.00	1.194	0.04	0.266	0.318
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Side	10mm	Index 4	23230	782	23.29	24.00	1.178	0.06	0.217	0.256
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Index 4	23230	782	24.23	25.00	1.194	-0.1	0.115	0.137
	LTE Band 13_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Index 4	23230	782	23.29	24.00	1.178	0.02	0.089	0.105
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	Index 4	23230	782	24.02	24.90	1.225	0.05	0.218	0.267
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	Index 4	23230	782	23.11	23.90	1.199	0.11	0.186	0.223
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	Index 4	23230	782	24.02	24.90	1.225	-0.17	0.271	0.332
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	Index 4	23230	782	23.11	23.90	1.199	0.09	0.226	0.271
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Side	10mm	Index 4	23230	782	24.02	24.90	1.225	-0.02	0.292	0.358
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Side	10mm	Index 4	23230	782	23.11	23.90	1.199	-0.1	0.237	0.284
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Side	10mm	Index 4	23230	782	24.02	24.90	1.225	-0.07	0.117	0.143
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Side	10mm	Index 4	23230	782	23.11	23.90	1.199	0.04	0.098	0.118
	LTE Band 13_Ant 1	10M	QPSK	1	0	Top Side	10mm	Index 4	23230	782	24.02	24.90	1.225	0.08	0.181	0.222
	LTE Band 13_Ant 1	10M	QPSK	25	0	Top Side	10mm	Index 4	23230	782	23.11	23.90	1.199	-0.13	0.151	0.181



FCC SAR TEST REPORT

Report No. : FA0D2942-04C

Table with 15 columns: 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). Rows include test data for LTE Band 14 and LTE Band 25 across various antenna positions and configurations.



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	Index 4	26865	831.5	24.22	25.00	1.197	-0.15	0.260	0.311
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	Index 4	26865	831.5	23.29	24.00	1.178	0.08	0.233	0.274
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	Index 4	26865	831.5	24.22	25.00	1.197	-0.07	0.275	0.329
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	Index 4	26865	831.5	23.29	24.00	1.178	-0.09	0.227	0.267
42	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	Index 4	26865	831.5	24.22	25.00	1.197	-0.12	0.395	0.473
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Side	10mm	Index 4	26865	831.5	23.29	24.00	1.178	-0.02	0.321	0.378
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	Index 4	26865	831.5	24.22	25.00	1.197	0.05	0.193	0.231
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Side	10mm	Index 4	26865	831.5	23.29	24.00	1.178	0.08	0.148	0.174
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	Index 4	26865	831.5	24.22	25.00	1.197	0.01	0.226	0.270
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	10mm	Index 4	26865	831.5	23.29	24.00	1.178	0.08	0.187	0.220
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	20575+20476	841.5	22.99	23.00	1.002	-0.02	0.293	0.294
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	Index 4	26865	831.5	23.99	24.90	1.233	0.01	0.255	0.314
	LTE Band 26_Ant 1	15M	QPSK	36	39	Front	10mm	Index 4	26865	831.5	23.07	23.90	1.211	-0.06	0.214	0.259
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Index 4	26865	831.5	23.99	24.90	1.233	-0.04	0.368	0.454
	LTE Band 26_Ant 1	15M	QPSK	36	39	Back	10mm	Index 4	26865	831.5	23.07	23.90	1.211	0.03	0.311	0.376
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	Index 4	26865	831.5	23.99	24.90	1.233	0.04	0.183	0.226
	LTE Band 26_Ant 1	15M	QPSK	36	39	Left Side	10mm	Index 4	26865	831.5	23.07	23.90	1.211	0.15	0.137	0.166
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Side	10mm	Index 4	26865	831.5	23.99	24.90	1.233	-0.19	0.117	0.144
	LTE Band 26_Ant 1	15M	QPSK	36	39	Right Side	10mm	Index 4	26865	831.5	23.07	23.90	1.211	0.06	0.097	0.117
	LTE Band 26_Ant 1	15M	QPSK	1	0	Top Side	10mm	Index 4	26865	831.5	23.99	24.90	1.233	-0.01	0.246	0.303
	LTE Band 26_Ant 1	15M	QPSK	36	39	Top Side	10mm	Index 4	26865	831.5	23.07	23.90	1.211	0	0.196	0.237
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	Index 4	20575+20476	841.5	22.95	23.00	1.012	-0.18	0.270	0.273
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	Index 4	27710	2310	19.75	20.40	1.161	-0.03	0.457	0.531
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	Index 4	27710	2310	19.80	20.40	1.148	-0.07	0.451	0.518
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	Index 4	27710	2310	19.75	20.40	1.161	-0.17	0.525	0.610
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	Index 4	27710	2310	19.80	20.40	1.148	-0.14	0.523	0.600
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	Index 4	27710	2310	19.75	20.40	1.161	0.03	0.033	0.038
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Side	10mm	Index 4	27710	2310	19.80	20.40	1.148	0.12	0.029	0.033
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	Index 4	27710	2310	19.75	20.40	1.161	-0.07	0.416	0.483
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Side	10mm	Index 4	27710	2310	19.80	20.40	1.148	-0.18	0.410	0.471
43	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	Index 4	27710	2310	19.75	20.40	1.161	-0.13	0.772	0.897
	LTE Band 30_Ant 2	10M	QPSK	25	0	Bottom Side	10mm	Index 4	27710	2310	19.80	20.40	1.148	-0.14	0.762	0.875
	LTE Band 30_Ant 2	10M	QPSK	50	0	Bottom Side	10mm	Index 4	27710	2310	19.83	20.40	1.140	-0.13	0.751	0.856
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	Index 4	27710	2310	23.72	23.90	1.042	-0.05	0.413	0.430
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	Index 4	27710	2310	22.75	23.40	1.161	-0.09	0.335	0.389
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	Index 4	27710	2310	23.72	23.90	1.042	-0.05	0.485	0.506
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	Index 4	27710	2310	22.75	23.40	1.161	-0.13	0.324	0.376
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Side	10mm	Index 4	27710	2310	23.72	23.90	1.042	0.05	0.853	0.889
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Side	10mm	Index 4	27710	2310	22.75	23.40	1.161	0.11	0.577	0.670
	LTE Band 30_Ant 0	10M	QPSK	50	0	Left Side	10mm	Index 4	27710	2310	22.77	23.40	1.156	0.1	0.599	0.693
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Side	10mm	Index 4	27710	2310	23.72	23.90	1.042	-0.11	0.046	0.048
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Side	10mm	Index 4	27710	2310	22.75	23.40	1.161	-0.19	0.034	0.039
	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Index 4	27710	2310	23.72	23.90	1.042	-0.11	0.275	0.287
	LTE Band 30_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	Index 4	27710	2310	22.75	23.40	1.161	-0.16	0.221	0.257



FCC SAR TEST REPORT

Report No. : FA0D2942-04C

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	99	Front	10mm	Index 4	132072	1720	21.50	22.00	1.122	-0.19	0.500	0.561
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 4	132072	1720	21.65	22.00	1.084	-0.13	0.496	0.538
	LTE Band 66_Ant 2	20M	QPSK	1	99	Back	10mm	Index 4	132072	1720	21.50	22.00	1.122	0.1	0.481	0.540
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 4	132072	1720	21.65	22.00	1.084	-0.08	0.480	0.520
	LTE Band 66_Ant 2	20M	QPSK	1	99	Left Side	10mm	Index 4	132072	1720	21.50	22.00	1.122	-0.11	0.141	0.158
	LTE Band 66_Ant 2	20M	QPSK	50	24	Left Side	10mm	Index 4	132072	1720	21.65	22.00	1.084	-0.12	0.134	0.145
	LTE Band 66_Ant 2	20M	QPSK	1	99	Right Side	10mm	Index 4	132072	1720	21.50	22.00	1.122	-0.11	0.386	0.433
	LTE Band 66_Ant 2	20M	QPSK	50	24	Right Side	10mm	Index 4	132072	1720	21.65	22.00	1.084	-0.14	0.379	0.411
	LTE Band 66_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	132072	1720	21.50	22.00	1.122	-0.12	0.642	0.720
	LTE Band 66_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	132322	1745	21.38	22.00	1.153	-0.11	0.705	0.813
44	LTE Band 66_Ant 2	20M	QPSK	1	99	Bottom Side	10mm	Index 4	132572	1770	21.46	22.00	1.132	-0.13	0.804	0.910
	LTE Band 66_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	Index 4	132072	1720	21.65	22.00	1.084	-0.15	0.634	0.687
	LTE Band 66_Ant 2	20M	QPSK	100	0	Bottom Side	10mm	Index 4	132072	1720	21.59	22.00	1.099	-0.19	0.629	0.691
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Bottom Side	10mm	Index 4	132047+132140	1717.5	20.58	22.00	1.387	-0.08	0.549	0.761
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	132572+132374	1770	21.11	22.00	1.227	-0.11	0.690	0.847
	LTE Band 66_Ant 0	20M	QPSK	1	49	Front	10mm	Index 4	132072	1720	23.84	24.70	1.219	0.13	0.301	0.367
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	Index 4	132072	1720	22.86	23.70	1.213	-0.01	0.253	0.307
	LTE Band 66_Ant 0	20M	QPSK	1	49	Back	10mm	Index 4	132072	1720	23.84	24.70	1.219	0.05	0.393	0.479
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	132322	1745	23.68	24.70	1.265	-0.02	0.418	0.529
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	132572	1770	23.55	24.70	1.303	0.05	0.391	0.510
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	Index 4	132072	1720	22.86	23.70	1.213	0	0.330	0.400
	LTE Band 66_Ant 0	20M	QPSK	1	49	Left Side	10mm	Index 4	132072	1720	23.84	24.70	1.219	0.09	0.573	0.698
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	132322	1745	23.68	24.70	1.265	-0.01	0.597	0.755
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	132572	1770	23.55	24.70	1.303	-0.14	0.555	0.723
	LTE Band 66_Ant 0	20M	QPSK	50	24	Left Side	10mm	Index 4	132072	1720	22.86	23.70	1.213	0.15	0.529	0.642
	LTE Band 66_Ant 0	20M	QPSK	1	49	Right Side	10mm	Index 4	132072	1720	23.84	24.70	1.219	0.02	0.067	0.082
	LTE Band 66_Ant 0	20M	QPSK	50	24	Right Side	10mm	Index 4	132072	1720	22.86	23.70	1.213	0.08	0.065	0.079
	LTE Band 66_Ant 0	20M	QPSK	1	49	Bottom Side	10mm	Index 4	132072	1720	23.84	24.70	1.219	0.09	0.210	0.256
	LTE Band 66_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	Index 4	132072	1720	22.86	23.70	1.213	0.01	0.200	0.243
	LTE Band 66B_Ant 0	15M	QPSK	1	0	Left Side	10mm	Index 4	132322+132229	1745	22.61	23.00	1.094	-0.02	0.527	0.577
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Left Side	10mm	Index 4	132072+132270	1720	22.59	23.00	1.099	0.15	0.539	0.592
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	Index 4	133322	683	24.35	25.00	1.161	-0.09	0.294	0.341
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	Index 4	133322	683	23.38	24.00	1.153	0.06	0.230	0.265
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	Index 4	133322	683	24.35	25.00	1.161	-0.08	0.287	0.333
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	Index 4	133322	683	23.38	24.00	1.153	0	0.218	0.251
45	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	Index 4	133322	683	24.35	25.00	1.161	-0.15	0.403	0.468
	LTE Band 71_Ant 0	20M	QPSK	50	24	Left Side	10mm	Index 4	133322	683	23.38	24.00	1.153	0.06	0.316	0.364
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	Index 4	133322	683	24.35	25.00	1.161	-0.01	0.281	0.326
	LTE Band 71_Ant 0	20M	QPSK	50	24	Right Side	10mm	Index 4	133322	683	23.38	24.00	1.153	0.04	0.212	0.245
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	Index 4	133322	683	24.35	25.00	1.161	-0.08	0.057	0.066
	LTE Band 71_Ant 0	20M	QPSK	50	24	Bottom Side	10mm	Index 4	133322	683	23.38	24.00	1.153	-0.06	0.042	0.048
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	Index 4	133322	683	24.08	24.90	1.208	0.12	0.143	0.173
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	Index 4	133322	683	23.11	23.90	1.199	0.06	0.130	0.156
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Index 4	133322	683	24.08	24.90	1.208	-0.08	0.164	0.198
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	Index 4	133322	683	23.11	23.90	1.199	-0.05	0.160	0.192
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	Index 4	133322	683	24.08	24.90	1.208	0.03	0.166	0.200
	LTE Band 71_Ant 1	20M	QPSK	50	24	Left Side	10mm	Index 4	133322	683	23.11	23.90	1.199	0.09	0.153	0.184
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	Index 4	133322	683	24.08	24.90	1.208	-0.01	0.052	0.063
	LTE Band 71_Ant 1	20M	QPSK	50	24	Right Side	10mm	Index 4	133322	683	23.11	23.90	1.199	0.07	0.057	0.068
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	Index 4	133322	683	24.08	24.90	1.208	0.13	0.076	0.092
	LTE Band 71_Ant 1	20M	QPSK	50	24	Top Side	10mm	Index 4	133322	683	23.11	23.90	1.199	-0.15	0.066	0.079



<TDD LTE SAR>

Table with 18 columns: 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). Rows include various LTE Band 41 configurations for Ant 2 and Ant 0, with varying test positions and parameters.



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 48_Ant 6	20M	QPSK	1	0	Front	10mm	Index 4	56640	3690	23.28	24.00	1.180	62.9	1.006	-0.16	0.426	0.506
	LTE Band 48_Ant 6	20M	QPSK	50	0	Front	10mm	Index 4	56640	3690	22.30	23.00	1.175	62.9	1.006	-0.1	0.366	0.433
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	56640	3690	23.28	24.00	1.180	62.9	1.006	0.06	0.435	0.517
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	55340	3560	23.11	24.00	1.227	62.9	1.006	-0.05	0.402	0.496
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	55830	3609	23.13	24.00	1.222	62.9	1.006	-0.05	0.403	0.495
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 4	56150	3641	23.21	24.00	1.199	62.9	1.006	0	0.390	0.471
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 4	56640	3690	22.30	23.00	1.175	62.9	1.006	0.08	0.349	0.412
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	56640	3690	23.28	24.00	1.180	62.9	1.006	-0.18	0.750	0.891
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	55340	3560	23.11	24.00	1.227	62.9	1.006	-0.04	0.711	0.878
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	55830	3609	23.13	24.00	1.222	62.9	1.006	0.1	0.722	0.887
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	Index 4	56150	3641	23.21	24.00	1.199	62.9	1.006	-0.15	0.733	0.885
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Side	10mm	Index 4	56640	3690	22.30	23.00	1.175	62.9	1.006	-0.19	0.664	0.785
	LTE Band 48_Ant 6	20M	QPSK	100	0	Left Side	10mm	Index 4	56640	3690	22.22	23.00	1.197	62.9	1.006	-0.19	0.670	0.807
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Side	10mm	Index 4	56640	3690	23.28	24.00	1.180	62.9	1.006	0.18	0.027	0.032
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Side	10mm	Index 4	56640	3690	22.30	23.00	1.175	62.9	1.006	-0.14	0.022	0.026
	LTE Band 48_Ant 6	20M	QPSK	1	0	Bottom Side	10mm	Index 4	56640	3690	23.28	24.00	1.180	62.9	1.006	-0.09	0.124	0.147
	LTE Band 48_Ant 6	20M	QPSK	50	0	Bottom Side	10mm	Index 4	56640	3690	22.30	23.00	1.175	62.9	1.006	-0.08	0.101	0.119
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 4	56640	3690	23.15	24.20	1.274	62.9	1.006	-0.13	0.320	0.410
	LTE Band 48_Ant 2	20M	QPSK	50	24	Front	10mm	Index 4	56640	3690	22.29	23.50	1.321	62.9	1.006	-0.14	0.264	0.351
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	56640	3690	23.15	24.20	1.274	62.9	1.006	-0.17	0.326	0.418
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	55340	3560	23.14	24.20	1.276	62.9	1.006	-0.04	0.290	0.372
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	55830	3609	23.00	24.20	1.318	62.9	1.006	-0.08	0.258	0.342
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 4	56150	3641	22.92	24.20	1.343	62.9	1.006	-0.08	0.260	0.351
	LTE Band 48_Ant 2	20M	QPSK	50	24	Back	10mm	Index 4	56640	3690	22.29	23.50	1.321	62.9	1.006	-0.09	0.242	0.322
	LTE Band 48_Ant 2	20M	QPSK	1	0	Left Side	10mm	Index 4	56640	3690	23.15	24.20	1.274	62.9	1.006	-0.1	0.038	0.049
	LTE Band 48_Ant 2	20M	QPSK	50	24	Left Side	10mm	Index 4	56640	3690	22.29	23.50	1.321	62.9	1.006	-0.09	0.032	0.043
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	56640	3690	23.15	24.20	1.274	62.9	1.006	-0.11	0.537	0.688
47	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	55340	3560	23.14	24.20	1.276	62.9	1.006	-0.04	0.705	0.905
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	55830	3609	23.00	24.20	1.318	62.9	1.006	-0.16	0.660	0.875
	LTE Band 48_Ant 2	20M	QPSK	1	0	Right Side	10mm	Index 4	56150	3641	22.92	24.20	1.343	62.9	1.006	-0.07	0.615	0.831
	LTE Band 48_Ant 2	20M	QPSK	50	24	Right Side	10mm	Index 4	56640	3690	22.29	23.50	1.321	62.9	1.006	0.12	0.484	0.643
	LTE Band 48_Ant 2	20M	QPSK	100	0	Right Side	10mm	Index 4	56640	3690	22.23	23.50	1.340	62.9	1.006	0.06	0.488	0.658
	LTE Band 48_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	Index 4	56640	3690	23.15	24.20	1.274	62.9	1.006	-0.15	0.139	0.178
	LTE Band 48_Ant 2	20M	QPSK	50	24	Bottom Side	10mm	Index 4	56640	3690	22.29	23.50	1.321	62.9	1.006	-0.1	0.115	0.153



<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 n5_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	167300	836.5	24.87	25.00	1.030	0.06	0.219	0.226
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	Index 4	167300	836.5	24.71	25.00	1.069	-0.07	0.241	0.258
	FR1 n5_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	167300	836.5	24.87	25.00	1.030	0.01	0.214	0.221
	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	Index 4	167300	836.5	24.71	25.00	1.069	0.11	0.215	0.230
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	167300	836.5	24.87	25.00	1.030	0.13	0.311	0.320
48	FR1 n5_Ant 0	20M	BPSK	50	28	Left Side	10mm	Index 4	167300	836.5	24.71	25.00	1.069	-0.05	0.398	0.425
	FR1 n5_Ant 0	20M	BPSK	1	53	Right Side	10mm	Index 4	167300	836.5	24.87	25.00	1.030	0.08	0.156	0.161
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Side	10mm	Index 4	167300	836.5	24.71	25.00	1.069	0.07	0.164	0.175
	FR1 n5_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	167300	836.5	24.87	25.00	1.030	-0.11	0.145	0.149
	FR1 n5_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	167300	836.5	24.71	25.00	1.069	0.05	0.150	0.160
	FR1 n5_Ant 1	20M	BPSK	1	53	Front	10mm	Index 4	167300	836.5	24.62	24.90	1.067	0.05	0.162	0.173
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	Index 4	167300	836.5	24.47	24.90	1.104	0.18	0.163	0.180
	FR1 n5_Ant 1	20M	BPSK	1	53	Back	10mm	Index 4	167300	836.5	24.62	24.90	1.067	-0.09	0.218	0.233
	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	Index 4	167300	836.5	24.47	24.90	1.104	0.05	0.209	0.231
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Side	10mm	Index 4	167300	836.5	24.62	24.90	1.067	0.11	0.089	0.095
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Side	10mm	Index 4	167300	836.5	24.47	24.90	1.104	0.05	0.091	0.100
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Side	10mm	Index 4	167300	836.5	24.62	24.90	1.067	0.03	0.060	0.064
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Side	10mm	Index 4	167300	836.5	24.47	24.90	1.104	0.02	0.059	0.065
	FR1 n5_Ant 1	20M	BPSK	1	53	Top Side	10mm	Index 4	167300	836.5	24.62	24.90	1.067	0.07	0.159	0.170
	FR1 n5_Ant 1	20M	BPSK	50	28	Top Side	10mm	Index 4	167300	836.5	24.47	24.90	1.104	0.13	0.172	0.190



FCC SAR TEST REPORT

Report No. : FA0D2942-04C

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 n7_Ant 2	20M	BPSK	1	53	Front	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.11	0.547	0.547
	FR1 n7_Ant 2	20M	BPSK	50	0	Front	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.17	0.516	0.516
	FR1 n7_Ant 2	20M	BPSK	1	53	Back	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.14	0.535	0.535
	FR1 n7_Ant 2	20M	BPSK	50	0	Back	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.11	0.514	0.514
	FR1 n7_Ant 2	20M	BPSK	1	53	Left Side	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.08	0.029	0.029
	FR1 n7_Ant 2	20M	BPSK	50	0	Left Side	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.07	0.023	0.023
	FR1 n7_Ant 2	20M	BPSK	1	53	Right Side	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.1	0.495	0.495
	FR1 n7_Ant 2	20M	BPSK	50	0	Right Side	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.16	0.477	0.477
49	FR1 n7_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.03	0.910	0.910
	FR1 n7_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	502000	2510	19.49	19.50	1.002	0.02	0.884	0.886
	FR1 n7_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	507000	2535	19.49	19.50	1.002	-0.05	0.899	0.901
	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	10mm	Index 4	512000	2560	19.50	19.50	1.000	-0.05	0.890	0.890
	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	10mm	Index 4	502000	2510	19.49	19.50	1.002	0.01	0.854	0.856
	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	10mm	Index 4	507000	2535	19.49	19.50	1.002	-0.06	0.896	0.898
	FR1 n7_Ant 2	20M	BPSK	100	0	Bottom Side	10mm	Index 4	512000	2560	19.49	19.50	1.002	0	0.858	0.860
	FR1 n7_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	502000	2510	23.39	24.00	1.151	0.08	0.240	0.276
	FR1 n7_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	507000	2535	23.21	24.00	1.199	0.02	0.299	0.359
	FR1 n7_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	512000	2560	23.19	24.00	1.205	-0.11	0.338	0.407
	FR1 n7_Ant 0	20M	BPSK	50	28	Front	10mm	Index 4	502000	2510	23.25	24.00	1.189	0.09	0.230	0.273
	FR1 n7_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	502000	2510	23.39	24.00	1.151	0.15	0.229	0.264
	FR1 n7_Ant 0	20M	BPSK	50	28	Back	10mm	Index 4	502000	2510	23.25	24.00	1.189	-0.13	0.224	0.266
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	502000	2510	23.39	24.00	1.151	-0.01	0.417	0.480
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	507000	2535	23.21	24.00	1.199	0.08	0.465	0.558
	FR1 n7_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	512000	2560	23.19	24.00	1.205	-0.09	0.542	0.653
	FR1 n7_Ant 0	20M	BPSK	50	28	Left Side	10mm	Index 4	502000	2510	23.25	24.00	1.189	-0.04	0.403	0.479
	FR1 n7_Ant 0	20M	BPSK	1	53	Right Side	10mm	Index 4	502000	2510	23.39	24.00	1.151	-0.11	0.058	0.067
	FR1 n7_Ant 0	20M	BPSK	50	28	Right Side	10mm	Index 4	502000	2510	23.25	24.00	1.189	0.16	0.057	0.068
	FR1 n7_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	502000	2510	23.39	24.00	1.151	0.06	0.146	0.168
	FR1 n7_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	502000	2510	23.25	24.00	1.189	0.03	0.139	0.165
	FR1 n12_Ant 0	15M	BPSK	1	77	Front	10mm	Index 4	141500	707.5	24.70	25.00	1.072	-0.09	0.295	0.316
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	Index 4	141500	707.5	24.69	25.00	1.074	0.17	0.283	0.304
	FR1 n12_Ant 0	15M	BPSK	1	77	Back	10mm	Index 4	141500	707.5	24.70	25.00	1.072	0.15	0.273	0.293
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	Index 4	141500	707.5	24.69	25.00	1.074	0.13	0.263	0.282
	FR1 n12_Ant 0	15M	BPSK	1	77	Left Side	10mm	Index 4	141500	707.5	24.70	25.00	1.072	0.17	0.370	0.396
50	FR1 n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	Index 4	141500	707.5	24.69	25.00	1.074	-0.07	0.376	0.404
	FR1 n12_Ant 0	15M	BPSK	1	77	Right Side	10mm	Index 4	141500	707.5	24.70	25.00	1.072	0.12	0.228	0.244
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	Index 4	141500	707.5	24.69	25.00	1.074	0.08	0.227	0.244
	FR1 n12_Ant 0	15M	BPSK	1	77	Bottom Side	10mm	Index 4	141500	707.5	24.70	25.00	1.072	0.01	0.060	0.064
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	Index 4	141500	707.5	24.69	25.00	1.074	0.08	0.058	0.062
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	Index 4	141500	707.5	24.47	24.90	1.104	0.02	0.128	0.141
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	Index 4	141500	707.5	24.45	24.90	1.109	-0.03	0.112	0.124
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	Index 4	141500	707.5	24.47	24.90	1.104	-0.06	0.166	0.183
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	Index 4	141500	707.5	24.45	24.90	1.109	0.01	0.146	0.162
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	Index 4	141500	707.5	24.47	24.90	1.104	0	0.127	0.140
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	Index 4	141500	707.5	24.45	24.90	1.109	0.05	0.123	0.136
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Side	10mm	Index 4	141500	707.5	24.47	24.90	1.104	-0.07	0.044	0.049
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Side	10mm	Index 4	141500	707.5	24.45	24.90	1.109	0.04	0.050	0.055
	FR1 n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	Index 4	141500	707.5	24.47	24.90	1.104	0.02	0.134	0.148
	FR1 n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	Index 4	141500	707.5	24.45	24.90	1.109	0.03	0.092	0.102



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 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 4	372000	1860	20.20	20.20	1.000	-0.03	0.589	0.589
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 4	372000	1860	20.19	20.20	1.002	-0.01	0.615	0.616
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 4	372000	1860	20.20	20.20	1.000	0.17	0.550	0.550
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 4	372000	1860	20.19	20.20	1.002	-0.03	0.497	0.498
	FR1 n25_Ant 2	20M	BPSK	1	53	Left Side	10mm	Index 4	372000	1860	20.20	20.20	1.000	-0.05	0.052	0.052
	FR1 n25_Ant 2	20M	BPSK	50	28	Left Side	10mm	Index 4	372000	1860	20.19	20.20	1.002	-0.05	0.055	0.055
	FR1 n25_Ant 2	20M	BPSK	1	53	Right Side	10mm	Index 4	372000	1860	20.20	20.20	1.000	-0.07	0.350	0.350
	FR1 n25_Ant 2	20M	BPSK	50	28	Right Side	10mm	Index 4	372000	1860	20.19	20.20	1.002	-0.02	0.341	0.342
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	372000	1860	20.20	20.20	1.000	-0.07	0.894	0.894
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	376500	1882.5	20.19	20.20	1.002	-0.12	0.887	0.889
	FR1 n25_Ant 2	20M	BPSK	1	53	Bottom Side	10mm	Index 4	381000	1905	20.19	20.20	1.002	-0.11	0.865	0.867
	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	Index 4	372000	1860	20.19	20.20	1.002	-0.09	0.838	0.840
51	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	Index 4	376500	1882.5	20.18	20.20	1.005	-0.07	0.893	0.897
	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	10mm	Index 4	381000	1905	20.07	20.20	1.030	-0.09	0.854	0.880
	FR1 n25_Ant 2	20M	BPSK	100	0	Bottom Side	10mm	Index 4	372000	1860	20.19	20.20	1.002	-0.08	0.844	0.846
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	372000	1860	22.20	22.60	1.096	0.15	0.479	0.525
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 4	372000	1860	22.09	22.60	1.125	0.09	0.474	0.533
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	372000	1860	22.20	22.60	1.096	-0.05	0.565	0.620
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 4	372000	1860	22.09	22.60	1.125	-0.03	0.558	0.628
	FR1 n25_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	372000	1860	22.20	22.60	1.096	-0.09	0.569	0.624
	FR1 n25_Ant 0	20M	BPSK	50	28	Left Side	10mm	Index 4	372000	1860	22.09	22.60	1.125	-0.05	0.538	0.605
	FR1 n25_Ant 0	20M	BPSK	1	53	Right Side	10mm	Index 4	372000	1860	22.20	22.60	1.096	-0.18	0.023	0.025
	FR1 n25_Ant 0	20M	BPSK	50	28	Right Side	10mm	Index 4	372000	1860	22.09	22.60	1.125	0.19	0.023	0.026
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	372000	1860	22.20	22.60	1.096	-0.03	0.589	0.646
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	376500	1882.5	21.96	22.60	1.159	0.03	0.710	0.823
	FR1 n25_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	381000	1905	22.05	22.60	1.135	-0.08	0.701	0.796
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	372000	1860	22.09	22.60	1.125	0.11	0.602	0.677
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	376500	1882.5	21.90	22.60	1.175	0.03	0.700	0.822
	FR1 n25_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	381000	1905	21.81	22.60	1.199	-0.03	0.699	0.838
	FR1 n25_Ant 0	20M	BPSK	100	0	Bottom Side	10mm	Index 4	372000	1860	22.00	22.60	1.148	-0.01	0.559	0.642



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 n30_Ant 2	10M	BPSK	1	26	Front	10mm	Index 4	462000	2310	20.75	21.00	1.059	-0.18	0.575	0.609
	FR1 n30_Ant 2	10M	BPSK	25	14	Front	10mm	Index 4	462000	2310	20.63	21.00	1.089	-0.05	0.581	0.633
	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index 4	462000	2310	20.75	21.00	1.059	-0.03	0.622	0.659
	FR1 n30_Ant 2	10M	BPSK	25	14	Back	10mm	Index 4	462000	2310	20.63	21.00	1.089	-0.07	0.587	0.639
	FR1 n30_Ant 2	10M	BPSK	1	26	Left Side	10mm	Index 4	462000	2310	20.75	21.00	1.059	-0.1	0.024	0.025
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Side	10mm	Index 4	462000	2310	20.63	21.00	1.089	-0.04	0.023	0.025
	FR1 n30_Ant 2	10M	BPSK	1	26	Right Side	10mm	Index 4	462000	2310	20.75	21.00	1.059	-0.07	0.486	0.515
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Side	10mm	Index 4	462000	2310	20.63	21.00	1.089	-0.01	0.487	0.530
	FR1 n30_Ant 2	10M	BPSK	1	26	Bottom Side	10mm	Index 4	462000	2310	20.75	21.00	1.059	-0.07	0.838	0.888
	FR1 n30_Ant 2	10M	BPSK	25	14	Bottom Side	10mm	Index 4	462000	2310	20.63	21.00	1.089	-0.02	0.816	0.889
52	FR1 n30_Ant 2	10M	BPSK	50	0	Bottom Side	10mm	Index 4	462000	2310	20.63	21.00	1.089	0.04	0.825	0.898
	FR1 n30_Ant 0	10M	BPSK	1	26	Front	10mm	Index 4	462000	2310	23.38	24.40	1.265	0.08	0.295	0.373
	FR1 n30_Ant 0	10M	BPSK	25	14	Front	10mm	Index 4	462000	2310	23.25	24.40	1.303	0.04	0.309	0.403
	FR1 n30_Ant 0	10M	BPSK	1	26	Back	10mm	Index 4	462000	2310	23.38	24.40	1.265	0.02	0.343	0.434
	FR1 n30_Ant 0	10M	BPSK	25	14	Back	10mm	Index 4	462000	2310	23.25	24.40	1.303	-0.02	0.350	0.456
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Side	10mm	Index 4	462000	2310	23.38	24.40	1.265	-0.02	0.598	0.756
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Side	10mm	Index 4	462000	2310	23.25	24.40	1.303	-0.11	0.568	0.740
	FR1 n30_Ant 0	10M	BPSK	50	0	Left Side	10mm	Index 4	462000	2310	23.26	23.90	1.159	0.09	0.576	0.667
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Side	10mm	Index 4	462000	2310	23.38	24.40	1.265	0.14	0.039	0.049
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Side	10mm	Index 4	462000	2310	23.25	24.40	1.303	-0.08	0.039	0.051
	FR1 n30_Ant 0	10M	BPSK	1	26	Bottom Side	10mm	Index 4	462000	2310	23.38	24.40	1.265	0.09	0.196	0.248
	FR1 n30_Ant 0	10M	BPSK	25	14	Bottom Side	10mm	Index 4	462000	2310	23.25	24.40	1.303	-0.03	0.180	0.235
	FR1 n66_Ant 2	40M	BPSK	1	108	Front	10mm	Index 4	349000	1745	22.48	22.70	1.052	-0.04	0.535	0.563
	FR1 n66_Ant 2	40M	BPSK	108	54	Front	10mm	Index 4	349000	1745	22.31	22.70	1.094	-0.07	0.597	0.653
	FR1 n66_Ant 2	40M	BPSK	1	108	Back	10mm	Index 4	349000	1745	22.48	22.70	1.052	-0.05	0.663	0.697
	FR1 n66_Ant 2	40M	BPSK	108	54	Back	10mm	Index 4	349000	1745	22.31	22.70	1.094	-0.05	0.628	0.687
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Side	10mm	Index 4	349000	1745	22.48	22.70	1.052	-0.01	0.194	0.204
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Side	10mm	Index 4	349000	1745	22.31	22.70	1.094	-0.15	0.188	0.206
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Side	10mm	Index 4	349000	1745	22.48	22.70	1.052	-0.06	0.468	0.492
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Side	10mm	Index 4	349000	1745	22.31	22.70	1.094	-0.11	0.470	0.514
	FR1 n66_Ant 2	40M	BPSK	1	108	Bottom Side	10mm	Index 4	349000	1745	22.48	22.70	1.052	0.14	0.746	0.785
53	FR1 n66_Ant 2	40M	BPSK	108	54	Bottom Side	10mm	Index 4	349000	1745	22.31	22.70	1.094	-0.04	0.747	0.817
	FR1 n66_Ant 2	40M	BPSK	216	0	Bottom Side	10mm	Index 4	349000	1745	22.15	22.70	1.135	-0.1	0.718	0.815
	FR1 n66_Ant 0	40M	BPSK	1	108	Front	10mm	Index 4	349000	1745	24.21	24.70	1.119	0.02	0.376	0.421
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	Index 4	349000	1745	24.05	24.70	1.161	-0.03	0.369	0.429
	FR1 n66_Ant 0	40M	BPSK	1	108	Back	10mm	Index 4	349000	1745	24.21	24.70	1.119	-0.05	0.483	0.541
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	Index 4	349000	1745	24.05	24.70	1.161	-0.01	0.476	0.553
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Side	10mm	Index 4	349000	1745	24.21	24.70	1.119	-0.1	0.691	0.774
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Side	10mm	Index 4	349000	1745	24.05	24.70	1.161	-0.06	0.687	0.798
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Side	10mm	Index 4	349000	1745	24.21	24.70	1.119	0.05	0.082	0.092
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Side	10mm	Index 4	349000	1745	24.05	24.70	1.161	0	0.091	0.106
	FR1 n66_Ant 0	40M	BPSK	1	108	Bottom Side	10mm	Index 4	349000	1745	24.21	24.70	1.119	-0.03	0.346	0.387
	FR1 n66_Ant 0	40M	BPSK	108	54	Bottom Side	10mm	Index 4	349000	1745	24.05	24.70	1.161	0.02	0.336	0.390



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 n71_Ant 0	20M	BPSK	1	53	Front	10mm	Index 4	136100	680.5	24.80	25.00	1.047	-0.09	0.215	0.225
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	Index 4	136100	680.5	24.69	25.00	1.074	0.18	0.209	0.224
	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	Index 4	136100	680.5	24.80	25.00	1.047	0.02	0.204	0.214
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	Index 4	136100	680.5	24.69	25.00	1.074	0.04	0.200	0.215
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Side	10mm	Index 4	136100	680.5	24.80	25.00	1.047	0.09	0.222	0.232
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Side	10mm	Index 4	136100	680.5	24.69	25.00	1.074	0.14	0.215	0.231
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Side	10mm	Index 4	136100	680.5	24.80	25.00	1.047	0.04	0.162	0.170
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Side	10mm	Index 4	136100	680.5	24.69	25.00	1.074	0.05	0.159	0.171
	FR1 n71_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	Index 4	136100	680.5	24.80	25.00	1.047	0.17	0.028	0.029
	FR1 n71_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	Index 4	136100	680.5	24.69	25.00	1.074	0	0.029	0.031
	FR1 n71_Ant 1	20M	BPSK	1	53	Front	10mm	Index 4	136100	680.5	24.01	24.90	1.227	0.09	0.147	0.180
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	Index 4	136100	680.5	23.87	24.90	1.268	0.06	0.146	0.185
	FR1 n71_Ant 1	20M	BPSK	1	53	Back	10mm	Index 4	136100	680.5	24.01	24.90	1.227	-0.08	0.187	0.230
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	Index 4	136100	680.5	23.87	24.90	1.268	0.15	0.176	0.223
54	FR1 n71_Ant 1	20M	BPSK	1	53	Left Side	10mm	Index 4	136100	680.5	24.01	24.90	1.227	-0.06	0.215	0.264
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Side	10mm	Index 4	136100	680.5	23.87	24.90	1.268	0.01	0.207	0.262
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Side	10mm	Index 4	136100	680.5	24.01	24.90	1.227	0.17	0.088	0.108
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Side	10mm	Index 4	136100	680.5	23.87	24.90	1.268	0.04	0.082	0.104
	FR1 n71_Ant 1	20M	BPSK	1	53	Top Side	10mm	Index 4	136100	680.5	24.01	24.90	1.227	0.17	0.110	0.135
	FR1 n71_Ant 1	20M	BPSK	50	28	Top Side	10mm	Index 4	136100	680.5	23.87	24.90	1.268	0.03	0.138	0.175
	FR1 n41_Ant 5	100M	BPSK	1	137	Front	10mm	Index 4	518598	2592.99	20.01	20.60	1.146	0.16	0.409	0.469
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	Index 4	518598	2592.99	19.95	20.60	1.161	0.04	0.326	0.379
	FR1 n41_Ant 5	100M	BPSK	1	137	Back	10mm	Index 4	518598	2592.99	20.01	20.60	1.146	0.05	0.461	0.528
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	Index 4	518598	2592.99	19.95	20.60	1.161	0.09	0.418	0.485
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Side	10mm	Index 4	518598	2592.99	20.01	20.60	1.146	0.17	0.012	0.014
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Side	10mm	Index 4	518598	2592.99	19.95	20.60	1.161	0.12	0.011	0.013
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Side	10mm	Index 4	518598	2592.99	20.01	20.60	1.146	0.04	0.673	0.771
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Side	10mm	Index 4	518598	2592.99	19.95	20.60	1.161	0.07	0.574	0.667
	FR1 n41_Ant 5	100M	BPSK	1	137	Top Side	10mm	Index 4	518598	2592.99	20.01	20.60	1.146	-0.05	0.088	0.101
	FR1 n41_Ant 5	100M	BPSK	135	69	Top Side	10mm	Index 4	518598	2592.99	19.95	20.60	1.161	0.11	0.073	0.085
	FR1 n41 HPUE_Ant 5	100M	BPSK	1	137	Right Side	10mm	Index 4	518598	2592.99	23.05	23.60	1.135	0	0.716	0.813
	FR1 n41_Ant 1	100M	BPSK	1	271	Front	10mm	Index 4	518598	2592.99	24.52	24.80	1.067	-0.07	0.383	0.409
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Index 4	518598	2592.99	23.72	24.80	1.282	-0.11	0.453	0.581
	FR1 n41_Ant 1	100M	BPSK	1	271	Back	10mm	Index 4	518598	2592.99	24.52	24.80	1.067	-0.05	0.478	0.510
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Index 4	518598	2592.99	23.72	24.80	1.282	-0.1	0.491	0.630
	FR1 n41_Ant 1	100M	BPSK	1	271	Left Side	10mm	Index 4	518598	2592.99	24.52	24.80	1.067	-0.04	0.700	0.747
55	FR1 n41_Ant 1	100M	BPSK	135	69	Left Side	10mm	Index 4	518598	2592.99	23.72	24.80	1.282	-0.14	0.690	0.885
	FR1 n41_Ant 1	100M	BPSK	270	0	Left Side	10mm	Index 4	518598	2592.99	23.24	24.20	1.247	-0.19	0.700	0.873
	FR1 n41_Ant 1	100M	BPSK	1	271	Right Side	10mm	Index 4	518598	2592.99	24.52	24.80	1.067	-0.16	0.010	0.010
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Side	10mm	Index 4	518598	2592.99	23.72	24.80	1.282	0.18	0.008	0.011
	FR1 n41_Ant 1	100M	BPSK	1	271	Top Side	10mm	Index 4	518598	2592.99	24.52	24.80	1.067	0.07	0.311	0.332
	FR1 n41_Ant 1	100M	BPSK	135	69	Top Side	10mm	Index 4	518598	2592.99	23.72	24.80	1.282	0.14	0.283	0.363
	FR1 n41 HPUE_Ant 1	100M	BPSK	1	271	Left Side	10mm	Index 4	518598	2592.99	25.86	27.40	1.426	0	0.584	0.833



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	Index 4	656000	3840	21.50	21.60	1.023	-0.07	0.345	0.353
	FR1 n77_Ant 6	100M	BPSK	135	138	Front	10mm	Index 4	656000	3840	21.31	21.60	1.069	-0.02	0.400	0.428
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	Index 4	656000	3840	21.50	21.60	1.023	-0.01	0.443	0.453
	FR1 n77_Ant 6	100M	BPSK	135	138	Back	10mm	Index 4	656000	3840	21.31	21.60	1.069	0.04	0.526	0.562
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Side	10mm	Index 4	656000	3840	21.50	21.60	1.023	0	0.770	0.788
	FR1 n77_Ant 6	100M	BPSK	135	138	Left Side	10mm	Index 4	656000	3840	21.31	21.60	1.069	-0.1	0.622	0.665
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Side	10mm	Index 4	656000	3840	21.50	21.60	1.023	0.04	0.019	0.019
	FR1 n77_Ant 6	100M	BPSK	135	138	Right Side	10mm	Index 4	656000	3840	21.31	21.60	1.069	0.08	0.024	0.026
	FR1 n77_Ant 6	100M	BPSK	1	1	Bottom Side	10mm	Index 4	656000	3840	21.50	21.60	1.023	0	0.109	0.112
	FR1 n77_Ant 6	100M	BPSK	135	138	Bottom Side	10mm	Index 4	656000	3840	21.31	21.60	1.069	0	0.141	0.151
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Left Side	10mm	Index 4	656000	3840	23.41	24.60	1.315	-0.16	0.586	0.770
	FR1 n77_Ant 6	100M	BPSK	1	137	Front	10mm	Index 4	633332	3499.98	21.21	21.60	1.094	-0.05	0.515	0.563
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	Index 4	633332	3499.98	21.11	21.60	1.119	-0.04	0.493	0.552
	FR1 n77_Ant 6	100M	BPSK	1	137	Back	10mm	Index 4	633332	3499.98	21.21	21.60	1.094	0.07	0.402	0.440
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	Index 4	633332	3499.98	21.11	21.60	1.119	-0.05	0.370	0.414
	FR1 n77_Ant 6	100M	BPSK	1	137	Left Side	10mm	Index 4	633332	3499.98	21.21	21.60	1.094	-0.06	0.696	0.761
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	Index 4	633332	3499.98	21.11	21.60	1.119	-0.12	0.657	0.735
	FR1 n77_Ant 6	100M	BPSK	1	137	Right Side	10mm	Index 4	633332	3499.98	21.21	21.60	1.094	-0.13	0.023	0.025
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	Index 4	633332	3499.98	21.11	21.60	1.119	0.13	0.022	0.025
	FR1 n77_Ant 6	100M	BPSK	1	137	Bottom Side	10mm	Index 4	633332	3499.98	21.21	21.60	1.094	-0.18	0.110	0.120
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	Index 4	633332	3499.98	21.11	21.60	1.119	-0.09	0.108	0.121
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	137	Left Side	10mm	Index 4	633332	3499.98	23.16	24.60	1.393	-0.14	0.553	0.770
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	Index 4	656000	3840	21.17	21.90	1.183	-0.15	0.250	0.296
	FR1 n77_Ant 2	100M	BPSK	135	0	Front	10mm	Index 4	656000	3840	20.90	21.90	1.259	-0.04	0.234	0.295
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	Index 4	656000	3840	21.17	21.90	1.183	-0.07	0.262	0.310
	FR1 n77_Ant 2	100M	BPSK	135	0	Back	10mm	Index 4	656000	3840	20.90	21.90	1.259	-0.08	0.226	0.285
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Side	10mm	Index 4	656000	3840	21.17	21.90	1.183	0.15	0.051	0.060
	FR1 n77_Ant 2	100M	BPSK	135	0	Left Side	10mm	Index 4	656000	3840	20.90	21.90	1.259	-0.01	0.058	0.073
	FR1 n77_Ant 2	100M	BPSK	1	1	Right Side	10mm	Index 4	656000	3840	21.17	21.90	1.183	0.03	0.393	0.465
	FR1 n77_Ant 2	100M	BPSK	135	0	Right Side	10mm	Index 4	656000	3840	20.90	21.90	1.259	0	0.315	0.397
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	Index 4	656000	3840	21.17	21.90	1.183	-0.07	0.171	0.202
	FR1 n77_Ant 2	100M	BPSK	135	0	Bottom Side	10mm	Index 4	656000	3840	20.90	21.90	1.259	-0.09	0.166	0.209
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Side	10mm	Index 4	656000	3840	23.93	24.90	1.250	0.01	0.472	0.590
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	Index 4	633332	3499.98	20.75	21.90	1.303	0.01	0.379	0.494
	FR1 n77_Ant 2	100M	BPSK	135	0	Front	10mm	Index 4	633332	3499.98	20.66	21.90	1.330	-0.07	0.390	0.519
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	Index 4	633332	3499.98	20.75	21.90	1.303	-0.09	0.281	0.366
	FR1 n77_Ant 2	100M	BPSK	135	0	Back	10mm	Index 4	633332	3499.98	20.66	21.90	1.330	-0.09	0.268	0.357
	FR1 n77_Ant 2	100M	BPSK	1	1	Left Side	10mm	Index 4	633332	3499.98	20.75	21.90	1.303	-0.13	0.028	0.036
	FR1 n77_Ant 2	100M	BPSK	135	0	Left Side	10mm	Index 4	633332	3499.98	20.66	21.90	1.330	0.02	0.025	0.033
56	FR1 n77_Ant 2	100M	BPSK	1	1	Right Side	10mm	Index 4	633332	3499.98	20.75	21.90	1.303	-0.02	0.647	0.843
	FR1 n77_Ant 2	100M	BPSK	135	0	Right Side	10mm	Index 4	633332	3499.98	20.66	21.90	1.330	0	0.557	0.741
	FR1 n77_Ant 2	100M	BPSK	270	0	Right Side	10mm	Index 4	633332	3499.98	20.43	21.90	1.403	0.05	0.494	0.693
	FR1 n77_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	Index 4	633332	3499.98	20.75	21.90	1.303	0	0.123	0.160
	FR1 n77_Ant 2	100M	BPSK	135	0	Bottom Side	10mm	Index 4	633332	3499.98	20.66	21.90	1.330	-0.04	0.118	0.157
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Right Side	10mm	Index 4	633332	3499.98	23.75	24.90	1.303	-0.02	0.634	0.826



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.09	0.143	0.182
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.09	0.360	0.474
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.03	0.270	0.344
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.03	0.447	0.589
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	1	2412	17.15	18.50	1.365	98.90	1.011	-0.1	0.165	0.228
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	1	2412	16.75	18.50	1.496	98.90	1.011	-0.1	0.358	0.542
57	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	11	2462	17.45	18.50	1.274	98.90	1.011	-0.13	0.197	0.254
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	11	2462	17.35	18.50	1.303	98.90	1.011	-0.13	0.451	0.594
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	12	2467	17.35	18.50	1.303	98.90	1.011	-0.02	0.315	0.415
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	12	2467	17.15	18.50	1.365	98.90	1.011	-0.02	0.429	0.592
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	13	2472	17.35	18.50	1.303	98.90	1.011	-0.09	0.301	0.397
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	13	2472	17.15	18.50	1.365	98.90	1.011	-0.09	0.425	0.586
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.03	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.03	0.173	0.228
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.06	0.138	0.176
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.06	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.08	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.08	0.374	0.493
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	-0.19	0.044	0.046
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	-0.19	0.112	0.123
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	0.02	0.075	0.078
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	0.02	0.158	0.173
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	1	2412	13.15	13.50	1.084	98.90	1.011	-0.1	0.094	0.103
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	1	2412	12.65	13.50	1.216	98.90	1.011	-0.1	0.127	0.156
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	11	2462	13.35	13.50	1.035	98.90	1.011	-0.02	0.067	0.070
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	11	2462	12.85	13.50	1.161	98.90	1.011	-0.02	0.148	0.174
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	12	2467	13.25	13.50	1.059	98.90	1.011	-0.12	0.072	0.077
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	12	2467	13.10	13.50	1.096	98.90	1.011	-0.12	0.164	0.182
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	13	2472	13.35	13.50	1.035	98.90	1.011	-0.08	0.107	0.112
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	13	2472	13.05	13.50	1.109	98.90	1.011	-0.08	0.160	0.179
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	-0.15	0.131	0.137
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	-0.15	0.039	0.043
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	0.16	0.066	0.069
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	0.16	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	-0.03	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	-0.03	0.139	0.152



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(4)	46	5230	15.80	16.50	1.175	96.10	1.041	0.03	0.155	0.190
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(3)	46	5230	15.50	16.50	1.259	96.10	1.041	0.03	0.298	0.391
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(4)	46	5230	15.80	16.50	1.175	96.10	1.041	0.01	0.165	0.202
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(3)	46	5230	15.50	16.50	1.259	96.10	1.041	0.01	0.343	0.450
58	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(4)	46	5230	15.80	16.50	1.175	96.10	1.041	-0.1	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(3)	46	5230	15.50	16.50	1.259	96.10	1.041	-0.1	0.509	0.667
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	7	Ant 4+3(4)	46	5230	15.80	16.50	1.175	96.10	1.041	-0.17	0.231	0.283
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	7	Ant 4+3(3)	46	5230	15.50	16.50	1.259	96.10	1.041	-0.17	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	7	Ant 4+3(4)	46	5230	15.80	16.50	1.175	96.10	1.041	-0.15	0.129	0.158
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	7	Ant 4+3(3)	46	5230	15.50	16.50	1.259	96.10	1.041	-0.15	0.111	0.145
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	9	Ant 4+3(4)	38	5190	15.30	15.50	1.047	96.10	1.041	-0.16	0.146	0.159
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	9	Ant 4+3(3)	38	5190	15.20	15.50	1.072	96.10	1.041	-0.16	0.259	0.289
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(4)	38	5190	15.30	15.50	1.047	96.10	1.041	0.13	0.169	0.184
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(3)	38	5190	15.20	15.50	1.072	96.10	1.041	0.13	0.229	0.255
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	9	Ant 4+3(4)	38	5190	15.30	15.50	1.047	96.10	1.041	-0.13	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	10mm	9	Ant 4+3(3)	38	5190	15.20	15.50	1.072	96.10	1.041	-0.13	0.335	0.374
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	9	Ant 4+3(4)	38	5190	15.30	15.50	1.047	96.10	1.041	-0.04	0.220	0.240
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	10mm	9	Ant 4+3(3)	38	5190	15.20	15.50	1.072	96.10	1.041	-0.04	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	9	Ant 4+3(4)	38	5190	15.30	15.50	1.047	96.10	1.041	-0.18	0.123	0.134
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	10mm	9	Ant 4+3(3)	38	5190	15.20	15.50	1.072	96.10	1.041	-0.18	0.095	0.106
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	42	5210	14.00	14.00	1.000	88.00	1.136	-0.16	0.091	0.103
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	42	5210	13.55	14.00	1.109	88.00	1.136	-0.16	0.174	0.219
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	42	5210	14.00	14.00	1.000	88.00	1.136	-0.1	0.096	0.109
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	42	5210	13.55	14.00	1.109	88.00	1.136	-0.1	0.191	0.241
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(4)	42	5210	14.00	14.00	1.000	88.00	1.136	-0.18	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(3)	42	5210	13.55	14.00	1.109	88.00	1.136	-0.18	0.297	0.374
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(4)	42	5210	14.00	14.00	1.000	88.00	1.136	0.13	0.157	0.178
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(3)	42	5210	13.55	14.00	1.109	88.00	1.136	0.13	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(4)	42	5210	14.00	14.00	1.000	88.00	1.136	-0.14	0.085	0.097
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(3)	42	5210	13.55	14.00	1.109	88.00	1.136	-0.14	0.001	0.001



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	-0.11	0.234	0.278
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.11	0.257	0.331
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	-0.15	0.403	0.479
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.15	0.329	0.424
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	-0.14	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.14	0.351	0.453
59	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	0.17	0.506	0.602
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.01	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	-0.08	0.388	0.462
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.08	0.188	0.242
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.08	0.134	0.159
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.08	0.130	0.166
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	0.16	0.221	0.263
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	0.16	0.180	0.229
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.02	0.178	0.227
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	0.02	0.304	0.362
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.08	0.225	0.268
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.08	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.08	0.134	0.159
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.08	0.130	0.166
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	0.16	0.221	0.263
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	0.16	0.180	0.229
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.02	0.178	0.227
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	0.02	0.304	0.362
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.08	0.225	0.268
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.08	0.001	0.001



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	-0.02	0.079	0.091
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	-0.04	0.098	0.113
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	0.05	0.015	0.017
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	-0.09	0.068	0.078
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	-0.08	0.102	0.117
	Bluetooth	1Mbps	Front	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	-0.09	0.121	0.141
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	-0.19	0.128	0.149
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	-0.05	0.107	0.124
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	0.08	0.007	0.009
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	-0.02	0.150	0.174
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	0	0.062	0.076
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	0	0.127	0.152
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	-0.04	0.074	0.091
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	-0.04	0.169	0.203
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	-0.11	0.023	0.028
	Bluetooth	1Mbps	Left Side	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	-0.11	0.087	0.104
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	0.06	0.075	0.092
	Bluetooth	1Mbps	Right Side	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	0.06	0.020	0.024
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	-0.04	0.105	0.129
	Bluetooth	1Mbps	Top Side	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	-0.04	0.053	0.064
	Bluetooth	1Mbps	Front	10mm	3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.03	0.153	0.205
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.19	0.190	0.255
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.09	0.032	0.043
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.14	0.144	0.193
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.04	0.196	0.263
	Bluetooth	1Mbps	Front	10mm	3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	-0.02	0.305	0.390
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	-0.04	0.320	0.409
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	0.07	0.263	0.336
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	0.01	0.016	0.020
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	-0.07	0.343	0.439
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	-0.09	0.087	0.108
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	-0.09	0.126	0.148
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	-0.05	0.133	0.165
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	-0.05	0.299	0.352
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	0.04	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	0.04	0.080	0.094
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	0.05	0.130	0.161
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	0.05	0.001	0.001
60	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	-0.02	0.219	0.271
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	-0.02	0.450	0.530



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 (4 Tx slots)	Front	10mm	Index 5/6	189	836.4	29.83	30.50	1.167	0.12	0.406	0.474
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 5/6	128	824.2	29.75	30.50	1.189	-0.09	0.463	0.550
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 5/6	251	848.8	29.53	30.50	1.250	-0.1	0.422	0.528
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5/6	189	836.4	29.83	30.50	1.167	-0.05	0.368	0.429
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	Index 5/6	128	824.2	29.16	30.40	1.330	-0.15	0.273	0.363
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5/6	128	824.2	29.16	30.40	1.330	-0.16	0.407	0.541
61	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5/6	189	836.4	28.69	30.40	1.483	-0.05	0.552	0.818
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	Index 5/6	251	848.8	28.42	30.40	1.578	-0.18	0.339	0.535
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 5	512	1850.2	24.30	25.50	1.318	-0.05	0.853	1.124
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 5	661	1880	24.29	25.50	1.321	-0.07	0.835	1.103
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 5	810	1909.8	24.00	25.50	1.413	-0.07	0.638	0.901
62	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 5	512	1850.2	24.30	25.50	1.318	-0.04	0.908	1.197
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 5	661	1880	24.29	25.50	1.321	-0.01	0.904	1.194
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 5	810	1909.8	24.00	25.50	1.413	-0.03	0.667	0.942
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 6	512	1850.2	24.30	24.30	1.000	-0.05	0.853	0.853
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 6	661	1880	24.29	24.30	1.002	-0.07	0.835	0.837
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	Index 6	810	1909.8	24.00	24.30	1.072	-0.07	0.638	0.684
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 6	512	1850.2	24.30	24.30	1.000	-0.04	0.908	0.908
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 6	661	1880	24.29	24.30	1.002	-0.01	0.904	0.906
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	Index 6	810	1909.8	24.00	24.30	1.072	-0.03	0.667	0.715
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 5	810	1909.8	26.30	27.70	1.380	-0.11	0.669	0.923
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5	810	1909.8	26.30	27.70	1.380	-0.12	0.854	1.179
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5	512	1850.2	26.26	27.70	1.393	-0.17	0.636	0.886
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 5	661	1880	26.26	27.70	1.393	-0.13	0.729	1.016
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	Index 6	810	1909.8	26.30	26.50	1.047	-0.11	0.669	0.701
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 6	810	1909.8	26.30	26.50	1.047	-0.12	0.854	0.894
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 6	512	1850.2	26.26	26.50	1.057	-0.17	0.636	0.672
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	Index 6	661	1880	26.26	26.50	1.057	-0.13	0.729	0.770



<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	Index 5	9262	1852.4	21.37	22.60	1.327	-0.16	0.753	1.000
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	Index 5	9400	1880	21.32	22.60	1.343	-0.19	0.750	1.007
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	Index 5	9538	1907.6	21.30	22.60	1.349	-0.12	0.695	0.938
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	9262	1852.4	21.37	22.60	1.327	-0.08	0.883	1.172
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	9400	1880	21.32	22.60	1.343	-0.05	0.873	1.172
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	9538	1907.6	21.30	22.60	1.349	-0.17	0.800	1.079
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	Index 6	9262	1852.4	21.37	21.40	1.007	-0.16	0.753	0.758
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	9262	1852.4	21.37	21.40	1.007	-0.08	0.883	0.889
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	9400	1880	21.32	21.40	1.019	-0.05	0.873	0.889
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	9538	1907.6	21.30	21.40	1.023	-0.17	0.800	0.819
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5	9262	1852.4	22.70	23.90	1.318	-0.19	0.590	0.778
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5	9262	1852.4	22.70	23.90	1.318	-0.07	0.746	0.983
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5	9400	1880	22.69	23.90	1.321	-0.11	0.864	1.142
63	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5	9538	1907.6	22.69	23.90	1.321	-0.07	0.905	1.196
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	Index 6	9262	1852.4	22.70	22.70	1.000	-0.19	0.590	0.590
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 6	9262	1852.4	22.70	22.70	1.000	-0.07	0.746	0.746
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 6	9400	1880	22.69	22.70	1.002	-0.11	0.864	0.866
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	Index 6	9538	1907.6	22.69	22.70	1.002	-0.07	0.905	0.907
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Index 5	1513	1752.6	22.80	24.00	1.318	-0.15	0.741	0.977
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	1312	1712.4	22.75	24.00	1.334	-0.09	0.740	0.987
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	1413	1732.6	22.72	24.00	1.343	-0.08	0.812	1.090
64	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 5	1513	1752.6	22.80	24.00	1.318	-0.05	0.877	1.156
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	Index 6	1513	1752.6	22.80	22.80	1.000	-0.15	0.741	0.741
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	1312	1712.4	22.75	22.80	1.012	-0.09	0.740	0.749
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	1413	1732.6	22.72	22.80	1.019	-0.08	0.812	0.827
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	Index 6	1513	1752.6	22.80	22.80	1.000	-0.05	0.877	0.877
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	1513	1752.6	24.14	24.70	1.138	-0.07	0.443	0.504
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	1513	1752.6	24.14	24.70	1.138	-0.08	0.514	0.585
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	1312	1712.4	24.08	24.70	1.153	-0.03	0.480	0.554
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	1413	1732.6	24.08	24.70	1.153	-0.08	0.464	0.535
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	4132	826.4	24.73	25.00	1.064	-0.06	0.187	0.199
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	4182	836.4	24.72	25.00	1.067	0.01	0.195	0.208
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Index 5/6	4233	846.6	24.64	25.00	1.086	-0.03	0.259	0.281
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Index 5/6	4132	826.4	24.73	25.00	1.064	0.15	0.179	0.190
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	Index 5/6	4182	836.4	24.58	24.90	1.076	0.04	0.226	0.243
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5/6	4182	836.4	24.58	24.90	1.076	0.01	0.341	0.367
65	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5/6	4132	826.4	24.56	24.90	1.081	-0.06	0.349	0.377
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	Index 5/6	4233	846.6	24.43	24.90	1.114	-0.01	0.291	0.324



<FDD 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)
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	21350	2560	20.22	21.50	1.343	-0.14	0.691	0.928
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	20850	2510	20.17	21.50	1.358	-0.13	0.661	0.898
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	21100	2535	20.19	21.50	1.352	-0.03	0.690	0.933
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	Index 5	20850	2510	20.30	21.50	1.318	-0.14	0.662	0.873
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	Index 5	20850	2510	20.24	21.50	1.337	-0.15	0.661	0.883
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	21350	2560	20.22	21.50	1.343	-0.09	0.890	1.195
66	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	20850	2510	20.17	21.50	1.358	-0.06	0.881	1.197
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	21100	2535	20.19	21.50	1.352	-0.03	0.884	1.195
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5	20850	2510	20.30	21.50	1.318	-0.07	0.905	1.193
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5	21100	2535	20.25	21.50	1.334	-0.12	0.896	1.195
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5	21350	2560	20.26	21.50	1.330	-0.04	0.896	1.192
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5	20850	2510	20.24	21.50	1.337	-0.1	0.895	1.196
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	20850+21048	2510	19.93	21.50	1.435	-0.1	0.669	0.960
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	21350	2560	20.22	20.30	1.019	-0.14	0.691	0.704
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	20850	2510	20.17	20.30	1.030	-0.13	0.661	0.681
	LTE Band 7_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	21100	2535	20.19	20.30	1.026	-0.03	0.690	0.708
	LTE Band 7_Ant 2	20M	QPSK	50	50	Front	10mm	Index 6	20850	2510	20.30	20.30	1.000	-0.14	0.662	0.662
	LTE Band 7_Ant 2	20M	QPSK	100	0	Front	10mm	Index 6	20850	2510	20.24	20.30	1.014	-0.15	0.661	0.670
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	21350	2560	20.22	20.30	1.019	-0.09	0.890	0.907
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	20850	2510	20.17	20.30	1.030	-0.06	0.881	0.908
	LTE Band 7_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	21100	2535	20.19	20.30	1.026	-0.03	0.884	0.907
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 6	20850	2510	20.30	20.30	1.000	-0.07	0.905	0.905
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 6	21100	2535	20.25	20.30	1.012	-0.12	0.896	0.906
	LTE Band 7_Ant 2	20M	QPSK	50	50	Back	10mm	Index 6	21350	2560	20.26	20.30	1.009	-0.04	0.896	0.904
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	Index 6	20850	2510	20.24	20.30	1.014	-0.1	0.895	0.907
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	20850+21048	2510	19.93	20.30	1.089	-0.1	0.669	0.728
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	Index 5/6	21100	2535	23.16	24.00	1.213	-0.02	0.351	0.426
	LTE Band 7_Ant 0	20M	QPSK	50	50	Front	10mm	Index 5/6	20850	2510	22.25	23.00	1.189	-0.18	0.277	0.329
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	21100	2535	23.16	24.00	1.213	-0.03	0.378	0.459
	LTE Band 7_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	20850	2510	22.91	24.00	1.285	-0.06	0.359	0.461
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	21350	2560	23.02	24.00	1.253	-0.18	0.399	0.500
	LTE Band 7_Ant 0	20M	QPSK	50	50	Back	10mm	Index 5/6	20850	2510	22.25	23.00	1.189	-0.17	0.288	0.342
	LTE Band 7C_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	20850+21048	2510	22.50	23.00	1.122	-0.02	0.268	0.301
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	23095	707.5	24.37	25.00	1.156	0.06	0.254	0.294
	LTE Band 12_Ant 0	10M	QPSK	25	12	Front	10mm	Index 5/6	23095	707.5	23.43	24.00	1.140	0.01	0.204	0.233
67	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	23095	707.5	24.37	25.00	1.156	-0.04	0.270	0.312
	LTE Band 12_Ant 0	10M	QPSK	25	12	Back	10mm	Index 5/6	23095	707.5	23.43	24.00	1.140	0.01	0.217	0.247
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	Index 5/6	23095	707.5	24.10	24.90	1.202	0.01	0.149	0.179
	LTE Band 12_Ant 1	10M	QPSK	25	25	Front	10mm	Index 5/6	23095	707.5	23.20	23.90	1.175	0.19	0.109	0.128
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5/6	23095	707.5	24.10	24.90	1.202	-0.15	0.194	0.233
	LTE Band 12_Ant 1	10M	QPSK	25	25	Back	10mm	Index 5/6	23095	707.5	23.20	23.90	1.175	0.09	0.142	0.167
68	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	23230	782	24.23	25.00	1.194	-0.04	0.323	0.386
	LTE Band 13_Ant 0	10M	QPSK	25	0	Front	10mm	Index 5/6	23230	782	23.29	24.00	1.178	-0.04	0.267	0.314
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	23230	782	24.23	25.00	1.194	0.06	0.320	0.382
	LTE Band 13_Ant 0	10M	QPSK	25	0	Back	10mm	Index 5/6	23230	782	23.29	24.00	1.178	-0.07	0.266	0.313
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	Index 5/6	23230	782	24.02	24.90	1.225	0.05	0.218	0.267
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	Index 5/6	23230	782	23.11	23.90	1.199	0.11	0.186	0.223
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5/6	23230	782	24.02	24.90	1.225	-0.17	0.271	0.332
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	Index 5/6	23230	782	23.11	23.90	1.199	0.09	0.226	0.271



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 14_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	23330	793	24.30	25.00	1.175	-0.02	0.328	0.385
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	Index 5/6	23330	793	23.31	24.00	1.172	0	0.252	0.295
	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	23330	793	24.30	25.00	1.175	0.04	0.312	0.367
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	Index 5/6	23330	793	23.31	24.00	1.172	0.06	0.214	0.251
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	Index 5/6	23330	793	24.06	24.90	1.213	0.02	0.256	0.311
	LTE Band 14_Ant 1	10M	QPSK	25	0	Front	10mm	Index 5/6	23330	793	23.11	23.90	1.199	0.08	0.232	0.278
69	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5/6	23330	793	24.06	24.90	1.213	-0.11	0.335	0.406
	LTE Band 14_Ant 1	10M	QPSK	25	0	Back	10mm	Index 5/6	23330	793	23.11	23.90	1.199	-0.06	0.276	0.331
	LTE Band 25_Ant 2	20M	QPSK	1	49	Front	10mm	Index 5	26590	1905	21.62	22.90	1.343	-0.06	0.772	1.037
	LTE Band 25_Ant 2	20M	QPSK	1	49	Front	10mm	Index 5	26140	1860	21.61	22.90	1.346	-0.18	0.827	1.113
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5	26340	1880	21.57	22.90	1.358	-0.11	0.833	1.131
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	Index 5	26590	1905	21.70	22.90	1.318	-0.1	0.790	1.041
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	Index 5	26590	1905	21.67	22.90	1.327	-0.12	0.785	1.042
	LTE Band 25_Ant 2	20M	QPSK	1	49	Back	10mm	Index 5	26590	1905	21.62	22.90	1.343	-0.18	0.823	1.105
	LTE Band 25_Ant 2	20M	QPSK	1	49	Back	10mm	Index 5	26140	1860	21.61	22.90	1.346	-0.14	0.878	1.182
70	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	26340	1880	21.57	22.90	1.358	-0.19	0.881	1.197
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	26590	1905	21.70	22.90	1.318	-0.15	0.839	1.106
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	26140	1860	21.70	22.90	1.318	-0.16	0.898	1.184
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	26340	1880	21.69	22.90	1.321	-0.12	0.897	1.185
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5	26590	1905	21.67	22.90	1.327	-0.11	0.834	1.107
	LTE Band 25_Ant 2	20M	QPSK	1	49	Front	10mm	Index 6	26590	1905	21.62	21.70	1.019	-0.06	0.772	0.786
	LTE Band 25_Ant 2	20M	QPSK	1	49	Front	10mm	Index 6	26140	1860	21.61	21.70	1.021	-0.18	0.827	0.844
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	Index 6	26340	1880	21.57	21.70	1.030	-0.11	0.833	0.858
	LTE Band 25_Ant 2	20M	QPSK	50	24	Front	10mm	Index 6	26590	1905	21.70	21.70	1.000	-0.1	0.790	0.790
	LTE Band 25_Ant 2	20M	QPSK	100	0	Front	10mm	Index 6	26590	1905	21.67	21.70	1.007	-0.12	0.785	0.790
	LTE Band 25_Ant 2	20M	QPSK	1	49	Back	10mm	Index 6	26590	1905	21.62	21.70	1.019	-0.18	0.823	0.838
	LTE Band 25_Ant 2	20M	QPSK	1	49	Back	10mm	Index 6	26140	1860	21.61	21.70	1.021	-0.14	0.878	0.896
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	26340	1880	21.57	21.70	1.030	-0.19	0.881	0.908
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	26590	1905	21.70	21.70	1.000	-0.15	0.839	0.839
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	26140	1860	21.70	21.70	1.000	-0.16	0.898	0.898
	LTE Band 25_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	26340	1880	21.69	21.70	1.002	-0.12	0.897	0.899
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	Index 6	26590	1905	21.67	21.70	1.007	-0.11	0.834	0.840
	LTE Band 25_Ant 0	20M	QPSK	1	49	Front	10mm	Index 5	26140	1860	22.26	23.80	1.426	-0.18	0.439	0.626
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5	26140	1860	22.50	23.70	1.318	-0.16	0.474	0.625
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5	26140	1860	22.26	23.80	1.426	-0.18	0.614	0.875
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5	26340	1880	22.25	23.80	1.429	-0.04	0.660	0.943
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5	26590	1905	22.22	23.80	1.439	-0.12	0.744	1.070
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5	26140	1860	22.50	23.70	1.318	-0.06	0.633	0.834
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5	26340	1880	22.37	23.70	1.358	-0.04	0.686	0.932
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5	26590	1905	22.35	23.70	1.365	-0.11	0.754	1.029
	LTE Band 25_Ant 0	20M	QPSK	100	0	Back	10mm	Index 5	26140	1860	22.44	23.70	1.337	-0.02	0.613	0.819
	LTE Band 25_Ant 0	20M	QPSK	1	49	Front	10mm	Index 6	26140	1860	22.36	22.50	1.033	-0.18	0.439	0.453
	LTE Band 25_Ant 0	20M	QPSK	50	24	Front	10mm	Index 6	26140	1860	22.50	22.50	1.000	-0.16	0.474	0.474
	LTE Band 25_Ant 0	20M	QPSK	1	49	Back	10mm	Index 6	26140	1860	22.36	22.50	1.033	-0.18	0.614	0.634
	LTE Band 25_Ant 0	20M	QPSK	50	24	Back	10mm	Index 6	26140	1860	22.50	22.50	1.000	-0.06	0.633	0.633



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	Index 5/6	26865	831.5	24.22	25.00	1.197	-0.15	0.260	0.311
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	Index 5/6	26865	831.5	23.29	24.00	1.178	0.08	0.233	0.274
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	Index 5/6	26865	831.5	24.22	25.00	1.197	-0.07	0.275	0.329
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	Index 5/6	26865	831.5	23.29	24.00	1.178	-0.09	0.227	0.267
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	20575+20476	841.5	22.99	23.00	1.002	-0.04	0.216	0.216
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	Index 5/6	26865	831.5	23.99	24.90	1.233	0.01	0.255	0.314
	LTE Band 26_Ant 1	15M	QPSK	36	39	Front	10mm	Index 5/6	26865	831.5	23.07	23.90	1.211	-0.06	0.214	0.259
71	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	Index 5/6	26865	831.5	23.99	24.90	1.233	-0.04	0.368	0.454
	LTE Band 26_Ant 1	15M	QPSK	36	39	Back	10mm	Index 5/6	26865	831.5	23.07	23.90	1.211	0.03	0.311	0.376
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	Index 5/6	20575+20476	841.5	22.95	23.00	1.012	-0.18	0.270	0.273
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	Index 5	27710	2310	21.08	22.60	1.419	-0.1	0.683	0.969
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	Index 5	27710	2310	21.10	22.60	1.413	-0.1	0.679	0.959
	LTE Band 30_Ant 2	10M	QPSK	50	0	Front	10mm	Index 5	27710	2310	21.11	22.60	1.409	-0.12	0.681	0.960
72	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	Index 5	27710	2310	21.08	22.60	1.419	-0.12	0.783	1.111
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	Index 5	27710	2310	21.10	22.60	1.413	-0.18	0.781	1.103
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	Index 5	27710	2310	21.11	22.60	1.409	-0.13	0.785	1.106
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	Index 6	27710	2310	21.08	21.50	1.102	-0.1	0.683	0.752
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	Index 6	27710	2310	21.10	21.50	1.096	-0.1	0.679	0.745
	LTE Band 30_Ant 2	10M	QPSK	50	0	Front	10mm	Index 6	27710	2310	21.11	21.50	1.094	-0.12	0.681	0.745
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	Index 6	27710	2310	21.08	21.50	1.102	-0.12	0.783	0.863
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	Index 6	27710	2310	21.10	21.50	1.096	-0.18	0.781	0.856
	LTE Band 30_Ant 2	10M	QPSK	50	0	Back	10mm	Index 6	27710	2310	21.11	21.50	1.094	-0.13	0.785	0.859
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	Index 5/6	27710	2310	23.72	24.40	1.169	-0.05	0.413	0.483
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	Index 5/6	27710	2310	22.75	23.40	1.161	-0.09	0.335	0.389
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	Index 5/6	27710	2310	23.72	24.40	1.169	-0.05	0.485	0.567
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	Index 5/6	27710	2310	22.75	23.40	1.161	-0.13	0.324	0.376



FCC SAR TEST REPORT

Report No. : FA0D2942-04C

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	49	Front	10mm	Index 5	132572	1770	22.40	23.60	1.318	-0.15	0.742	0.978
	LTE Band 66_Ant 2	20M	QPSK	1	49	Front	10mm	Index 5	132072	1720	22.39	23.60	1.321	-0.18	0.617	0.815
	LTE Band 66_Ant 2	20M	QPSK	1	49	Front	10mm	Index 5	132322	1745	22.38	23.60	1.324	-0.17	0.671	0.889
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 5	132572	1770	22.33	23.60	1.340	-0.14	0.772	1.034
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 5	132072	1720	22.26	23.60	1.361	-0.18	0.625	0.851
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 5	132322	1745	22.25	23.60	1.365	-0.17	0.688	0.939
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	Index 5	132572	1770	22.24	23.60	1.368	-0.15	0.758	1.037
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 5	132572	1770	22.40	23.60	1.318	-0.18	0.753	0.993
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 5	132072	1720	22.39	23.60	1.321	0.02	0.546	0.721
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 5	132322	1745	22.38	23.60	1.324	0.01	0.604	0.800
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	132572	1770	22.33	23.60	1.340	-0.13	0.781	1.046
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	132072	1720	22.26	23.60	1.361	-0.17	0.721	0.982
73	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	132322	1745	22.25	23.60	1.365	-0.17	0.783	1.068
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5	132572	1770	22.24	23.60	1.368	-0.13	0.769	1.052
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Back	10mm	Index 5	132047+132140	1717.5	22.99	23.00	1.002	-0.17	0.865	0.867
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	132572+132374	1770	22.99	23.00	1.002	-0.15	1.030	1.032
	LTE Band 66_Ant 2	20M	QPSK	1	49	Front	10mm	Index 6	132572	1770	22.40	22.40	1.000	-0.15	0.742	0.742
	LTE Band 66_Ant 2	20M	QPSK	1	49	Front	10mm	Index 6	132072	1720	22.39	22.40	1.002	-0.18	0.617	0.618
	LTE Band 66_Ant 2	20M	QPSK	1	49	Front	10mm	Index 6	132322	1745	22.38	22.40	1.005	-0.17	0.671	0.674
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 6	132572	1770	22.33	22.40	1.016	-0.14	0.772	0.785
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 6	132072	1720	22.26	22.40	1.033	-0.18	0.625	0.645
	LTE Band 66_Ant 2	20M	QPSK	50	24	Front	10mm	Index 6	132322	1745	22.25	22.40	1.035	-0.17	0.688	0.712
	LTE Band 66_Ant 2	20M	QPSK	100	0	Front	10mm	Index 6	132572	1770	22.24	22.40	1.038	-0.15	0.758	0.786
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 6	132572	1770	22.40	22.40	1.000	-0.18	0.753	0.753
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 6	132072	1720	22.39	22.40	1.002	0.02	0.546	0.547
	LTE Band 66_Ant 2	20M	QPSK	1	49	Back	10mm	Index 6	132322	1745	22.38	22.40	1.005	0.01	0.604	0.607
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	132572	1770	22.33	22.40	1.016	-0.13	0.781	0.794
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	132072	1720	22.26	22.40	1.033	-0.17	0.721	0.745
	LTE Band 66_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	132322	1745	22.25	22.40	1.035	-0.17	0.783	0.811
	LTE Band 66_Ant 2	20M	QPSK	100	0	Back	10mm	Index 6	132572	1770	22.24	22.40	1.038	-0.13	0.769	0.798
	LTE Band 66B_Ant 2	15M	QPSK	1	0	Back	10mm	Index 6	132322+132229	1745	21.31	22.40	1.285	-0.14	0.640	0.823
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	132572+132374	1770	21.42	22.40	1.253	-0.04	0.718	0.900
	LTE Band 66_Ant 0	20M	QPSK	1	49	Front	10mm	Index 5/6	132072	1720	23.84	24.70	1.219	0.13	0.301	0.367
	LTE Band 66_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5/6	132072	1720	22.86	23.70	1.213	-0.01	0.253	0.307
	LTE Band 66_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	132072	1720	23.84	24.70	1.219	0.05	0.393	0.479
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	132322	1745	23.68	24.70	1.265	-0.02	0.418	0.529
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	132572	1770	23.55	24.70	1.303	0.05	0.391	0.510
	LTE Band 66_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5/6	132072	1720	22.86	23.70	1.213	0	0.330	0.400
	LTE Band 66B_Ant 0	15M	QPSK	1	0	Back	10mm	Index 5/6	132322+132229	1745	22.61	23.00	1.094	-0.15	0.407	0.445
	LTE Band 66C_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	132072+132270	1720	22.59	23.00	1.099	0.06	0.437	0.480
74	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	Index 5/6	133322	683	24.35	25.00	1.161	-0.09	0.294	0.341
	LTE Band 71_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5/6	133322	683	23.38	24.00	1.153	0.06	0.230	0.265
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	Index 5/6	133322	683	24.35	25.00	1.161	-0.08	0.287	0.333
	LTE Band 71_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5/6	133322	683	23.38	24.00	1.153	0	0.218	0.251
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	Index 5/6	133322	683	24.08	24.90	1.208	0.12	0.143	0.173
	LTE Band 71_Ant 1	20M	QPSK	50	24	Front	10mm	Index 5/6	133322	683	23.11	23.90	1.199	0.06	0.130	0.156
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	Index 5/6	133322	683	24.08	24.90	1.208	-0.08	0.164	0.198
	LTE Band 71_Ant 1	20M	QPSK	50	24	Back	10mm	Index 5/6	133322	683	23.11	23.90	1.199	-0.05	0.160	0.192



<TDD 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	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	40185	2549.5	22.78	23.40	1.153	62.9	1.006	-0.19	0.721	0.837
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	39750	2506	22.76	23.40	1.159	62.9	1.006	-0.16	0.675	0.787
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	40620	2593	22.72	23.40	1.169	62.9	1.006	-0.18	0.604	0.711
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 5	41055	2636.5	22.65	23.40	1.189	62.9	1.006	-0.13	0.512	0.612
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5	41490	2680	22.56	23.40	1.213	62.9	1.006	-0.08	0.547	0.668
	LTE Band 41_Ant 2	20M	QPSK	50	50	Front	10mm	Index 5	39750	2506	22.30	22.90	1.148	62.9	1.006	-0.08	0.614	0.709
	LTE Band 41_Ant 2	20M	QPSK	100	0	Front	10mm	Index 5	39750	2506	22.30	22.90	1.148	62.9	1.006	-0.09	0.608	0.702
75	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	40185	2549.5	22.78	23.40	1.153	62.9	1.006	-0.06	0.798	0.926
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	39750	2506	22.76	23.40	1.159	62.9	1.006	-0.04	0.786	0.916
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	40620	2593	22.72	23.40	1.169	62.9	1.006	-0.12	0.715	0.841
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	41055	2636.5	22.65	23.40	1.189	62.9	1.006	-0.06	0.620	0.741
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	41490	2680	22.56	23.40	1.213	62.9	1.006	-0.12	0.673	0.822
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	Index 5	39750	2506	22.30	22.90	1.148	62.9	1.006	-0.04	0.722	0.834
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	40185	2549.5	22.27	22.90	1.156	62.9	1.006	-0.03	0.755	0.878
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	40620	2593	22.27	22.90	1.156	62.9	1.006	-0.16	0.673	0.783
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	41055	2636.5	22.18	22.90	1.180	62.9	1.006	-0.1	0.561	0.666
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5	41490	2680	22.08	22.90	1.208	62.9	1.006	-0.15	0.602	0.731
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	Index 5	39750	2506	22.30	22.90	1.148	62.9	1.006	-0.13	0.712	0.822
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	99	Back	10mm	Index 5	40185	2549.5	24.56	25.00	1.107	42.9	1.009	-0.05	0.759	0.847
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5	40620+40422	2593	22.99	23.00	1.002	62.9	1.006	-0.12	0.774	0.780
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	40185	2549.5	22.78	23.20	1.102	62.9	1.006	-0.19	0.721	0.799
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	39750	2506	22.76	23.20	1.107	62.9	1.006	-0.16	0.675	0.751
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	40620	2593	22.72	23.20	1.117	62.9	1.006	-0.18	0.604	0.679
	LTE Band 41_Ant 2	20M	QPSK	1	99	Front	10mm	Index 6	41055	2636.5	22.65	23.20	1.135	62.9	1.006	-0.13	0.512	0.585
	LTE Band 41_Ant 2	20M	QPSK	1	0	Front	10mm	Index 6	41490	2680	22.56	23.20	1.159	62.9	1.006	-0.08	0.547	0.638
	LTE Band 41_Ant 2	20M	QPSK	50	50	Front	10mm	Index 6	39750	2506	22.30	22.70	1.096	62.9	1.006	-0.08	0.614	0.677
	LTE Band 41_Ant 2	20M	QPSK	100	0	Front	10mm	Index 6	39750	2506	22.30	22.70	1.096	62.9	1.006	-0.09	0.608	0.671
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	40185	2549.5	22.78	23.20	1.102	62.9	1.006	-0.06	0.798	0.884
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	39750	2506	22.76	23.20	1.107	62.9	1.006	-0.04	0.786	0.875
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	40620	2593	22.72	23.20	1.117	62.9	1.006	-0.12	0.715	0.803
	LTE Band 41_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	41055	2636.5	22.65	23.20	1.135	62.9	1.006	-0.06	0.620	0.708
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	41490	2680	22.56	23.20	1.159	62.9	1.006	-0.12	0.673	0.785
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	Index 6	39750	2506	22.30	22.70	1.096	62.9	1.006	-0.04	0.722	0.796
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	40185	2549.5	22.27	22.70	1.104	62.9	1.006	-0.03	0.755	0.839
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	40620	2593	22.27	22.70	1.104	62.9	1.006	-0.16	0.673	0.748
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	41055	2636.5	22.18	22.70	1.127	62.9	1.006	-0.1	0.561	0.636
	LTE Band 41_Ant 2	20M	QPSK	50	24	Back	10mm	Index 6	41490	2680	22.08	22.70	1.153	62.9	1.006	-0.15	0.602	0.699
	LTE Band 41_Ant 2	20M	QPSK	100	0	Back	10mm	Index 6	39750	2506	22.30	22.70	1.096	62.9	1.006	-0.13	0.712	0.785
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	99	Back	10mm	Index 6	40185	2549.5	24.56	24.80	1.057	42.9	1.009	-0.05	0.759	0.809
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Back	10mm	Index 6	40620+40422	2593	22.99	23.00	1.002	62.9	1.006	-0.12	0.774	0.780



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 0	20M	QPSK	1	99	Front	10mm	Index 5/6	40185	2549.5	22.75	23.20	1.109	62.9	1.006	-0.06	0.206	0.230
	LTE Band 41_Ant 0	20M	QPSK	50	24	Front	10mm	Index 5/6	40185	2549.5	21.86	22.20	1.081	62.9	1.006	-0.15	0.164	0.178
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	40185	2549.5	22.75	23.20	1.109	62.9	1.006	0.02	0.293	0.327
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	39790	2510	22.73	23.20	1.114	62.9	1.006	-0.19	0.248	0.278
	LTE Band 41_Ant 0	20M	QPSK	1	49	Back	10mm	Index 5/6	39750	2506	22.73	23.20	1.114	62.9	1.006	-0.14	0.238	0.267
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	40620	2593	22.50	23.20	1.175	62.9	1.006	-0.03	0.203	0.240
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	41055	2636.5	22.30	23.20	1.230	62.9	1.006	-0.19	0.251	0.311
	LTE Band 41_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	41490	2680	22.32	23.20	1.225	62.9	1.006	-0.05	0.255	0.314
	LTE Band 41_Ant 0	20M	QPSK	50	24	Back	10mm	Index 5/6	40185	2549.5	21.86	22.20	1.081	62.9	1.006	-0.04	0.251	0.273
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	99	Back	10mm	Index 5/6	40185	2549.5	25.66	26.50	1.213	42.9	1.009	0.09	0.387	0.474
	LTE Band 41C_Ant 0	20M	QPSK	1	99	Back	0mm	Index 5/6	39750+39948	2506	22.49	23.00	1.125	62.9	1.006	0.02	0.322	0.364
	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	Index 5/6	56640	3690	23.28	24.00	1.180	62.9	1.006	-0.16	0.426	0.506
	LTE Band 48_Ant 6	20M	QPSK	50	0	Front	10mm	Index 5/6	56640	3690	22.30	23.00	1.175	62.9	1.006	-0.1	0.366	0.433
76	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5/6	56640	3690	23.28	24.00	1.180	62.9	1.006	0.06	0.435	0.517
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5/6	55340	3560	23.11	24.00	1.227	62.9	1.006	-0.05	0.402	0.496
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5/6	55830	3609	23.13	24.00	1.222	62.9	1.006	-0.05	0.403	0.495
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	Index 5/6	56150	3641	23.21	24.00	1.199	62.9	1.006	0	0.390	0.471
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	Index 5/6	56640	3690	22.30	23.00	1.175	62.9	1.006	0.08	0.349	0.412
	LTE Band 48_Ant 2	20M	QPSK	1	0	Front	10mm	Index 5/6	56640	3690	23.15	24.50	1.365	62.9	1.006	-0.13	0.320	0.439
	LTE Band 48_Ant 2	20M	QPSK	50	24	Front	10mm	Index 5/6	56640	3690	22.29	23.50	1.321	62.9	1.006	-0.14	0.264	0.351
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	56640	3690	23.15	24.50	1.365	62.9	1.006	-0.17	0.326	0.448
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	55340	3560	23.14	24.50	1.368	62.9	1.006	-0.04	0.290	0.399
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	55830	3609	23.00	24.50	1.413	62.9	1.006	-0.08	0.258	0.367
	LTE Band 48_Ant 2	20M	QPSK	1	0	Back	10mm	Index 5/6	56150	3641	22.92	24.50	1.439	62.9	1.006	-0.08	0.260	0.376
	LTE Band 48_Ant 2	20M	QPSK	50	24	Back	10mm	Index 5/6	56640	3690	22.29	23.50	1.321	62.9	1.006	-0.09	0.242	0.322



<5G NR SAR>

Table with columns: 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). Rows include data for Plot No. 77, 78, and 79 across various antenna configurations.



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 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 5	372000	1860	22.30	22.30	1.000	-0.03	0.984	0.984
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 5	376500	1882.5	22.23	22.30	1.016	-0.08	0.980	0.996
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 5	381000	1905	22.29	22.30	1.002	-0.02	0.921	0.923
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 5	372000	1860	22.29	22.30	1.002	-0.07	0.915	0.917
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 5	376500	1882.5	22.22	22.30	1.019	-0.01	0.935	0.952
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 5	381000	1905	22.16	22.30	1.033	-0.06	0.871	0.900
	FR1 n25_Ant 2	20M	BPSK	100	0	Front	10mm	Index 5	381000	1905	22.14	22.30	1.038	-0.13	0.870	0.903
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 5	372000	1860	22.30	22.30	1.000	-0.06	1.110	1.110
80	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 5	376500	1882.5	22.23	22.30	1.016	-0.05	1.150	1.169
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 5	381000	1905	22.29	22.30	1.002	-0.12	1.070	1.072
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5	372000	1860	22.29	22.30	1.002	-0.07	1.070	1.072
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5	376500	1882.5	22.22	22.30	1.019	0.05	1.030	1.049
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 5	381000	1905	22.16	22.30	1.033	-0.04	0.917	0.947
	FR1 n25_Ant 2	20M	BPSK	100	0	Back	10mm	Index 5	372000	1860	22.29	22.30	1.002	0.03	1.080	1.082
	FR1 n25_Ant 2	20M	BPSK	1	53	Front	10mm	Index 6	372000	1860	21.10	21.10	1.000	-0.01	0.775	0.775
	FR1 n25_Ant 2	20M	BPSK	50	28	Front	10mm	Index 6	372000	1860	21.10	21.10	1.000	-0.07	0.752	0.752
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 6	372000	1860	21.10	21.10	1.000	0.12	0.869	0.869
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 6	376500	1882.5	21.02	21.10	1.019	0.18	0.893	0.910
	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index 6	381000	1905	21.00	21.10	1.023	0.04	0.817	0.836
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 6	372000	1860	21.10	21.10	1.000	-0.04	0.827	0.827
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 6	376500	1882.5	21.09	21.10	1.002	-0.05	0.844	0.846
	FR1 n25_Ant 2	20M	BPSK	50	28	Back	10mm	Index 6	381000	1905	21.10	21.10	1.000	0.17	0.794	0.794
	FR1 n25_Ant 2	20M	BPSK	100	0	Back	10mm	Index 6	372000	1860	21.02	21.10	1.019	-0.07	0.815	0.830
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5	372000	1860	23.10	23.90	1.202	-0.14	0.682	0.820
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5	376500	1882.5	22.90	23.90	1.259	0.03	0.657	0.827
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5	381000	1905	23.00	23.90	1.230	-0.1	0.710	0.873
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5	372000	1860	23.04	23.90	1.219	-0.06	0.704	0.858
	FR1 n25_Ant 0	20M	BPSK	50	56	Front	10mm	Index 5	376500	1882.5	22.85	23.90	1.274	-0.14	0.636	0.810
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5	381000	1905	22.77	23.90	1.297	-0.05	0.690	0.895
	FR1 n25_Ant 0	20M	BPSK	100	0	Front	10mm	Index 5	372000	1860	22.91	23.90	1.256	-0.19	0.590	0.741
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5	372000	1860	23.10	23.90	1.202	-0.04	0.725	0.872
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5	376500	1882.5	22.90	23.90	1.259	-0.09	0.759	0.956
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5	381000	1905	23.00	23.90	1.230	-0.07	0.803	0.988
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5	372000	1860	23.04	23.90	1.219	-0.03	0.660	0.805
	FR1 n25_Ant 0	20M	BPSK	50	56	Back	10mm	Index 5	376500	1882.5	22.85	23.90	1.274	-0.06	0.729	0.928
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5	381000	1905	22.77	23.90	1.297	-0.09	0.801	1.039
	FR1 n25_Ant 0	20M	BPSK	100	0	Back	10mm	Index 5	372000	1860	22.91	23.90	1.256	-0.01	0.687	0.863
	FR1 n25_Ant 0	20M	BPSK	1	53	Front	10mm	Index 6	372000	1860	22.20	22.70	1.122	0.15	0.479	0.537
	FR1 n25_Ant 0	20M	BPSK	50	28	Front	10mm	Index 6	372000	1860	22.09	22.70	1.151	0.09	0.474	0.545
	FR1 n25_Ant 0	20M	BPSK	1	53	Back	10mm	Index 6	372000	1860	22.20	22.70	1.122	-0.05	0.565	0.634
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 6	372000	1860	22.09	22.70	1.151	-0.03	0.558	0.642
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 6	376500	1882.5	21.90	22.70	1.202	-0.14	0.545	0.655
	FR1 n25_Ant 0	20M	BPSK	50	28	Back	10mm	Index 6	381000	1905	21.81	22.70	1.227	-0.01	0.651	0.799



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 n30_Ant 2	10M	BPSK	1	26	Front	10mm	Index 5	462000	2310	22.80	22.80	1.000	-0.01	0.935	0.935
	FR1 n30_Ant 2	10M	BPSK	25	14	Front	10mm	Index 5	462000	2310	22.67	22.80	1.030	-0.1	0.921	0.949
81	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index 5	462000	2310	22.80	22.80	1.000	0.02	1.120	1.120
	FR1 n30_Ant 2	10M	BPSK	25	14	Back	10mm	Index 5	462000	2310	22.67	22.80	1.030	-0.03	1.080	1.113
	FR1 n30_Ant 2	10M	BPSK	50	0	Back	10mm	Index 5	462000	2310	22.68	22.80	1.028	-0.03	1.070	1.100
	FR1 n30_Ant 2	10M	BPSK	1	26	Front	10mm	Index 6	462000	2310	21.60	21.60	1.000	-0.08	0.710	0.710
	FR1 n30_Ant 2	10M	BPSK	25	14	Front	10mm	Index 6	462000	2310	21.56	21.60	1.009	-0.08	0.686	0.692
	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index 6	462000	2310	21.60	21.60	1.000	-0.05	0.906	0.906
	FR1 n30_Ant 2	10M	BPSK	25	14	Back	10mm	Index 6	462000	2310	21.56	21.60	1.009	-0.07	0.897	0.905
	FR1 n30_Ant 2	10M	BPSK	50	0	Back	10mm	Index 6	462000	2310	21.55	21.60	1.012	-0.05	0.882	0.892
	FR1 n30_Ant 0	10M	BPSK	1	26	Front	10mm	Index 5/6	462000	2310	23.38	24.40	1.265	0.08	0.295	0.373
	FR1 n30_Ant 0	10M	BPSK	25	14	Front	10mm	Index 5/6	462000	2310	23.25	24.40	1.303	0.04	0.309	0.403
	FR1 n30_Ant 0	10M	BPSK	1	26	Back	10mm	Index 5/6	462000	2310	23.38	24.40	1.265	0.02	0.343	0.434
	FR1 n30_Ant 0	10M	BPSK	25	14	Back	10mm	Index 5/6	462000	2310	23.25	24.40	1.303	-0.02	0.350	0.456
	FR1 n66_Ant 2	40M	BPSK	1	108	Front	10mm	Index 5	349000	1745	23.47	24.70	1.327	-0.15	0.745	0.989
	FR1 n66_Ant 2	40M	BPSK	108	54	Front	10mm	Index 5	349000	1745	23.31	24.70	1.377	-0.11	0.733	1.009
82	FR1 n66_Ant 2	40M	BPSK	1	108	Back	10mm	Index 5	349000	1745	23.47	24.70	1.327	-0.03	0.803	1.066
	FR1 n66_Ant 2	40M	BPSK	108	54	Back	10mm	Index 5	349000	1745	23.31	24.70	1.377	-0.02	0.772	1.063
	FR1 n66_Ant 2	40M	BPSK	216	0	Back	10mm	Index 5	349000	1745	23.06	24.20	1.300	-0.02	0.742	0.965
	FR1 n66_Ant 2	40M	BPSK	1	108	Front	10mm	Index 6	349000	1745	23.47	23.50	1.007	-0.15	0.745	0.750
	FR1 n66_Ant 2	40M	BPSK	108	54	Front	10mm	Index 6	349000	1745	23.31	23.50	1.045	-0.11	0.733	0.766
	FR1 n66_Ant 2	40M	BPSK	1	108	Back	10mm	Index 6	349000	1745	23.47	23.50	1.007	-0.03	0.803	0.809
	FR1 n66_Ant 2	40M	BPSK	108	54	Back	10mm	Index 6	349000	1745	23.31	23.50	1.045	-0.02	0.772	0.807
	FR1 n66_Ant 2	40M	BPSK	216	0	Back	10mm	Index 6	349000	1745	23.06	23.50	1.107	-0.02	0.742	0.821
	FR1 n66_Ant 0	40M	BPSK	1	108	Front	10mm	Index 5/6	349000	1745	24.21	24.70	1.119	0.02	0.376	0.421
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	Index 5/6	349000	1745	24.05	24.70	1.161	-0.03	0.369	0.429
	FR1 n66_Ant 0	40M	BPSK	1	108	Back	10mm	Index 5/6	349000	1745	24.21	24.70	1.119	-0.05	0.483	0.541
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	Index 5/6	349000	1745	24.05	24.70	1.161	-0.01	0.476	0.553
	FR1 n71_Ant 0	20M	BPSK	1	53	Front	10mm	Index 5/6	136100	680.5	24.80	25.00	1.047	-0.09	0.215	0.225
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	Index 5/6	136100	680.5	24.69	25.00	1.074	0.18	0.209	0.224
	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	Index 5/6	136100	680.5	24.80	25.00	1.047	0.02	0.204	0.214
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	Index 5/6	136100	680.5	24.69	25.00	1.074	0.04	0.200	0.215
	FR1 n71_Ant 1	20M	BPSK	1	53	Front	10mm	Index 5/6	136100	680.5	24.01	24.90	1.227	0.09	0.147	0.180
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	Index 5/6	136100	680.5	23.87	24.90	1.268	0.06	0.146	0.185
83	FR1 n71_Ant 1	20M	BPSK	1	53	Back	10mm	Index 5/6	136100	680.5	24.01	24.90	1.227	-0.08	0.187	0.230
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	Index 5/6	136100	680.5	23.87	24.90	1.268	0.15	0.176	0.223
	FR1 n41_Ant 5	100M	BPSK	1	137	Front	10mm	Index 5/6	518598	2592.99	20.95	22.00	1.274	-0.13	0.369	0.470
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	Index 5/6	518598	2592.99	20.88	22.00	1.294	-0.06	0.390	0.505
	FR1 n41_Ant 5	100M	BPSK	1	137	Back	10mm	Index 5/6	518598	2592.99	20.95	22.00	1.274	0	0.463	0.590
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	Index 5/6	518598	2592.99	20.88	22.00	1.294	-0.02	0.488	0.632
	FR1 n41 HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	Index 5/6	518598	2592.99	24.52	25.00	1.117	-0.11	0.543	0.606
	FR1 n41_Ant 1	100M	BPSK	1	271	Front	10mm	Index 5/6	518598	2592.99	24.52	25.40	1.225	-0.07	0.383	0.469
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Index 5/6	518598	2592.99	23.72	25.40	1.472	-0.11	0.453	0.667
	FR1 n41_Ant 1	100M	BPSK	1	271	Back	10mm	Index 5/6	518598	2592.99	24.52	25.40	1.225	-0.05	0.478	0.585
84	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Index 5/6	518598	2592.99	23.72	25.40	1.472	-0.1	0.491	0.723
	FR1 n41 HPUE_Ant 1	100M	BPSK	135	69	Back	10mm	Index 5/6	518598	2592.99	25.80	27.40	1.445	-0.05	0.413	0.597



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	Index 5/6	656000	3840	22.51	22.80	1.069	-0.18	0.473	0.506
	FR1 n77_Ant 6	100M	BPSK	135	138	Front	10mm	Index 5/6	656000	3840	22.31	22.80	1.119	-0.02	0.411	0.460
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	Index 5/6	656000	3840	22.51	22.80	1.069	0.07	0.641	0.685
	FR1 n77_Ant 6	100M	BPSK	135	138	Back	10mm	Index 5/6	656000	3840	22.31	22.80	1.119	-0.1	0.516	0.578
	FR1 n77_HPUE_Ant 6	100M	BPSK	1	1	Back	10mm	Index 5/6	656000	3840	24.40	25.80	1.380	0.04	0.449	0.620
	FR1 n77_Ant 6	100M	BPSK	1	137	Front	10mm	Index 5/6	633332	3499.98	22.23	22.80	1.140	-0.12	0.612	0.698
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	Index 5/6	633332	3499.98	22.02	22.80	1.197	0	0.601	0.719
	FR1 n77_Ant 6	100M	BPSK	1	137	Back	10mm	Index 5/6	633332	3499.98	22.23	22.80	1.140	-0.1	0.480	0.547
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	Index 5/6	633332	3499.98	22.02	22.80	1.197	-0.07	0.457	0.547
	FR1 n77_HPUE_Ant 6	100M	BPSK	135	69	Front	10mm	Index 5/6	633332	3499.98	23.98	25.80	1.521	0.02	0.467	0.710
	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	Index 5/6	656000	3840	22.86	23.10	1.057	-0.17	0.323	0.341
	FR1 n77_Ant 2	100M	BPSK	135	0	Front	10mm	Index 5/6	656000	3840	22.68	23.10	1.102	-0.14	0.308	0.339
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	Index 5/6	656000	3840	22.86	23.10	1.057	-0.1	0.306	0.323
	FR1 n77_Ant 2	100M	BPSK	135	0	Back	10mm	Index 5/6	656000	3840	22.68	23.10	1.102	0.06	0.305	0.336
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Front	10mm	Index 5/6	656000	3840	25.91	26.10	1.045	-0.06	0.418	0.437
85	FR1 n77_Ant 2	100M	BPSK	1	1	Front	10mm	Index 5/6	633332	3499.98	22.03	23.10	1.279	0.05	0.574	0.734
	FR1 n77_Ant 2	100M	BPSK	135	0	Front	10mm	Index 5/6	633332	3499.98	21.96	23.10	1.300	-0.09	0.563	0.732
	FR1 n77_Ant 2	100M	BPSK	1	1	Back	10mm	Index 5/6	633332	3499.98	22.03	23.10	1.279	0.05	0.495	0.633
	FR1 n77_Ant 2	100M	BPSK	135	0	Back	10mm	Index 5/6	633332	3499.98	21.96	23.10	1.300	0	0.473	0.615
	FR1 n77_HPUE_Ant 2	100M	BPSK	1	1	Front	10mm	Index 5/6	633332	3499.98	26.00	26.10	1.023	0.02	0.657	0.672



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5	Ant 4+3(4)	6	2437	21.45	21.50	1.012	98.90	1.011	-0.06	0.306	0.313
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5	Ant 4+3(3)	6	2437	21.05	21.50	1.109	98.90	1.011	-0.06	0.789	0.885
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5	Ant 4+3(4)	1	2412	21.45	21.50	1.012	98.90	1.011	-0.07	0.126	0.129
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5	Ant 4+3(3)	1	2412	21.05	21.50	1.109	98.90	1.011	-0.07	0.691	0.775
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5	Ant 4+3(4)	11	2462	21.45	21.50	1.012	98.90	1.011	-0.07	0.416	0.425
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5	Ant 4+3(3)	11	2462	21.05	21.50	1.109	98.90	1.011	-0.07	0.978	1.097
86	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	6	2437	21.45	21.50	1.012	98.90	1.011	-0.1	0.605	0.619
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	6	2437	21.05	21.50	1.109	98.90	1.011	-0.1	0.994	1.115
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	1	2412	21.45	21.50	1.012	98.90	1.011	-0.06	0.578	0.591
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	1	2412	21.05	21.50	1.109	98.90	1.011	-0.06	0.756	0.848
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	11	2462	21.45	21.50	1.012	98.90	1.011	-0.06	0.427	0.437
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	11	2462	21.05	21.50	1.109	98.90	1.011	-0.06	0.986	1.106
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	12	2467	21.45	21.50	1.012	98.90	1.011	-0.05	0.438	0.448
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	12	2467	21.15	21.50	1.084	98.90	1.011	-0.05	0.998	1.094
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(4)	13	2472	20.85	21.00	1.035	98.90	1.011	-0.17	0.657	0.688
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5	Ant 4+3(3)	13	2472	20.75	21.00	1.059	98.90	1.011	-0.17	0.965	1.033
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	6	Ant 4+3(4)	6	2437	17.50	17.50	1.000	98.90	1.011	-0.08	0.157	0.159
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	6	Ant 4+3(3)	6	2437	17.25	17.50	1.059	98.90	1.011	-0.08	0.392	0.420
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	6	2437	17.50	17.50	1.000	98.90	1.011	-0.17	0.272	0.275
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	6	2437	17.25	17.50	1.059	98.90	1.011	-0.17	0.419	0.449
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	1	2412	17.15	17.50	1.084	98.90	1.011	-0.12	0.182	0.199
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	1	2412	16.75	17.50	1.189	98.90	1.011	-0.12	0.402	0.483
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	11	2462	17.45	17.50	1.012	98.90	1.011	-0.13	0.197	0.201
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	11	2462	17.05	17.50	1.109	98.90	1.011	-0.13	0.451	0.506
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	12	2467	17.35	17.50	1.035	98.90	1.011	-0.09	0.312	0.327
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	12	2467	17.05	17.50	1.109	98.90	1.011	-0.09	0.429	0.481
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(4)	13	2472	17.35	17.50	1.035	98.90	1.011	-0.01	0.209	0.219
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	6	Ant 4+3(3)	13	2472	17.05	17.50	1.109	98.90	1.011	-0.01	0.509	0.571
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.09	0.143	0.182
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.09	0.360	0.474
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	6	2437	17.50	18.50	1.259	98.90	1.011	-0.03	0.270	0.344
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	6	2437	17.35	18.50	1.303	98.90	1.011	-0.03	0.447	0.589
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	1	2412	17.15	18.50	1.365	98.90	1.011	-0.1	0.165	0.228
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	1	2412	16.75	18.50	1.496	98.90	1.011	-0.1	0.358	0.542
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	11	2462	17.45	18.50	1.274	98.90	1.011	-0.13	0.197	0.254
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	11	2462	17.35	18.50	1.303	98.90	1.011	-0.13	0.451	0.594
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	12	2467	17.35	18.50	1.303	98.90	1.011	-0.02	0.315	0.415
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	12	2467	17.15	18.50	1.365	98.90	1.011	-0.02	0.429	0.592
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(4)	13	2472	17.35	18.50	1.303	98.90	1.011	-0.09	0.301	0.397
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4+3(3)	13	2472	17.15	18.50	1.365	98.90	1.011	-0.09	0.425	0.586
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	-0.19	0.044	0.046
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	-0.19	0.112	0.123
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	6	2437	13.35	13.50	1.035	98.90	1.011	0.02	0.075	0.078
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	6	2437	13.15	13.50	1.084	98.90	1.011	0.02	0.158	0.173
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	1	2412	13.15	13.50	1.084	98.90	1.011	-0.1	0.094	0.103
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	1	2412	12.65	13.50	1.216	98.90	1.011	-0.1	0.127	0.156
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	11	2462	13.35	13.50	1.035	98.90	1.011	-0.02	0.067	0.070
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	11	2462	12.85	13.50	1.161	98.90	1.011	-0.02	0.148	0.174
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	12	2467	13.25	13.50	1.059	98.90	1.011	-0.12	0.072	0.077
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	12	2467	13.10	13.50	1.096	98.90	1.011	-0.12	0.164	0.182
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(4)	13	2472	13.35	13.50	1.035	98.90	1.011	-0.08	0.107	0.112
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4+3(3)	13	2472	13.05	13.50	1.109	98.90	1.011	-0.08	0.160	0.179



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
87	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.13	0.355	0.370
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.13	0.656	0.691
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.15	0.406	0.423
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.15	0.721	0.759
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	-0.06	0.203	0.216
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.06	0.370	0.399
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	-0.11	0.248	0.264
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.11	0.497	0.536
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	9	Ant 4+3(4)	54	5270	15.90	16.50	1.148	96.10	1.041	-0.14	0.052	0.062
	WLAN5GHz	802.11n-HT40 MCS0	Front	10mm	9	Ant 4+3(3)	54	5270	15.80	16.50	1.175	96.10	1.041	-0.14	0.099	0.121
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(4)	54	5270	15.90	16.50	1.148	96.10	1.041	-0.14	0.166	0.198
	WLAN5GHz	802.11n-HT40 MCS0	Back	10mm	9	Ant 4+3(3)	54	5270	15.80	16.50	1.175	96.10	1.041	-0.14	0.352	0.431
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	8	Ant 4+3(4)	50	5250	15.10	15.50	1.096	86.90	1.151	-0.12	0.059	0.074
	WLAN5GHz	802.11ac-VHT160 MCS0	Front	10mm	8	Ant 4+3(3)	50	5250	15.14	15.50	1.086	86.90	1.151	-0.12	0.104	0.130
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	8	Ant 4+3(4)	50	5250	15.10	15.50	1.096	86.90	1.151	-0.1	0.115	0.145
	WLAN5GHz	802.11ac-VHT160 MCS0	Back	10mm	8	Ant 4+3(3)	50	5250	15.14	15.50	1.086	86.90	1.151	-0.1	0.059	0.074
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	-0.02	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.02	0.379	0.456
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	-0.07	0.555	0.645
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.07	0.437	0.526
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	0.02	0.159	0.181
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	0.02	0.183	0.225
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	-0.1	0.306	0.348
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	-0.1	0.304	0.374
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	0.02	0.159	0.181
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	0.02	0.183	0.225
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	-0.1	0.306	0.348
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	-0.1	0.304	0.374
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	0.02	0.159	0.181
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	0.02	0.183	0.225
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	-0.1	0.306	0.348
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	-0.1	0.304	0.374
	WLAN5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(4)	157	5785	20.90	21.00	1.023	93.10	1.074	-0.01	0.335	0.368
	WLAN5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(3)	157	5785	20.65	21.00	1.084	93.10	1.074	-0.01	0.409	0.476
	WLAN5GHz	802.11a 6Mbps	Back	10mm	5/6	Ant 4+3(4)	157	5785	20.90	21.00	1.023	93.10	1.074	-0.09	0.716	0.787
	WLAN5GHz	802.11a 6Mbps	Back	10mm	5/6	Ant 4+3(3)	157	5785	20.65	21.00	1.084	93.10	1.074	-0.09	0.634	0.738
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	-0.11	0.234	0.278
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.11	0.257	0.331
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	155	5775	17.80	18.00	1.047	88.00	1.136	-0.15	0.403	0.479
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	155	5775	17.45	18.00	1.135	88.00	1.136	-0.15	0.329	0.424
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.08	0.130	0.155
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.08	0.134	0.171
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	0.16	0.221	0.263
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	0.16	0.180	0.229
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	-0.08	0.130	0.155
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	-0.08	0.134	0.171
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.00	1.136	0.16	0.221	0.263
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	155	5775	15.00	15.50	1.122	88.00	1.136	0.16	0.180	0.229



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.03	0.153	0.205
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4	39	2441	19.56	20.50	1.242	77.22	1.079	-0.19	0.190	0.255
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	-0.02	0.305	0.390
90	Bluetooth	1Mbps	Back	10mm	2/3	Ant 3	39	2441	19.78	20.50	1.180	76.83	1.084	-0.04	0.320	0.409
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	-0.09	0.087	0.108
	Bluetooth	1Mbps	Front	10mm	2/3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	-0.09	0.126	0.148
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(4)	78	2480	16.92	17.50	1.143	76.83	1.084	-0.05	0.133	0.165
	Bluetooth	1Mbps	Back	10mm	2/3	Ant 4+3(3)	78	2480	17.14	17.50	1.086	76.83	1.084	-0.05	0.299	0.352
	Bluetooth	1Mbps	Front	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	-0.02	0.079	0.091
	Bluetooth	1Mbps	Back	10mm	4	Ant 4	78	2480	17.72	18.00	1.067	77.22	1.079	-0.04	0.098	0.113
	Bluetooth	1Mbps	Front	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	-0.09	0.121	0.141
	Bluetooth	1Mbps	Back	10mm	4	Ant 3	39	2441	15.70	16.00	1.072	76.83	1.084	-0.19	0.128	0.149
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	0	0.062	0.076
	Bluetooth	1Mbps	Front	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	0	0.127	0.152
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(4)	78	2480	13.94	14.50	1.138	76.83	1.084	-0.04	0.074	0.091
	Bluetooth	1Mbps	Back	10mm	4	Ant 4+3(3)	78	2480	14.06	14.50	1.107	76.83	1.084	-0.04	0.169	0.203

<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	APD
	WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 4+3(4) Ant 4+3(3)	5/6/7/8/9	207	6985	12.30 12.50	12.50	1.047 1.000	91.3	1.095	0	0.020 0.037	0.023 0.041	0.14 0.33
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4) Ant 4+3(3)	5/6/7/8/9	207	6985	12.30 12.50	12.50	1.047 1.000	91.3	1.095	-0.16	0.039 0.064	0.045 0.070	0.30 0.50
91	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4) Ant 4+3(3)	5/6/7/8/9	15	6025	11.40 12.00	12.00	1.148 1.000	91.3	1.095	-0.13	0.070 0.081	0.088 0.089	0.59 0.77
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4) Ant 4+3(3)	5/6/7/8/9	47	6185	11.20 12.00	12.00	1.202 1.000	91.3	1.095	-0.17	0.066 0.070	0.087 0.077	0.56 0.62
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4) Ant 4+3(3)	5/6/7/8/9	111	6505	11.70 11.90	12.00	1.072 1.023	91.3	1.095	0.16	0.062 0.050	0.073 0.056	0.51 0.43
	WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4) Ant 4+3(3)	5/6/7/8/9	175	6825	11.40 11.60	12.00	1.148 1.096	91.3	1.095	0.04	0.050 0.045	0.063 0.054	0.40 0.43



15.4 Product Specific 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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
92	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	0mm	Index5/6	810	1909.8	26.30	27.70	1.380	-0.13	0.689	0.951
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	0mm	Index5/6	512	1850.2	26.26	27.70	1.393	-0.05	0.641	0.893
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	0mm	Index5/6	661	1880	26.26	27.70	1.393	-0.02	0.669	0.932

<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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	9400	1880	21.32	22.60	1.343	-0.14	1.300	1.746
93	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	9262	1852.4	21.37	22.60	1.327	-0.14	1.480	1.965
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	9538	1907.6	21.30	22.60	1.349	-0.06	1.280	1.727
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	9400	1880	22.69	23.90	1.321	-0.1	0.756	0.999
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	9262	1852.4	22.70	23.90	1.318	-0.12	0.686	0.904
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	9538	1907.6	22.69	23.90	1.321	-0.1	0.739	0.976
94	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	1513	1752.6	22.80	24.00	1.318	-0.06	1.930	2.544
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	1312	1712.4	22.75	24.00	1.334	-0.11	1.860	2.480
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	0mm	Index5/6	1413	1732.6	22.72	24.00	1.343	-0.12	1.850	2.484

<FDD 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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
95	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index5/6	21350	2560	20.26	21.50	1.330	-0.12	2.120	2.821
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index5/6	20850	2510	20.30	21.50	1.318	-0.1	2.080	2.742
	LTE Band 7_Ant 2	20M	QPSK	50	50	Bottom Side	0mm	Index5/6	21100	2535	20.25	21.50	1.334	-0.16	2.080	2.774
	LTE Band 7C_Ant 2	20M	QPSK	1	99	Bottom Side	0mm	Index5/6	20850+21048	2510	19.93	21.50	1.435	-0.1	1.790	2.570
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Index5/6	26340	1880	21.57	22.90	1.358	-0.17	1.430	1.942
96	LTE Band 25_Ant 2	20M	QPSK	1	49	Bottom Side	0mm	Index5/6	26140	1860	21.61	22.90	1.346	-0.07	1.520	2.046
	LTE Band 25_Ant 2	20M	QPSK	1	49	Bottom Side	0mm	Index5/6	26590	1905	21.62	22.90	1.343	-0.03	1.460	1.960
97	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	0mm	Index5/6	27710	2310	21.08	22.60	1.419	0.17	1.760	2.498
98	LTE Band 66_Ant 2	20M	QPSK	1	49	Bottom Side	0mm	Index5/6	132572	1770	22.40	23.60	1.318	-0.12	1.880	2.478
	LTE Band 66_Ant 2	20M	QPSK	1	49	Bottom Side	0mm	Index5/6	132322	1745	22.38	23.60	1.324	-0.19	1.810	2.397
	LTE Band 66_Ant 2	20M	QPSK	1	49	Bottom Side	0mm	Index5/6	132072	1720	22.39	23.60	1.321	-0.11	1.840	2.431
	LTE Band 66B_Ant 2	15M	QPSK	1	74	Bottom Side	0mm	Index5/6	132047+132140	1717.5	22.99	23.00	1.002	-0.12	2.150	2.155
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Index5/6	132572+132374	1770	22.99	23.00	1.002	-0.14	2.350	2.355

<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 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	0mm	Index5/6	512000	2560	21.62	22.00	1.091	-0.11	2.270	2.478
	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	0mm	Index5/6	502000	2510	21.56	22.00	1.107	-0.17	2.240	2.479
99	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	0mm	Index5/6	507000	2535	21.55	22.00	1.109	-0.16	2.240	2.485
100	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	0mm	Index5/6	372000	1860	22.29	22.30	1.002	-0.03	1.830	1.834
	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	0mm	Index5/6	376500	1882.5	22.22	22.30	1.019	0.15	1.760	1.793
	FR1 n25_Ant 2	20M	BPSK	50	28	Bottom Side	0mm	Index5/6	381000	1905	22.16	22.30	1.033	-0.08	1.680	1.735
101	FR1 n30_Ant 2	10M	BPSK	50	0	Bottom Side	0mm	Index5/6	462000	2310	22.68	22.80	1.028	-0.19	2.350	2.416
102	FR1 n66_Ant 2	40M	BPSK	108	54	Bottom Side	0mm	Index5/6	349000	1745	23.31	24.70	1.377	0.09	2.040	2.810



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
103	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	46	5230	19.00	19.00	1.000	96.10	1.041	-0.12	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	46	5230	18.95	19.00	1.012	96.10	1.041	-0.12	2.750	2.896
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	48	5240	18.30	18.50	1.047	92.80	1.078	-0.12	0.001	0.001
	WLAN5GHz	802.11n-HT20 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	48	5240	18.25	18.50	1.059	92.80	1.078	-0.12	2.150	2.455
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.04	1.140	1.187
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.04	1.730	1.822
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.12	0.670	0.697
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.12	1.270	1.337
104	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.11	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.11	2.550	2.685
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	5/6	Ant 4+3(4)	52	5260	18.40	18.50	1.023	93.10	1.074	-0.11	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	5/6	Ant 4+3(3)	52	5260	18.15	18.50	1.084	93.10	1.074	-0.11	2.000	2.328
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.14	1.080	1.124
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.14	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	0.06	0.902	0.939
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	0.06	0.465	0.490
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	-0.19	0.610	0.650
	WLAN5GHz	802.11n-HT40 MCS0	Front	0mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.19	1.080	1.164
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	-0.18	0.387	0.412
	WLAN5GHz	802.11n-HT40 MCS0	Back	0mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.12	0.709	0.764
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	-0.1	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.1	1.590	1.713
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	-0.09	0.572	0.609
	WLAN5GHz	802.11n-HT40 MCS0	Right Side	0mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.09	0.001	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	7	Ant 4+3(4)	54	5270	16.90	17.00	1.023	96.10	1.041	0.04	0.561	0.598
	WLAN5GHz	802.11n-HT40 MCS0	Top Side	0mm	7	Ant 4+3(3)	54	5270	16.85	17.00	1.035	96.10	1.041	-0.15	0.232	0.250



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	-0.07	1.140	1.325
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.07	1.040	1.251
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	-0.02	0.902	1.049
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.02	1.110	1.336
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	-0.11	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.07	1.360	1.637
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	-0.01	1.250	1.453
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.01	0.001	0.001
105	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	5/6	Ant 4+3(4)	138	5690	19.90	20.00	1.023	88.00	1.136	0.09	1.470	1.709
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	5/6	Ant 4+3(3)	138	5690	19.75	20.00	1.059	88.00	1.136	-0.19	0.608	0.732
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	5/6	Ant 4+3(4)	106	5530	16.00	16.50	1.122	88.00	1.136	0.17	0.477	0.608
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	5/6	Ant 4+3(3)	106	5530	15.95	16.50	1.135	88.00	1.136	-0.07	0.282	0.364
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	5/6	Ant 4+3(4)	122	5610	19.60	20.00	1.096	88.00	1.136	0.09	1.300	1.619
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	5/6	Ant 4+3(3)	122	5610	19.75	20.00	1.059	88.00	1.136	-0.07	0.735	0.884
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	-0.17	0.633	0.719
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	0mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	-0.17	0.512	0.630
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	-0.11	0.509	0.578
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	0mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	-0.11	0.453	0.558
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	0.14	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	0.14	0.709	0.873
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	0.15	0.629	0.715
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	0.15	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	7	Ant 4+3(4)	138	5690	17.00	17.00	1.000	88.00	1.136	-0.11	0.702	0.797
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	7	Ant 4+3(3)	138	5690	16.65	17.00	1.084	88.00	1.136	-0.11	0.284	0.350
106	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	5/6	Ant 4+3(4)	157	5785	20.90	21.00	1.023	93.10	1.074	0.13	1.680	1.846
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	5/6	Ant 4+3(3)	157	5785	20.65	21.00	1.084	93.10	1.074	0.13	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	5/6	Ant 4+3(4)	157	5785	20.90	21.00	1.023	93.10	1.074	0.13	1.680	1.846
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	5/6	Ant 4+3(3)	157	5785	20.65	21.00	1.084	93.10	1.074	0.13	0.001	0.001



<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	APD
	WLAN6GHz	802.11ax-HE160 MCS0	Front	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	12.30	12.50	1.047	91.3	1.095	0.13	0.077	0.088	1.93
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.157	0.172	3.94
	WLAN6GHz	802.11ax-HE160 MCS0	Back	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	12.30	12.50	1.047	91.3	1.095	0.11	0.047	0.054	1.18
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.105	0.115	2.63
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	12.30	12.50	1.047	91.3	1.095	0.12	0.001	0.001	4.59
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.183	0.200	
	WLAN6GHz	802.11ax-HE160 MCS0	Right Side	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	12.30	12.50	1.047	91.3	1.095	0.14	0.126	0.144	3.16
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.001	0.001	
	WLAN6GHz	802.11ax-HE160 MCS0	Top Side	0mm	Ant 4+3(4)	5/6/7/8/9	207	6985	12.30	12.50	1.047	91.3	1.095	0.17	0.154	0.177	3.86
					Ant 4+3(3)				12.50	12.50	1.000	91.3	1.095		0.111	0.122	
107	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 4+3(4)	5/6/7/8/9	15	6025	11.40	12.00	1.148	91.3	1.095	0.17	0.001	0.001	7.46
					Ant 4+3(3)				12.00	12.00	1.000	91.3	1.095		0.298	0.326	
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 4+3(4)	5/6/7/8/9	47	6185	11.20	12.00	1.202	91.3	1.095	-0.18	0.001	0.001	6.03
					Ant 4+3(3)				12.00	12.00	1.000	91.3	1.095		0.241	0.264	
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 4+3(4)	5/6/7/8/9	111	6505	11.70	12.00	1.072	91.3	1.095	0.13	0.001	0.001	4.14
					Ant 4+3(3)				11.90	12.00	1.023	91.3	1.095		0.165	0.185	
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	0mm	Ant 4+3(4)	5/6/7/8/9	175	6825	11.40	12.00	1.148	91.3	1.095	0.13	0.001	0.001	4.06
					Ant 4+3(3)				11.60	12.00	1.096	91.3	1.095		0.162	0.195	

15.5 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grip Step (λ)	iPDn (W/m ²)	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	15	6025	12.00	0.0625	1.43	-0.776601	3.61	4.37
WLAN6GHz	802.11ax-HE160 MCS0	Left Side	10mm	Ant 4+3(3)	15	6025	12.00	0.25	1.71		0.901	1.04
WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	207	6985	12.50	0.0625	1.2	0.4575749	1.88	2.38
WLAN6GHz	802.11ax-HE160 MCS0	Left Side	8.59mm	Ant 4+3(3)	207	6985	12.50	0.25	1.08		0.539	0.884
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	15	6025	13.50	0.0625	3.04	0.0430709	3.42	4.3
WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 4+3(4)	15	6025	13.00	0.25	3.01		1.16	1.25
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	207	6985	12.50	0.0625	1.79	-0.795854	1.4	1.6
WLAN6GHz	802.11ax-HE160 MCS0	Front	8.59mm	Ant 4+3(3)	207	6985	12.50	0.25	2.15		0.823	0.892

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grip Step (λ)	Scaling Factor for measurement uncertainty	Power Drift (dB)	Normal psPD (W/m ²)	Scaled Normal psPD (W/m ²)	Total psPD (W/m ²)	Scaled Total psPD (W/m ²)
108	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	15	6025	12.00	12.00	1.000	91.30	1.095	0.0625	1.5535	-0.03	3.61	6.14	4.37	7.43
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	47	6185	12.00	12.00	1.000	91.30	1.095	0.0625	1.5535	0.18	2.42	4.12	3.04	5.17
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	111	6505	11.90	12.00	1.023	91.30	1.095	0.0625	1.5535	0.14	2	3.48	2.6	4.53
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	175	6825	11.60	12.00	1.096	91.30	1.095	0.0625	1.5535	0.13	1.49	2.78	2.02	3.77
	WLAN6GHz	802.11ax-HE160 MCS0	Left Side	2mm	Ant 4+3(3)	207	6985	12.50	12.50	1.000	91.30	1.095	0.0625	1.5535	-0.06	1.88	3.20	2.38	4.05
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	15	6025	13.50	13.50	1.000	91.30	1.095	0.0625	1.5535	-0.11	3.42	5.82	4.3	7.31
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	47	6185	13.40	13.50	1.023	91.30	1.095	0.0625	1.5535	-0.19	1.85	3.22	2.23	3.88
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	111	6505	11.90	12.00	1.023	91.30	1.095	0.0625	1.5535	0.12	1.11	1.93	1.38	2.40
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(4)	175	6825	11.40	12.00	1.148	91.30	1.095	0.0625	1.5535	-0.16	0.983	1.92	1.3	2.54
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	207	6985	12.50	12.50	1.000	91.30	1.095	0.0625	1.5535	0.18	1.4	2.38	1.6	2.72



15.6 Repeated SAR Measurement

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/kg, only one repeated measurement is required.
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.

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)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index2	23230	782	24.02	24.90	1.225	-0.1	0.878	-	1.075
2nd	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Index2	23230	782	24.02	24.90	1.225	-0.05	0.856	1.03	1.048
1st	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Index2	26865	831.5	23.99	24.90	1.233	-0.09	0.933	-	1.150
2nd	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	Index2	26865	831.5	23.99	24.90	1.233	-0.15	0.930	1.00	1.147
1st	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	Index5	132572+132374	1770	22.99	23.00	1.002	-0.15	1.030	-	1.032
2nd	LTE Band 66C_Ant 2	20M	QPSK	1	0	Back	10mm	Index5	132572+132374	1770	22.99	23.00	1.002	0.04	0.985	1.05	0.987
1st	FR1 n7_Ant 2	20M	BPSK	1	53	Back	10mm	Index5	507000	2535	21.68	22.00	1.076	-0.07	1.110	-	1.195
2nd	FR1 n7_Ant 2	20M	BPSK	1	53	Back	10mm	Index5	507000	2535	21.68	22.00	1.076	-0.02	1.100	1.01	1.184
1st	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index5	376500	1882.5	22.23	22.30	1.016	-0.05	1.150	-	1.169
2nd	FR1 n25_Ant 2	20M	BPSK	1	53	Back	10mm	Index5	376500	1882.5	22.23	22.30	1.016	-0.09	1.130	1.02	1.148
1st	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index5	462000	2310	22.80	22.80	1.000	0.02	1.120	-	1.120
2nd	FR1 n30_Ant 2	10M	BPSK	1	26	Back	10mm	Index5	462000	2310	22.80	22.80	1.000	0.03	1.090	1.03	1.090

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 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 66C_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Index5/6	132572+132374	1770	22.99	23.00	1.002	-0.14	2.350	-	2.355
2nd	LTE Band 66C_Ant 2	20M	QPSK	1	0	Bottom Side	0mm	Index5/6	132572+132374	1770	22.99	23.00	1.002	0.09	2.280	1.03	2.285
1st	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	0mm	Index5/6	512000	2560	21.62	22.00	1.091	-0.11	2.270	-	2.478
2nd	FR1 n7_Ant 2	20M	BPSK	50	0	Bottom Side	0mm	Index5/6	512000	2560	21.62	22.00	1.091	-0.02	2.210	1.03	2.412
1st	FR1 n30_Ant 2	10M	BPSK	50	0	Bottom Side	0mm	Index5/6	462000	2310	22.68	22.80	1.028	-0.19	2.350	-	2.416
2nd	FR1 n30_Ant 2	10M	BPSK	50	0	Bottom Side	0mm	Index5/6	462000	2310	22.68	22.80	1.028	0.05	2.270	1.04	2.334



No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	1	2412	16.15	16.50	1.084	98.90	1.011	0.14	0.001	-	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	1	2412	16.05	16.50	1.109	98.90	1.011	0.14	1.060	-	1.189
2nd	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	1	2412	16.15	16.50	1.084	98.90	1.011	0.12	0.001	1.00	0.001
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	1	2412	16.05	16.50	1.109	98.90	1.011	0.12	1.050	1.01	1.177
1st	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	114	5570	15.00	15.50	1.122	86.90	1.151	-0.1	0.347	-	0.448
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	114	5570	14.95	15.50	1.135	86.90	1.151	-0.1	0.834	-	1.090
2nd	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	114	5570	15.00	15.50	1.122	86.90	1.151	-0.16	0.336	1.03	0.434
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	114	5570	14.95	15.50	1.135	86.90	1.151	-0.16	0.811	1.03	1.059
1st	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	151	5755	15.45	16.50	1.274	96.10	1.041	-0.13	0.823	-	1.091
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	151	5755	15.05	16.50	1.396	96.10	1.041	-0.13	0.259	-	0.376
2nd	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	151	5755	15.45	16.50	1.274	96.10	1.041	-0.16	0.796	1.03	1.055
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	151	5755	15.05	16.50	1.396	96.10	1.041	-0.16	0.241	1.07	0.350

No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	46	5230	19.00	19.00	1.000	96.10	1.041	-0.12	0.001	-	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	46	5230	18.95	19.00	1.012	96.10	1.041	-0.12	2.750	-	2.896
2nd	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	46	5230	19.00	19.00	1.000	96.10	1.041	-0.12	0.001	1.00	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	46	5230	18.95	19.00	1.012	96.10	1.041	-0.12	2.660	1.03	2.801
1st	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.11	0.001	-	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.11	2.550	-	2.685
2nd	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(4)	54	5270	19.00	19.00	1.000	96.10	1.041	-0.11	0.001	1.00	0.001
	WLAN5GHz	802.11n-HT40 MCS0	Left Side	0mm	5/6	Ant 4+3(3)	54	5270	18.95	19.00	1.012	96.10	1.041	-0.11	2.460	1.04	2.591



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

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required
 Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<LTE Band 41 Linearity Data for Head>

TX 0		
	LTE Band 41_Ant 2 (Power Class 3)	LTE Band 41_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	23.8	26.8
Reported 1g SAR (W/kg)	0.272	0.359
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	207.25
Linearity SAR(W/kg)	0.37	
% deviation from expected linearity		-3.30%

TX 1		
	LTE Band 41_Ant 0 (Power Class 3)	LTE Band 41_Ant 0 (Power Class 2)
Maximum Tune up Power (dBm)	23.2	26.5
Reported 1g SAR (W/kg)	0.184	0.253
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	132.25	193.41
Linearity SAR(W/kg)	0.27	
% deviation from expected linearity		-5.98%

<LTE Band 41 Linearity Data for Hotspot>

TX 0		
	LTE Band 41_Ant 2 (Power Class 3)	LTE Band 41_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	22.1	23.8
Reported 1g SAR (W/kg)	0.891	0.867
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	102.66	103.87
Linearity SAR(W/kg)	0.90	
% deviation from expected linearity		-3.83%

TX 1		
	LTE Band 41_Ant 0 (Power Class 3)	LTE Band 41_Ant 0 (Power Class 2)
Maximum Tune up Power (dBm)	23.2	26.5
Reported 1g SAR (W/kg)	0.6	0.896
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	132.25	193.41
Linearity SAR(W/kg)	0.88	
% deviation from expected linearity		2.11%



<LTE Band 41 Linearity Data for Body-worn>

TX 0		
	LTE Band 41_Ant 2 (Power Class 3)	LTE Band 41_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	23.4	25
Reported 1g SAR (W/kg)	0.926	0.847
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	138.49	136.93
Linearity SAR(W/kg)	0.94	
% deviation from expected linearity		-7.49%

TX 1		
	LTE Band 41_Ant 0 (Power Class 3)	LTE Band 41_Ant 0 (Power Class 2)
Maximum Tune up Power (dBm)	23.2	24.9
Reported 1g SAR (W/kg)	0.884	0.809
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	132.25	133.81
Linearity SAR(W/kg)	0.89	
% deviation from expected linearity		-9.55%



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

This device support Power Class 2 and Power Class 3 operations for FR1 n41/n77. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each FR1 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required.

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

<FR1 n41 Linearity Data for Head>

TX 0		
	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	18	21
Reported 1g SAR (W/kg)	1.172	1.109
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	63.10	62.95
Linearity SAR(W/kg)	1.17	
% deviation from expected linearity		-5.15%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	18.2	21.2
Reported 1g SAR (W/kg)	1.09	1.14
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	66.07	65.91
Linearity SAR(W/kg)	1.09	
% deviation from expected linearity		4.84%

<FR1 n77 Linearity Data for Head>

TX 0		
	FR1 n77_Ant 6 (Power Class 3)	FR1 n77_Ant 6 (Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	0.928	0.693
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	0.74	
% deviation from expected linearity		-5.76%

TX 1		
	FR1 n77_Ant 2 (Power Class 3)	FR1 n77_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	25	27
Reported 1g SAR (W/kg)	1.063	0.785
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	316.23	250.59
Linearity SAR(W/kg)	0.84	
% deviation from expected linearity		-6.81%



<FR1 n41 Linearity Data for Hotspot>

TX 0		
	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	20.6	23.6
Reported 1g SAR (W/kg)	0.771	0.813
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	114.82	114.54
Linearity SAR(W/kg)	0.77	
% deviation from expected linearity		5.70%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	24.8	27.4
Reported 1g SAR (W/kg)	0.885	0.833
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	302.00	274.77
Linearity SAR(W/kg)	0.81	
% deviation from expected linearity		3.45%

<FR1 n77 Linearity Data for Hotspot>

TX 0		
	FR1 n77_Ant 6 (Power Class 3)	FR1 n77_Ant 6 (Power Class 2)
Maximum Tune up Power (dBm)	21.4	24.6
Reported 1g SAR (W/kg)	0.788	0.77
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	138.04	144.20
Linearity SAR(W/kg)	0.82	
% deviation from expected linearity		-6.46%

TX 1		
	FR1 n77_Ant 2 (Power Class 3)	FR1 n77_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	21.9	24.9
Reported 1g SAR (W/kg)	0.843	0.826
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	154.88	154.51
Linearity SAR(W/kg)	0.84	
% deviation from expected linearity		-1.78%

<FR1 n41 Linearity Data for Body-worn>

TX 0		
	FR1 n41_Ant 5 (Power Class 3)	FR1 n41_Ant 5 (Power Class 2)
Maximum Tune up Power (dBm)	22	25
Reported 1g SAR (W/kg)	0.632	0.606
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	158.49	158.11
Linearity SAR(W/kg)	0.63	
% deviation from expected linearity		-3.89%

TX 1		
	FR1 n41_Ant 1 (Power Class 3)	FR1 n41_Ant 1 (Power Class 2)
Maximum Tune up Power (dBm)	25.4	27.4
Reported 1g SAR (W/kg)	0.723	0.597
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	346.74	274.77
Linearity SAR(W/kg)	0.57	
% deviation from expected linearity		4.20%

<FR1 n77 Linearity Data for Body-worn>

TX 0		
	FR1 n77_Ant 6 (Power Class 3)	FR1 n77_Ant 6 (Power Class 2)
Maximum Tune up Power (dBm)	22.8	25.8
Reported 1g SAR (W/kg)	0.719	0.71
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	190.55	190.09
Linearity SAR(W/kg)	0.72	
% deviation from expected linearity		-1.02%

TX 1		
	FR1 n77_Ant 2 (Power Class 3)	FR1 n77_Ant 2 (Power Class 2)
Maximum Tune up Power (dBm)	23.1	26.1
Reported 1g SAR (W/kg)	0.734	0.672
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	204.17	203.69
Linearity SAR(W/kg)	0.73	
% deviation from expected linearity		-8.23%