



FCC SAR TEST REPORT

FCC ID : A4RGQML3
Equipment : Phone
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Mar. 18, 2022 and testing was started from Apr. 08, 2022 and completed on Jul. 25, 2022. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

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

Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA1O2843-05E	01	Initial issue of report	Jul. 17, 2022
FA1O2843-05E	02	1. Added WIFI6E 11a output power 2. Update n48 Plimit and n48/n77 test data	Jul. 27, 2022



1. Statement of Compliance

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

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 10mm)	Hotspot (Separation 10mm)	Product Specific (Separation 0mm)		
		1g SAR (W/kg)				10g SAR (W/kg)	
Licensed	GSM850	1.04	0.77	0.77		1.59	3.83
	GSM1900	0.60	0.97	0.89			
	WCDMA II	1.02	1.14	0.90	2.94		
	WCDMA IV	0.57	0.84	0.90	2.97		
	WCDMA V	1.08	0.75	0.75			
	LTE B2	1.09	1.12	0.89	2.96		
	LTE B7	0.68	1.17	0.89	2.97		
	LTE B12/17	1.00	0.43	0.43			
	LTE B13	1.05	0.68	0.82			
	LTE B14	1.07	0.74	0.74			
	LTE B25/2	0.84	1.10	0.89	2.84		
	LTE B26/5	1.05	0.61	0.61			
	LTE B30	0.60	1.04	0.88	2.91		
	LTE B41/38	0.39	1.12	0.89	1.45		
	LTE B48	0.25	1.15	0.82			
	LTE B66/4	1.15	1.07	0.89	2.93		
	LTE B71	1.18	0.34	0.44			
	FR1 n2	1.16	1.13	0.87	2.97		
	FR1 n5	1.18	0.54	0.55			
	FR1 n7	0.60	1.07	0.89	2.94		
	FR1 n12	1.19	0.44	0.44			
	FR1 n14	1.03	0.61	0.61			
	FR1 n25/2	1.03	0.92	0.86			
FR1 n30	0.67	1.04	0.83	2.76			
FR1 n41/38	1.17	1.14	0.89	1.96			
FR1 n48	1.15	1.15	0.90				
FR1 n66	1.17	0.97	0.87	2.94			
FR1 n71	1.15	0.34	0.41				
FR1 n77	1.15	0.95	0.84				
DTS	2.4GHz WLAN	1.15	0.74	0.70		1.59	
NII	5GHz WLAN	1.17	0.70	0.62	2.66	1.56	3.83
6XD	6GHz WLAN	0.74	0.13		0.46		
DSS	Bluetooth	0.25	0.39	0.45		1.48	
Equipment Class	Frequency Band	Head APD (W/m ²)	Body APD (W/m ²)	Product Specific APD (W/m ²)	Reported PD (W/m ²)		
6XD	6GHz WLAN	3.62	0.78	8.71	7.16		
Date of Testing:		2022/4/8 ~ 2022/7/25					

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093), Human Exposure to RF Radiation Limits (1.0 mW/cm²=10 W/m²) specified in FCC 47 CFR part 1.1310 and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang
Report Producer: Paula Chen



2. Equipment Under Test (EUT) Information

2.1 General Information

Product Feature & Specification	
Equipment Name	Phone
FCC ID	A4RGQML3
SN	23121FDH200032 23121FDH20001F 23121FDH20004T 23121FDH20000Q
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 n14 : 788 MHz ~ 798 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 n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450MHz ~ 3550 MHz, 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 5.8G UNII4 Band: 5850 MHz ~ 5895 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz 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.

Remark:

1. Dynamic antenna tuning mechanism is available at Ant. 0, 1 and 2 and for its < 3GHz band, details are illustrated in the operational description
2. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
3. 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.
4. This device has NFC operations, the NFC antenna is integrated into the device for this model, therefore, all SAR test were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the antenna can be found in the operational description.
5. According to FCC KDB publication 447498 D01v06, transmitters are consider to be operating simultaneously when there is overlapping transmission, with the exception of transmission during network hand-offs with maximum hand-off duration less than 30 seconds.

2.2 Maximum Tune-up Limit

General Note:

1. In the report PC3 as power class3, PC2 as power class2, PC1.5 as Power class 1.5.
2. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition.
3. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) by output power index 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.
4. 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 P_{limit} plus the total uncertainty, or P_{max} plus total uncertainty when the derived P_{limit} is higher than P_{max}. 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.
5. The index 1 is for the mobile exposure condition, the compliance is demonstrated in Sporton's test report FA102919-05A.
6. 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.
7. In n41 PC1.5, the device only supports UL MIMO mode.
8. When the Uplink MIMO is active that per chain power is equal than standalone power back off 3dB.
9. The device support uplink MIMO for 5G FR1 n41/48/77, the TAS feature will control the device to transmit at higher power instantaneously, as high as P_{max}, when needed, but enforces power limiting to maintain time-averaged transmit power to P_{limit}, the uplink MIMO compliance is validated include in the TAS Part2 report No.: FA102843-05F.
10. Since the device the device support TAS feature and the 5G NR transmitter will operate in the time-averaged transmission power, therefore, for 5G NR PC3 / PC2 / PC1.5 regardless of whether support different transmission duty cycle, the 5G NR SAR was performed with PC3 as highest time-average power and 100% duty cycle to be tested
11. The 5G FR1 uplink MIMO only support CP-OFDM modulation. Since the CP-OFDM mode maximum power is lower than DFT-s-OFDM maximum power by 3GPP MPR requirement, uplink MIMO SAR testing was not necessary due to cover by DFT-s-OFDM SAR results. Except n48 PC3 Sub Tx0 Ant1 and Sub Tx1 Ant5, due to these transmit antenna only support uplink MIMO operation, therefore, additional standalone SAR is required.



Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Mobile Condition	Head	Head	Hotspot	Body-worn-Extremity	Body-worn-Extremity
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5
GSM850 GSM/GPRS 1TX	0	12.50%	33.50	33.50	33.50	33.50	33.50	33.50
GSM850 GPRS 2TX	0	25.00%	32.50	32.50	32.50	32.50	32.50	32.50
GSM850 GPRS 3TX	0	37.50%	31.50	31.50	31.50	31.50	31.50	31.50
GSM850 GPRS 4TX	0	50.00%	30.50	30.50	30.50	30.50	30.50	30.50
GSM850 EDGE 1TX	0	12.50%	28.00	28.00	28.00	28.00	28.00	28.00
GSM850 EDGE 2TX	0	25.00%	27.50	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 3TX	0	37.50%	27.50	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 4TX	0	50.00%	25.50	25.50	25.50	25.50	25.50	25.50
GSM1900 GSM/GPRS 1TX	2	12.50%	31.00	31.00	31.00	31.00	31.00	31.00
GSM1900 GPRS 2TX	2	25.00%	29.50	29.50	29.50	29.50	29.50	29.50
GSM1900 GPRS 3TX	2	37.50%	29.00	29.00	29.00	28.60	29.00	28.80
GSM1900 GPRS 4TX	2	50.00%	28.00	28.00	28.00	27.40	28.00	27.60
GSM1900 EDGE 1TX	2	12.50%	26.00	26.00	26.00	26.00	26.00	26.00
GSM1900 EDGE 2TX	2	25.00%	25.00	25.00	25.00	25.00	25.00	25.00
GSM1900 EDGE 3TX	2	37.50%	25.00	25.00	25.00	25.00	25.00	25.00
GSM1900 EDGE 4TX	2	50.00%	24.00	24.00	24.00	24.00	24.00	24.00
WCDMA B2	2	100.00%	25.40	25.40	24.80	22.60	24.20	23.00
WCDMA B4	2	100.00%	25.40	25.40	25.40	23.00	24.20	23.00
WCDMA B5	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
LTE B7	2	100.00%	25.40	25.40	25.40	22.00	23.40	22.20
LTE B12/B17	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
LTE B13	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
LTE B14	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
LTE B25/B2	2	100.00%	25.40	25.40	25.40	23.40	24.60	23.40
LTE B26/B5	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
LTE B30	2	100.00%	24.30	24.30	24.30	22.10	23.40	22.20
LTE-B38 PC3	2	63.30%	25.40	25.40	25.40	25.40	25.40	25.40
LTE-B38 PC2	2	43.30%	26.90	26.90	26.90	26.90	26.90	26.90
LTE B41 PC3	2	63.30%	25.40	25.40	25.40	25.40	25.40	25.40
LTE B41 PC2	2	43.30%	26.90	26.90	26.90	26.90	26.90	26.90
LTE B48 PC3	6	63.30%	25.40	25.40	25.40	24.30	25.40	24.30
LTE B66/B4	2	100.00%	25.40	25.40	25.40	23.30	24.80	23.60
LTE B71	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
FR1 n5	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
FR1 n7	2	100.00%	25.40	25.40	25.40	21.60	24.20	23.00
FR1 n12	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
FR1 n14	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
FR1 n25/n2	2	100.00%	25.40	25.40	24.80	23.30	24.50	23.30
FR1 n30	2	100.00%	24.30	24.30	24.30	22.00	23.20	22.00
FR1 n38 PC3	2	100.00%	25.40	25.40	25.40	22.70	24.40	23.20
FR1 n41 PC3	2	100.00%	25.40	25.40	25.40	22.70	24.40	23.20
FR1 n41 PC2	2	50.00%	26.90	26.90	26.90	25.70	26.90	26.20
FR1 n41 PC1.5 ULMIMO	2	25.00%	25.90	25.90	25.90	25.90	25.90	25.90
FR1 n48 PC3	6	100.00%	25.40	25.40	25.40	22.70	23.90	22.70
FR1 n66	2	100.00%	25.40	25.40	25.40	23.30	24.50	23.30
FR1 n71	0	100.00%	25.40	25.40	25.40	25.40	25.40	25.40
FR1 n77 PC3	6	100.00%	24.10	24.10	24.10	22.90	24.10	22.90
FR1 n77 PC2	6	50.00%	27.10	27.10	27.10	25.90	27.10	25.90
LTE B2 Sub	1	100.00%	25.40	16.00	14.80	19.90	22.40	21.20
LTE B66/B4 Sub	1	100.00%	25.40	18.00	16.80	23.20	24.60	23.40
FR1 n2 Sub	1	100.00%	25.40	17.00	15.80	20.40	23.00	21.80
FR1 n38 PC3 Sub	1	100.00%	25.40	19.00	17.80	23.00	24.20	23.00
FR1 n41 PC3 Sub	1	100.00%	25.40	19.00	17.80	23.00	24.20	23.00
FR1 n41 PC2 Sub	1	50.00%	26.90	22.00	20.80	26.00	26.90	26.00
FR1 n41 PC1.5 Sub ULMIMO	1	25.00%	25.90	25.00	23.80	25.90	25.90	25.90
FR1 n48 PC3 Sub ULMIMO	1	100.00%	20.50	20.50	19.30	20.50	20.50	20.50
FR1 n66 Sub	1	100.00%	25.40	18.80	17.60	23.60	25.10	23.90
FR1 n77 Sub	1	100.00%	25.40	20.70	19.50	25.40	25.40	25.40



Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Mobile Condition	Head	Head	Hotspot	Body-worn-Extremity	Body-worn-Extremity
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5
GSM850 GSM/GPRS 1TX	1	12.50%	33.50	33.30	32.10	33.50	33.50	33.50
GSM850 GPRS 2TX	1	25.00%	32.50	30.30	29.10	32.50	32.50	32.50
GSM850 GPRS 3TX	1	37.50%	31.50	28.50	27.30	31.50	31.50	31.50
GSM850 GPRS 4TX	1	50.00%	30.50	27.30	26.10	30.50	30.50	30.50
GSM850 EDGE 1TX	1	12.50%	28.00	28.00	28.00	28.00	28.00	28.00
GSM850 EDGE 2TX	1	25.00%	27.50	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 3TX	1	37.50%	27.50	27.50	27.30	27.50	27.50	27.50
GSM850 EDGE 4TX	1	50.00%	25.50	25.50	25.50	25.50	25.50	25.50
GSM1900 GSM/GPRS 1TX	0	12.50%	30.80	30.80	30.80	29.00	30.20	29.00
GSM1900 GPRS 2TX	0	25.00%	29.30	29.30	29.30	26.00	27.20	26.00
GSM1900 GPRS 3TX	0	37.50%	28.80	28.80	28.80	24.20	25.40	24.20
GSM1900 GPRS 4TX	0	50.00%	27.80	27.80	27.80	23.00	24.20	23.00
GSM1900 EDGE 1TX	0	12.50%	25.80	25.80	25.80	25.80	25.80	25.80
GSM1900 EDGE 2TX	0	25.00%	24.80	24.80	24.80	24.80	24.80	24.80
GSM1900 EDGE 3TX	0	37.50%	24.80	24.80	24.80	24.20	24.80	24.20
GSM1900 EDGE 4TX	0	50.00%	23.80	23.80	23.80	23.00	23.80	23.00
WCDMA B2	0	100.00%	25.20	25.20	25.20	18.00	20.00	18.80
WCDMA B4	0	100.00%	25.20	25.20	25.20	18.30	20.40	19.20
WCDMA B5	1	100.00%	25.40	23.30	22.10	25.40	25.40	25.40
LTE B7	0	100.00%	25.00	25.00	25.00	18.30	21.80	20.60
LTE B12/B17	1	100.00%	25.40	23.90	22.70	25.40	25.40	25.40
LTE B13	1	100.00%	25.40	23.30	22.10	25.40	25.40	25.40
LTE B14	1	100.00%	25.40	23.40	22.20	25.40	25.40	25.40
LTE B25/B2	0	100.00%	25.20	25.20	25.20	18.80	20.20	19.00
LTE B26/B5	1	100.00%	25.40	23.90	22.70	25.40	25.40	25.40
LTE B30	0	100.00%	24.50	24.50	24.50	18.00	21.20	20.00
LTE-B38 PC3	0	63.30%	25.40	25.40	25.40	20.70	24.20	23.00
LTE-B38 PC2	0	43.30%	26.90	26.90	26.90	22.30	25.80	24.60
LTE B41 PC3	0	63.30%	25.40	25.40	25.40	20.70	24.20	23.00
LTE B41 PC2	0	43.30%	26.90	26.90	26.90	22.30	25.80	24.60
LTE B48 PC3	7	63.30%	24.80	24.80	24.80	24.80	24.80	24.80
LTE B66/B4	0	100.00%	25.20	25.20	25.20	17.30	20.80	19.60
LTE B71	1	100.00%	25.40	24.40	23.20	25.40	25.40	25.40
FR1 n5	1	100.00%	25.40	24.30	23.10	25.40	25.40	25.40
FR1 n7	0	100.00%	25.00	25.00	25.00	17.70	21.20	20.00
FR1 n12	1	100.00%	25.40	24.30	23.10	25.40	25.40	25.40
FR1 n14	1	100.00%	25.40	23.70	22.50	25.40	25.40	25.40
FR1 n25/n2	0	100.00%	25.20	25.20	25.20	18.90	20.30	19.10
FR1 n30	0	100.00%	24.50	24.50	24.50	17.80	21.50	20.30
FR1 n38 PC3	0	100.00%	25.40	25.40	25.40	19.00	22.90	21.70
FR1 n41 PC3	0	100.00%	25.40	25.40	25.40	19.00	22.90	21.70
FR1 n41 PC2	0	50.00%	26.90	26.90	26.90	22.00	25.90	24.70
FR1 n41 PC1.5 ULMIMO	0	25.00%	25.90	25.90	25.90	25.00	25.90	25.90
FR1 n48 PC3	7	100.00%	24.80	24.80	24.80	21.00	22.20	21.00
FR1 n66	0	100.00%	25.20	25.20	25.20	18.00	20.70	19.50
FR1 n71	1	100.00%	25.40	24.10	22.90	25.40	25.40	25.40
FR1 n77 PC3	7	100.00%	23.50	23.50	23.50	23.50	23.50	23.50
FR1 n77 PC2	7	50.00%	26.50	26.50	26.50	26.50	26.50	26.50
LTE B2 Sub	5	100.00%	25.20	21.90	20.70	23.00	25.20	25.20
LTE B66/B4 Sub	5	100.00%	25.20	24.70	23.50	25.20	25.20	25.20
FR1 n2 Sub	5	100.00%	25.20	22.30	21.10	23.80	25.20	25.20
FR1 n38 PC3 Sub	5	100.00%	24.40	21.80	20.60	22.30	23.50	22.30
FR1 n41 PC3 Sub	5	100.00%	24.40	21.80	20.60	22.30	23.50	22.30
FR1 n41 PC2 Sub	5	50.00%	25.90	24.80	23.60	25.30	25.90	25.30
FR1 n41 PC1.5 Sub ULMIMO	5	25.00%	25.90	25.90	25.90	25.90	25.90	25.90
FR1 n48 PC3 Sub ULMIMO	5	100.00%	19.20	19.20	19.20	19.20	19.20	19.20
FR1 n66 Sub	5	100.00%	25.20	24.60	23.40	25.20	25.20	25.20
FR1 n77 Sub	5	100.00%	24.80	21.70	20.50	23.40	24.80	24.80



<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 / hotspot / extremity condition, power index 5-9 are used. In each exposure condition, the power selection is determined by the user cases as tested 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)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	23.00
		6	2437	23.00
		11	2462	23.00
		12	2467	23.00
		13	2472	23.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	22.00
		6	2437	23.00
		11	2462	23.00
		12	2467	23.00
		13	2472	21.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11n-HT20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
	802.11ax-HE20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
12		2467	18.50	18.50	21.50	
		13	2472	17.00	17.00	20.00
		1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
		1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
		1	2412	20.00	20.00	23.00



<5GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	21.00	21.00	24.00
		40	5200	21.00	21.00	24.00
		44	5220	21.00	21.00	24.00
		48	5240	21.00	21.00	24.00
	802.11n-HT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	21.00	21.00	24.00
		44	5220	21.00	21.00	24.00
		48	5240	21.00	21.00	24.00
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	21.00	21.00	24.00
		44	5220	21.00	21.00	24.00
		48	5240	21.00	21.00	24.00
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	21.00	21.00	24.00
	802.11ac-VHT80 MCS0	42	5210	16.50	16.50	19.50
	802.11ax-HE20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	21.00	21.00	24.00
		44	5220	21.00	21.00	24.00
48		5240	21.00	21.00	24.00	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00	
	46	5230	21.00	21.00	24.00	
802.11ax-HE80 MCS0	42	5210	16.50	16.50	19.50	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	21.00	21.00	24.00
		56	5280	21.00	21.00	24.00
		60	5300	21.00	21.00	24.00
		64	5320	21.00	21.00	24.00
	802.11n-HT20 MCS0	52	5260	21.00	21.00	24.00
		56	5280	21.00	21.00	24.00
		60	5300	21.00	21.00	24.00
		64	5320	19.00	19.00	22.00
	802.11n-HT40 MCS0	54	5270	21.00	21.00	24.00
		62	5310	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	52	5260	21.00	21.00	24.00
		56	5280	21.00	21.00	24.00
		60	5300	21.00	21.00	24.00
		64	5320	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	54	5270	21.00	21.00	24.00
		62	5310	17.00	17.00	20.00
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.00
	802.11ac-VHT160 MCS0	50	5250	15.00	15.00	18.00
	802.11ax-HE20 MCS0	52	5260	21.00	21.00	24.00
		56	5280	21.00	21.00	24.00
60		5300	21.00	21.00	24.00	
64		5320	19.00	19.00	22.00	
802.11ax-HE40 MCS0	54	5270	21.00	21.00	24.00	
	62	5310	17.00	17.00	20.00	
802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.00	
802.11ax-HE160 MCS0	50	5250	15	15	18.00	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	21.00	21.00	24.00
		116	5580	21.00	21.00	24.00
		124	5620	21.00	21.00	24.00
		132	5660	21.00	21.00	24.00
		144	5720	21.00	21.00	24.00
	802.11n-HT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	21.00	21.00	24.00
		124	5620	21.00	21.00	24.00
		132	5660	21.00	21.00	24.00
		144	5720	21.00	21.00	24.00
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	21.00	21.00	24.00
		126	5630	21.00	21.00	24.00
		134	5670	19.00	19.00	22.00
		142	5710	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	21.00	21.00	24.00
		124	5620	21.00	21.00	24.00
		132	5660	21.00	21.00	24.00
		144	5720	21.00	21.00	24.00
	802.11ac-VHT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	21.00	21.00	24.00
		126	5630	21.00	21.00	24.00
		134	5670	19.00	19.00	22.00
		142	5710	21.00	21.00	24.00
	802.11ac-VHT80 MCS0	106	5530	15.50	15.50	18.50
		122	5610	21.00	21.00	24.00
		138	5690	21.00	21.00	24.00
	802.11ac-VHT160 MCS0	114	5570	15.50	15.50	18.50
	802.11ax-HE20 MCS0	100	5500	19.00	19.00	22.00
116		5580	21.00	21.00	24.00	
124		5620	21.00	21.00	24.00	
132		5660	21.00	21.00	24.00	
144		5720	21.00	21.00	24.00	
802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.00	
	110	5550	21.00	21.00	24.00	
	126	5630	21.00	21.00	24.00	
	134	5670	19.00	19.00	22.00	
	142	5710	21.00	21.00	24.00	
802.11ax-HE80 MCS0	106	5530	15.50	15.50	18.50	
	122	5610	21.00	21.00	24.00	
	138	5690	21.00	21.00	24.00	
802.11ax-HE160 MCS0	114	5570	15.50	15.50	18.50	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	22.00	22.00	25.00
		157	5785	22.00	22.00	25.00
		165	5825	22.00	22.00	25.00
802.11n-HT20 MCS0		149	5745	22.00	22.00	25.00
		157	5785	22.00	22.00	25.00
		165	5825	22.00	22.00	25.00
802.11n-HT40 MCS0		151	5755	22.00	22.00	25.00
		159	5795	22.00	22.00	25.00
802.11ac-VHT20 MCS0		149	5745	22.00	22.00	25.00
		157	5785	22.00	22.00	25.00
		165	5825	22.00	22.00	25.00
802.11ac-VHT40 MCS0		151	5755	22.00	22.00	25.00
		159	5795	22.00	22.00	25.00
802.11ac-VHT80 MCS0		155	5775	22.00	22.00	25.00
802.11ax-HE20 MCS0		149	5745	22.00	22.00	25.00
		157	5785	22.00	22.00	25.00
		165	5825	22.00	22.00	25.00
802.11ax-HE40 MCS0		151	5755	22.00	22.00	25.00
		159	5795	22.00	22.00	25.00
802.11ax-HE80 MCS0		155	5775	22.00	22.00	25.00

Burst Average Power (dBm)						
5.8GHz WLAN UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	22.00	22.00	25.00
		173	5865	22.00	22.00	25.00
		177	5885	22.00	22.00	25.00
802.11n-HT20 MCS0		169	5845	22.00	22.00	25.00
		173	5865	22.00	22.00	25.00
		177	5885	22.00	22.00	25.00
802.11n-HT40 MCS0		167	5835	22.00	22.00	25.00
		175	5875	22.00	22.00	25.00
802.11ac-VHT20 MCS0		169	5845	22.00	22.00	25.00
		173	5865	22.00	22.00	25.00
		177	5885	22.00	22.00	25.00
802.11ac-VHT40 MCS0		167	5835	22.00	22.00	25.00
		175	5875	22.00	22.00	25.00
802.11ac-VHT80 MCS0		171	5855	22.00	22.00	25.00
802.11ac-VHT160 MCS0		163	5815	20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845	22.00	22.00	25.00
		173	5865	22.00	22.00	25.00
		177	5885	22.00	22.00	25.00
802.11ax-HE40 MCS0		167	5835	22.00	22.00	25.00
		175	5875	22.00	22.00	25.00
802.11ax-HE80 MCS0		171	5855	21.00	21.00	24.00
802.11ax-HE160 MCS0		163	5815	20.00	20.00	23.00

< Power index 1 >

<2.4Hz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	17.50
		6	2437	17.50
		11	2462	17.50
		12	2467	17.50
		13	2472	17.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	17.50
		6	2437	17.50
		11	2462	17.50
		12	2467	17.50
		13	2472	17.50

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
		12	2467	17.50	17.50	20.50
		13	2472	17.00	17.00	20.00
	802.11n-HT20 MCS0	1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
		12	2467	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	13	2472	17.00	17.00	20.00
		1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
	802.11ax-HE20 MCS0	12	2467	17.50	17.50	20.50
		13	2472	17.00	17.00	20.00
		1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
	802.11ax-HE20 MCS0	12	2467	17.50	17.50	20.50
		13	2472	17.00	17.00	20.00
		1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
		48	5240	13.50	13.50	16.50
	802.11n-HT20 MCS0	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
		48	5240	13.50	13.50	16.50
	802.11n-HT40 MCS0	38	5190	13.50	13.50	16.50
		46	5230	13.50	13.50	16.50
	802.11ac-VHT20 MCS0	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
		48	5240	13.50	13.50	16.50
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	16.50
		46	5230	13.50	13.50	16.50
802.11ac-VHT80 MCS0	42	5210	13.50	13.50	16.50	
802.11ax-HE20 MCS0	36	5180	13.50	13.50	16.50	
	40	5200	13.50	13.50	16.50	
	44	5220	13.50	13.50	16.50	
	48	5240	13.50	13.50	16.50	
802.11ax-HE40 MCS0	38	5190	13.50	13.50	16.50	
	46	5230	13.50	13.50	16.50	
802.11ax-HE80 MCS0	42	5210	13.50	13.50	16.50	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
		60	5300	13.50	13.50	16.50
		64	5320	13.50	13.50	16.50
	802.11n-HT20 MCS0	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
		60	5300	13.50	13.50	16.50
		64	5320	13.50	13.50	16.50
	802.11n-HT40 MCS0	54	5270	13.50	13.50	16.50
		62	5310	13.50	13.50	16.50
	802.11ac-VHT20 MCS0	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
		60	5300	13.50	13.50	16.50
		64	5320	13.50	13.50	16.50
	802.11ac-VHT40 MCS0	54	5270	13.50	13.50	16.50
		62	5310	13.50	13.50	16.50
	802.11ac-VHT80 MCS0	58	5290	13.50	13.50	16.50
	802.11ac-VHT160 MCS0	50	5250	13.50	13.50	16.50
	802.11ax-HE20 MCS0	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
60		5300	13.50	13.50	16.50	
64		5320	13.50	13.50	16.50	
802.11ax-HE40 MCS0	54	5270	13.50	13.50	16.50	
	62	5310	13.50	13.50	16.50	
802.11ax-HE80 MCS0	58	5290	13.50	13.50	16.50	
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		144	5720	15.00	15.00	18.00
	802.11n-HT20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
	802.11ac-VHT20 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
	802.11ac-VHT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
	802.11ac-VHT80 MCS0	106	5530	15.00	15.00	18.00
		122	5610	15.00	15.00	18.00
		138	5690	15.00	15.00	18.00
	802.11ac-VHT160 MCS0	114	5570	15.00	15.00	18.00
	802.11ax-HE20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		144	5720	15.00	15.00	18.00
	802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
126		5630	15.00	15.00	18.00	
134		5670	15.00	15.00	18.00	
802.11ax-HE80 MCS0	106	5530	15.00	15.00	18.00	
	122	5610	15.00	15.00	18.00	
	138	5690	15.00	15.00	18.00	
802.11ax-HE160 MCS0	114	5570	15.00	15.00	18.00	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11n-HT20 MCS0	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11n-HT40 MCS0	151	5755	16.00	16.00	19.00
		159	5795	16.00	16.00	19.00
	802.11ac-VHT20 MCS0	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11ac-VHT40 MCS0	151	5755	16.00	16.00	19.00
		159	5795	16.00	16.00	19.00
	802.11ac-VHT80 MCS0	155	5775	16.00	16.00	19.00
	802.11ax-HE20 MCS0	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11ax-HE40 MCS0	151	5755	16.00	16.00	19.00
159		5795	16.00	16.00	19.00	
802.11ax-HE80 MCS0	155	5775	16.00	16.00	19.00	

Burst Average Power (dBm)						
5.8GHz WLAN UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.8GHz WLAN UNII4	802.11a 6Mbps	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11n-HT20 MCS0	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11n-HT40 MCS0	167	5835	16.50	16.50	19.50
		175	5875	16.50	16.50	19.50
	802.11ac-VHT20 MCS0	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11ac-VHT40 MCS0	167	5835	16.50	16.50	19.50
		175	5875	16.50	16.50	19.50
	802.11ac-VHT80 MCS0	171	5855	16.50	16.50	19.50
	802.11ac-VHT160 MCS0	163	5815	16.50	16.50	19.50
	802.11ax-HE20 MCS0	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11ax-HE40 MCS0	167	5835	16.50	16.50	19.50
		175	5875	16.50	16.50	19.50
	802.11ax-HE80 MCS0	171	5855	16.50	16.50	19.50
	802.11ax-HE160 MCS0	163	5815	16.50	16.50	19.50



< Power index 2 >

<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	15.50
		6	2437	15.50
		11	2462	15.50
		12	2467	15.50
		13	2472	15.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	15.50
		6	2437	15.50
		11	2462	15.50
		12	2467	15.50
		13	2472	15.50

Burst Average Power (dBm)							
Transmit Antenna				MIMO Ant 4+3			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412	15.50	15.50	18.50	
		6	2437	15.50	15.50	18.50	
		11	2462	15.50	15.50	18.50	
		12	2467	15.50	15.50	18.50	
		13	2472	15.50	15.50	18.50	
	802.11n-HT20 MCS0	1	2412	15.50	15.50	18.50	
		6	2437	15.50	15.50	18.50	
		11	2462	15.50	15.50	18.50	
		12	2467	15.50	15.50	18.50	
	802.11ac-VHT20 MCS0	13	2472	15.50	15.50	18.50	
		1	2412	15.50	15.50	18.50	
		6	2437	15.50	15.50	18.50	
		11	2462	15.50	15.50	18.50	
	802.11ax-HE20 MCS0	12	2467	15.50	15.50	18.50	
		13	2472	15.50	15.50	18.50	
		1	2412	15.50	15.50	18.50	
		6	2437	15.50	15.50	18.50	
		11	2462	15.50	15.50	18.50	
			12	2467	15.50	15.50	18.50
			13	2472	15.50	15.50	18.50



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
		48	5240	13.50	13.50	16.50
	802.11n-HT20 MCS0	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
		48	5240	13.50	13.50	16.50
	802.11n-HT40 MCS0	38	5190	13.50	13.50	16.50
		46	5230	13.50	13.50	16.50
	802.11ac-VHT20 MCS0	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
		48	5240	13.50	13.50	16.50
	802.11ac-VHT40 MCS0	38	5190	13.50	13.50	16.50
		46	5230	13.50	13.50	16.50
	802.11ac-VHT80 MCS0	42	5210	13.50	13.50	16.50
	802.11ax-HE20 MCS0	36	5180	13.50	13.50	16.50
		40	5200	13.50	13.50	16.50
		44	5220	13.50	13.50	16.50
48		5240	13.50	13.50	16.50	
802.11ax-HE40 MCS0	38	5190	13.50	13.50	16.50	
	46	5230	13.50	13.50	16.50	
802.11ax-HE80 MCS0	42	5210	13.50	13.50	16.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
		60	5300	13.50	13.50	16.50
		64	5320	13.50	13.50	16.50
	802.11n-HT20 MCS0	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
		60	5300	13.50	13.50	16.50
	802.11n-HT40 MCS0	64	5320	13.50	13.50	16.50
		54	5270	13.50	13.50	16.50
		62	5310	13.50	13.50	16.50
	802.11ac-VHT20 MCS0	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
		60	5300	13.50	13.50	16.50
		64	5320	13.50	13.50	16.50
	802.11ac-VHT40 MCS0	54	5270	13.50	13.50	16.50
		62	5310	13.50	13.50	16.50
	802.11ac-VHT80 MCS0	58	5290	13.50	13.50	16.50
	802.11ac-VHT160 MCS0	50	5250	13.50	13.50	16.50
	802.11ax-HE20 MCS0	52	5260	13.50	13.50	16.50
		56	5280	13.50	13.50	16.50
60		5300	13.50	13.50	16.50	
64		5320	13.50	13.50	16.50	
802.11ax-HE40 MCS0	54	5270	13.50	13.50	16.50	
	62	5310	13.50	13.50	16.50	
802.11ax-HE80 MCS0	58	5290	13.50	13.50	16.50	
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
		144	5720	15.00	15.00	18.00
	802.11n-HT20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
		126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
	802.11ac-VHT20 MCS0	142	5710	15.00	15.00	18.00
		100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
	802.11ac-VHT40 MCS0	132	5660	15.00	15.00	18.00
		144	5720	15.00	15.00	18.00
		102	5510	15.00	15.00	18.00
		110	5550	15.00	15.00	18.00
	802.11ac-VHT80 MCS0	126	5630	15.00	15.00	18.00
		134	5670	15.00	15.00	18.00
		142	5710	15.00	15.00	18.00
		106	5530	15.00	15.00	18.00
	802.11ac-VHT160 MCS0	122	5610	15.00	15.00	18.00
		138	5690	15.00	15.00	18.00
		114	5570	15.00	15.00	18.00
	802.11ax-HE20 MCS0	100	5500	15.00	15.00	18.00
		116	5580	15.00	15.00	18.00
		124	5620	15.00	15.00	18.00
		132	5660	15.00	15.00	18.00
144		5720	15.00	15.00	18.00	
802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.00	
	110	5550	15.00	15.00	18.00	
	126	5630	15.00	15.00	18.00	
	134	5670	15.00	15.00	18.00	
	142	5710	15.00	15.00	18.00	
802.11ax-HE80 MCS0	106	5530	15.00	15.00	18.00	
	122	5610	15.00	15.00	18.00	
	138	5690	15.00	15.00	18.00	
802.11ax-HE160 MCS0	114	5570	15.00	15.00	18.00	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11n-HT20 MCS0	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11n-HT40 MCS0	151	5755	16.00	16.00	19.00
		159	5795	16.00	16.00	19.00
	802.11ac-VHT20 MCS0	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11ac-VHT40 MCS0	151	5755	16.00	16.00	19.00
		159	5795	16.00	16.00	19.00
	802.11ac-VHT80 MCS0	155	5775	16.00	16.00	19.00
	802.11ax-HE20 MCS0	149	5745	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00
		165	5825	16.00	16.00	19.00
	802.11ax-HE40 MCS0	151	5755	16.00	16.00	19.00
159		5795	16.00	16.00	19.00	
802.11ax-HE80 MCS0	155	5775	16.00	16.00	19.00	

Burst Average Power (dBm)						
5.8GHz WLAN UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.8GHz WLAN UNII4	802.11a 6Mbps	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11n-HT20 MCS0	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11n-HT40 MCS0	167	5835	16.50	16.50	19.50
		175	5875	16.50	16.50	19.50
	802.11ac-VHT20 MCS0	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
	802.11ac-VHT40 MCS0	167	5835	16.50	16.50	19.50
		175	5875	16.50	16.50	19.50
	802.11ac-VHT80 MCS0	171	5855	16.50	16.50	19.50
	802.11ac-VHT160 MCS0	163	5815	16.50	16.50	19.50
	802.11ax-HE20 MCS0	169	5845	16.50	16.50	19.50
		173	5865	16.50	16.50	19.50
		177	5885	16.50	16.50	19.50
802.11ax-HE40 MCS0	167	5835	16.50	16.50	19.50	
	175	5875	16.50	16.50	19.50	
802.11ax-HE80 MCS0	171	5855	16.50	16.50	19.50	
802.11ax-HE160 MCS0	163	5815	16.50	16.50	19.50	



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<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	14.50
		6	2437	14.50
		11	2462	14.50
		12	2467	14.50
		13	2472	14.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	14.50
		6	2437	14.50
		11	2462	14.50
		12	2467	14.50
		13	2472	14.50

Burst Average Power (dBm)							
Transmit Antenna				MIMO Ant 4+3			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412	14.50	14.50	17.50	
		6	2437	14.50	14.50	17.50	
		11	2462	14.50	14.50	17.50	
		12	2467	14.50	14.50	17.50	
		13	2472	14.50	14.50	17.50	
	802.11n-HT20 MCS0	1	2412	14.50	14.50	17.50	
		6	2437	14.50	14.50	17.50	
		11	2462	14.50	14.50	17.50	
		12	2467	14.50	14.50	17.50	
	802.11ac-VHT20 MCS0	1	2412	14.50	14.50	17.50	
		6	2437	14.50	14.50	17.50	
		11	2462	14.50	14.50	17.50	
		12	2467	14.50	14.50	17.50	
	802.11ax-HE20 MCS0	1	2412	14.50	14.50	17.50	
		6	2437	14.50	14.50	17.50	
		11	2462	14.50	14.50	17.50	
		12	2467	14.50	14.50	17.50	
			13	2472	14.50	14.50	17.50



<5GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
		48	5240	10.00	10.00	13.00
	802.11n-HT20 MCS0	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
		48	5240	10.00	10.00	13.00
	802.11n-HT40 MCS0	38	5190	10.00	10.00	13.00
		46	5230	10.00	10.00	13.00
	802.11ac-VHT20 MCS0	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
		48	5240	10.00	10.00	13.00
	802.11ac-VHT40 MCS0	38	5190	10.00	10.00	13.00
		46	5230	10.00	10.00	13.00
	802.11ac-VHT80 MCS0	42	5210	10.00	10.00	13.00
	802.11ax-HE20 MCS0	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
48		5240	10.00	10.00	13.00	
802.11ax-HE40 MCS0	38	5190	10.00	10.00	13.00	
	46	5230	10.00	10.00	13.00	
802.11ax-HE80 MCS0	42	5210	10.00	10.00	13.00	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
		60	5300	10.00	10.00	13.00
		64	5320	10.00	10.00	13.00
	802.11n-HT20 MCS0	52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
		60	5300	10.00	10.00	13.00
	802.11n-HT40 MCS0	54	5270	10.00	10.00	13.00
		62	5310	10.00	10.00	13.00
		64	5320	10.00	10.00	13.00
	802.11ac-VHT20 MCS0	52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
		60	5300	10.00	10.00	13.00
		64	5320	10.00	10.00	13.00
	802.11ac-VHT40 MCS0	54	5270	10.00	10.00	13.00
		62	5310	10.00	10.00	13.00
	802.11ac-VHT80 MCS0	58	5290	10.00	10.00	13.00
	802.11ac-VHT160 MCS0	50	5250	10.00	10.00	13.00
	802.11ax-HE20 MCS0	52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
60		5300	10.00	10.00	13.00	
64		5320	10.00	10.00	13.00	
802.11ax-HE40 MCS0	54	5270	10.00	10.00	13.00	
	62	5310	10.00	10.00	13.00	
802.11ax-HE80 MCS0	58	5290	10.00	10.00	13.00	
802.11ax-HE160 MCS0	50	5250	10.00	10.00	13.00	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	11.00	11.00	14.00
		116	5580	11.00	11.00	14.00
		124	5620	11.00	11.00	14.00
		132	5660	11.00	11.00	14.00
		144	5720	11.00	11.00	14.00
	802.11n-HT20 MCS0	100	5500	11.00	11.00	14.00
		116	5580	11.00	11.00	14.00
		124	5620	11.00	11.00	14.00
		132	5660	11.00	11.00	14.00
	802.11n-HT40 MCS0	102	5510	11.00	11.00	14.00
		110	5550	11.00	11.00	14.00
		126	5630	11.00	11.00	14.00
		134	5670	11.00	11.00	14.00
	802.11ac-VHT20 MCS0	142	5710	11.00	11.00	14.00
		100	5500	11.00	11.00	14.00
		116	5580	11.00	11.00	14.00
		124	5620	11.00	11.00	14.00
	802.11ac-VHT40 MCS0	132	5660	11.00	11.00	14.00
		144	5720	11.00	11.00	14.00
		102	5510	11.00	11.00	14.00
		110	5550	11.00	11.00	14.00
	802.11ac-VHT80 MCS0	126	5630	11.00	11.00	14.00
		134	5670	11.00	11.00	14.00
		142	5710	11.00	11.00	14.00
		106	5530	11.00	11.00	14.00
	802.11ac-VHT160 MCS0	122	5610	11.00	11.00	14.00
		138	5690	11.00	11.00	14.00
		114	5570	11.00	11.00	14.00
	802.11ax-HE20 MCS0	100	5500	11.00	11.00	14.00
		116	5580	11.00	11.00	14.00
		124	5620	11.00	11.00	14.00
		132	5660	11.00	11.00	14.00
		144	5720	11.00	11.00	14.00
	802.11ax-HE40 MCS0	102	5510	11.00	11.00	14.00
		110	5550	11.00	11.00	14.00
		126	5630	11.00	11.00	14.00
		134	5670	11.00	11.00	14.00
		142	5710	11.00	11.00	14.00
	802.11ax-HE80 MCS0	106	5530	11.00	11.00	14.00
		122	5610	11.00	11.00	14.00
138		5690	11.00	11.00	14.00	
802.11ax-HE160 MCS0	114	5570	11.00	11.00	14.00	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11n-HT20 MCS0		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11n-HT40 MCS0		151	5755	12.00	12.00	15.00
		159	5795	12.00	12.00	15.00
802.11ac-VHT20 MCS0		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11ac-VHT40 MCS0		151	5755	12.00	12.00	15.00
		159	5795	12.00	12.00	15.00
802.11ac-VHT80 MCS0		155	5775	12.00	12.00	15.00
802.11ax-HE20 MCS0		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11ax-HE40 MCS0		151	5755	12.00	12.00	15.00
		159	5795	12.00	12.00	15.00
802.11ax-HE80 MCS0		155	5775	12.00	12.00	15.00

Burst Average Power (dBm)						
5.8GHz WLAN UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11n-HT20 MCS0		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11n-HT40 MCS0		167	5835	12.50	12.50	15.50
		175	5875	12.50	12.50	15.50
802.11ac-VHT20 MCS0		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11ac-VHT40 MCS0		167	5835	12.50	12.50	15.50
		175	5875	12.50	12.50	15.50
802.11ac-VHT80 MCS0		171	5855	12.50	12.50	15.50
802.11ac-VHT160 MCS0		163	5815	12.50	12.50	15.50
802.11ax-HE20 MCS0		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11ax-HE40 MCS0		167	5835	12.50	12.50	15.50
		175	5875	12.50	12.50	15.50
802.11ax-HE80 MCS0		171	5855	12.50	12.50	15.50
802.11ax-HE160 MCS0		163	5815	12.50	12.50	15.50



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<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	11.00
		6	2437	11.00
		11	2462	11.00
		12	2467	11.00
		13	2472	11.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	11.00
		6	2437	11.00
		11	2462	11.00
		12	2467	11.00
		13	2472	11.00

Burst Average Power (dBm)							
Transmit Antenna				MIMO Ant 4+3			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412	11.00	11.00	14.00	
		6	2437	11.00	11.00	14.00	
		11	2462	11.00	11.00	14.00	
		12	2467	11.00	11.00	14.00	
		13	2472	11.00	11.00	14.00	
	802.11n-HT20 MCS0	1	2412	11.00	11.00	14.00	
		6	2437	11.00	11.00	14.00	
		11	2462	11.00	11.00	14.00	
		12	2467	11.00	11.00	14.00	
	802.11ac-VHT20 MCS0	1	2412	11.00	11.00	14.00	
		6	2437	11.00	11.00	14.00	
		11	2462	11.00	11.00	14.00	
		12	2467	11.00	11.00	14.00	
	802.11ax-HE20 MCS0	1	2412	11.00	11.00	14.00	
		6	2437	11.00	11.00	14.00	
		11	2462	11.00	11.00	14.00	
		12	2467	11.00	11.00	14.00	
			13	2472	11.00	11.00	14.00



<5GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
		48	5240	10.00	10.00	13.00
	802.11n-HT20 MCS0	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
		48	5240	10.00	10.00	13.00
	802.11n-HT40 MCS0	38	5190	10.00	10.00	13.00
		46	5230	10.00	10.00	13.00
	802.11ac-VHT20 MCS0	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
		48	5240	10.00	10.00	13.00
	802.11ac-VHT40 MCS0	38	5190	10.00	10.00	13.00
		46	5230	10.00	10.00	13.00
	802.11ac-VHT80 MCS0	42	5210	10.00	10.00	13.00
	802.11ax-HE20 MCS0	36	5180	10.00	10.00	13.00
		40	5200	10.00	10.00	13.00
		44	5220	10.00	10.00	13.00
48		5240	10.00	10.00	13.00	
802.11ax-HE40 MCS0	38	5190	10.00	10.00	13.00	
	46	5230	10.00	10.00	13.00	
802.11ax-HE80 MCS0	42	5210	10.00	10.00	13.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps		52	5260	10.00	10.00
56			5280	10.00	10.00	13.00
60			5300	10.00	10.00	13.00
64			5320	10.00	10.00	13.00
802.11n-HT20 MCS0		52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
		60	5300	10.00	10.00	13.00
		64	5320	10.00	10.00	13.00
802.11n-HT40 MCS0		54	5270	10.00	10.00	13.00
		62	5310	10.00	10.00	13.00
802.11ac-VHT20 MCS0		52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
		60	5300	10.00	10.00	13.00
		64	5320	10.00	10.00	13.00
802.11ac-VHT40 MCS0		54	5270	10.00	10.00	13.00
		62	5310	10.00	10.00	13.00
802.11ac-VHT80 MCS0		58	5290	10.00	10.00	13.00
802.11ac-VHT160 MCS0		50	5250	10.00	10.00	13.00
802.11ax-HE20 MCS0		52	5260	10.00	10.00	13.00
		56	5280	10.00	10.00	13.00
		60	5300	10.00	10.00	13.00
		64	5320	10.00	10.00	13.00
802.11ax-HE40 MCS0		54	5270	10.00	10.00	13.00
		62	5310	10.00	10.00	13.00
802.11ax-HE80 MCS0		58	5290	10.00	10.00	13.00
802.11ax-HE160 MCS0		50	5250	10.00	10.00	13.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	11.50	11.50	14.50
		116	5580	11.50	11.50	14.50
		124	5620	11.50	11.50	14.50
		132	5660	11.50	11.50	14.50
		144	5720	11.50	11.50	14.50
	802.11n-HT20 MCS0	100	5500	11.50	11.50	14.50
		116	5580	11.50	11.50	14.50
		124	5620	11.50	11.50	14.50
		132	5660	11.50	11.50	14.50
	802.11n-HT40 MCS0	102	5510	11.50	11.50	14.50
		110	5550	11.50	11.50	14.50
		126	5630	11.50	11.50	14.50
		134	5670	11.50	11.50	14.50
	802.11ac-VHT20 MCS0	100	5500	11.50	11.50	14.50
		116	5580	11.50	11.50	14.50
		124	5620	11.50	11.50	14.50
		132	5660	11.50	11.50	14.50
	802.11ac-VHT40 MCS0	102	5510	11.50	11.50	14.50
		110	5550	11.50	11.50	14.50
		126	5630	11.50	11.50	14.50
		134	5670	11.50	11.50	14.50
	802.11ac-VHT80 MCS0	106	5530	11.50	11.50	14.50
		122	5610	11.50	11.50	14.50
		138	5690	11.50	11.50	14.50
	802.11ac-VHT160 MCS0	114	5570	11.50	11.50	14.50
	802.11ax-HE20 MCS0	100	5500	11.50	11.50	14.50
		116	5580	11.50	11.50	14.50
		124	5620	11.50	11.50	14.50
		132	5660	11.50	11.50	14.50
		144	5720	11.50	11.50	14.50
	802.11ax-HE40 MCS0	102	5510	11.50	11.50	14.50
		110	5550	11.50	11.50	14.50
126		5630	11.50	11.50	14.50	
134		5670	11.50	11.50	14.50	
142		5710	11.50	11.50	14.50	
802.11ax-HE80 MCS0	106	5530	11.50	11.50	14.50	
	122	5610	11.50	11.50	14.50	
	138	5690	11.50	11.50	14.50	
802.11ax-HE160 MCS0	114	5570	11.50	11.50	14.50	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11n-HT20 MCS0		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11n-HT40 MCS0		151	5755	12.00	12.00	15.00
		159	5795	12.00	12.00	15.00
802.11ac-VHT20 MCS0		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11ac-VHT40 MCS0		151	5755	12.00	12.00	15.00
		159	5795	12.00	12.00	15.00
802.11ac-VHT80 MCS0		155	5775	12.00	12.00	15.00
802.11ax-HE20 MCS0		149	5745	12.00	12.00	15.00
		157	5785	12.00	12.00	15.00
		165	5825	12.00	12.00	15.00
802.11ax-HE40 MCS0		151	5755	12.00	12.00	15.00
		159	5795	12.00	12.00	15.00
802.11ax-HE80 MCS0		155	5775	12.00	12.00	15.00

Burst Average Power (dBm)						
5.8GHz WLAN UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11n-HT20 MCS0		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11n-HT40 MCS0		167	5835	12.50	12.50	15.50
		175	5875	12.50	12.50	15.50
802.11ac-VHT20 MCS0		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11ac-VHT40 MCS0		167	5835	12.50	12.50	15.50
		175	5875	12.50	12.50	15.50
802.11ac-VHT80 MCS0		171	5855	12.50	12.50	15.50
802.11ac-VHT160 MCS0		163	5815	12.50	12.50	15.50
802.11ax-HE20 MCS0		169	5845	12.50	12.50	15.50
		173	5865	12.50	12.50	15.50
		177	5885	12.50	12.50	15.50
802.11ax-HE40 MCS0		167	5835	12.50	12.50	15.50
		175	5875	12.50	12.50	15.50
802.11ax-HE80 MCS0		171	5855	12.50	12.50	15.50
802.11ax-HE160 MCS0		163	5815	12.50	12.50	15.50

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<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	23.00
		6	2437	23.00
		11	2462	23.00
		12	2467	23.00
		13	2472	23.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	22.00
		6	2437	23.00
		11	2462	23.00
		12	2467	23.00
		13	2472	21.00

Burst Average Power (dBm)							
Transmit Antenna				MIMO Ant 4+3			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412	20.00	20.00	23.00	
		6	2437	23.00	23.00	26.00	
		11	2462	20.00	20.00	23.00	
		12	2467	18.50	18.50	21.50	
		13	2472	17.00	17.00	20.00	
	802.11n-HT20 MCS0	1	2412	20.00	20.00	23.00	
		6	2437	23.00	23.00	26.00	
		11	2462	20.00	20.00	23.00	
		12	2467	18.50	18.50	21.50	
	802.11ac-VHT20 MCS0	1	2412	20.00	20.00	23.00	
		6	2437	23.00	23.00	26.00	
		11	2462	20.00	20.00	23.00	
		12	2467	18.50	18.50	21.50	
	802.11ax-HE20 MCS0	1	2412	20.00	20.00	23.00	
		6	2437	23.00	23.00	26.00	
		11	2462	20.00	20.00	23.00	
		12	2467	18.50	18.50	21.50	
			13	2472	17.00	17.00	20.00



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.50	18.50	21.50
802.11ac-VHT80 MCS0	42	5210	16.50	16.50	19.50	
802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50	
	40	5200	18.50	18.50	21.50	
	44	5220	18.50	18.50	21.50	
	48	5240	18.50	18.50	21.50	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00	
	46	5230	18.50	18.50	21.50	
802.11ax-HE80 MCS0	42	5210	16.50	16.50	19.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	18.50	18.50	21.50
		62	5310	17.00	17.00	20.00
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	18.50	18.50	21.50
		62	5310	17.00	17.00	20.00
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.00
802.11ac-VHT160 MCS0		50	5250	15	15	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	18.50	18.50	21.50
		62	5310	17.00	17.00	20.00
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.00
802.11ax-HE160 MCS0		50	5250	15	15	18.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
	802.11n-HT20 MCS0	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
		134	5670	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	142	5710	18.50	18.50	21.50
		100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
		102	5510	15.00	15.00	18.00
		110	5550	18.50	18.50	21.50
	802.11ac-VHT80 MCS0	126	5630	18.50	18.50	21.50
		134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
		106	5530	15.50	15.50	18.50
	802.11ac-VHT160 MCS0	122	5610	18.50	18.50	21.50
		138	5690	18.50	18.50	21.50
		114	5570	15.50	15.50	18.50
	802.11ax-HE20 MCS0	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
144		5720	18.50	18.50	21.50	
802.11ax-HE40 MCS0	102	5510	15.00	15.00	18.00	
	110	5550	18.50	18.50	21.50	
	126	5630	18.50	18.50	21.50	
	134	5670	18.50	18.50	21.50	
	142	5710	18.50	18.50	21.50	
802.11ax-HE80 MCS0	106	5530	15.50	15.50	18.50	
	122	5610	18.50	18.50	21.50	
	138	5690	18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570	15.50	15.50	18.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	149	5745	21.00	21.00	24.00
		157	5785	21.00	21.00	24.00
		165	5825	21.00	21.00	24.00
	802.11n-HT20 MCS0	149	5745	21.00	21.00	24.00
		157	5785	21.00	21.00	24.00
		165	5825	21.00	21.00	24.00
	802.11n-HT40 MCS0	151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	149	5745	21.00	21.00	24.00
		157	5785	21.00	21.00	24.00
		165	5825	21.00	21.00	24.00
	802.11ac-VHT40 MCS0	151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
802.11ac-VHT80 MCS0	155	5775	21.00	21.00	24.00	
802.11ax-HE20 MCS0	149	5745	21.00	21.00	24.00	
	157	5785	21.00	21.00	24.00	
	165	5825	21.00	21.00	24.00	
802.11ax-HE40 MCS0	151	5755	21.00	21.00	24.00	
	159	5795	21.00	21.00	24.00	
802.11ax-HE80 MCS0	155	5775	21.00	21.00	24.00	

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN UNII4	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	169	5845	20.00	20.00	23.00
		173	5865	20.00	20.00	23.00
		177	5885	20.00	20.00	23.00
	802.11n-HT20 MCS0	169	5845	20.00	20.00	23.00
		173	5865	20.00	20.00	23.00
		177	5885	20.00	20.00	23.00
	802.11n-HT40 MCS0	167	5835	20.00	20.00	23.00
		175	5875	20.00	20.00	23.00
	802.11ac-VHT20 MCS0	169	5845	20.00	20.00	23.00
		173	5865	20.00	20.00	23.00
		177	5885	20.00	20.00	23.00
	802.11ac-VHT40 MCS0	167	5835	20.00	20.00	23.00
		175	5875	20.00	20.00	23.00
	802.11ac-VHT80 MCS0	171	5855	20.00	20.00	23.00
	802.11ac-VHT160 MCS0	163	5815	20.00	20.00	23.00
	802.11ax-HE20 MCS0	169	5845	20.00	20.00	23.00
173		5865	20.00	20.00	23.00	
177		5885	20.00	20.00	23.00	
802.11ax-HE40 MCS0	167	5835	20.00	20.00	23.00	
	175	5875	20.00	20.00	23.00	
802.11ax-HE80 MCS0	171	5855	20.00	20.00	23.00	
802.11ax-HE160 MCS0	163	5815	20.00	20.00	23.00	



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<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	23.00
		6	2437	23.00
		11	2462	23.00
		12	2467	23.00
		13	2472	23.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	22.00
		6	2437	23.00
		11	2462	23.00
		12	2467	23.00
		13	2472	21.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11n-HT20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11ax-HE20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	23.00	23.00	26.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
13		2472	17.00	17.00	20.00	



<5GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
		48	5240	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.50	18.50	21.50
	802.11ac-VHT80 MCS0	42	5210	16.50	16.50	19.50
	802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50
		40	5200	18.50	18.50	21.50
		44	5220	18.50	18.50	21.50
48		5240	18.50	18.50	21.50	
802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00	
	46	5230	18.50	18.50	21.50	
802.11ax-HE80 MCS0	42	5210	16.50	16.50	19.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps		52	5260	18.50	18.50
56			5280	18.50	18.50	21.50
60			5300	18.50	18.50	21.50
64			5320	18.50	18.50	21.50
802.11n-HT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
802.11n-HT40 MCS0		54	5270	18.50	18.50	21.50
		62	5310	17.00	17.00	20.00
		64	5320	18.50	18.50	21.50
802.11ac-VHT20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ac-VHT40 MCS0		54	5270	18.50	18.50	21.50
		62	5310	17.00	17.00	20.00
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.00
802.11ac-VHT160 MCS0		50	5250	15	15	18.00
802.11ax-HE20 MCS0		52	5260	18.50	18.50	21.50
		56	5280	18.50	18.50	21.50
		60	5300	18.50	18.50	21.50
		64	5320	18.50	18.50	21.50
802.11ax-HE40 MCS0		54	5270	18.50	18.50	21.50
		62	5310	17.00	17.00	20.00
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.00
802.11ax-HE160 MCS0		50	5250	15	15	18.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
	802.11n-HT20 MCS0	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
	802.11n-HT40 MCS0	144	5720	18.50	18.50	21.50
		102	5510	15.00	15.00	18.00
		110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
		100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
		102	5510	15.00	15.00	18.00
	802.11ac-VHT80 MCS0	110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
		134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
	802.11ac-VHT160 MCS0	106	5530	15.50	15.50	18.50
		122	5610	18.50	18.50	21.50
		138	5690	18.50	18.50	21.50
	802.11ax-HE20 MCS0	114	5570	15.50	15.50	18.50
		100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
132		5660	18.50	18.50	21.50	
802.11ax-HE40 MCS0	144	5720	18.50	18.50	21.50	
	102	5510	15.00	15.00	18.00	
	110	5550	18.50	18.50	21.50	
	126	5630	18.50	18.50	21.50	
	134	5670	18.50	18.50	21.50	
802.11ax-HE80 MCS0	142	5710	18.50	18.50	21.50	
	106	5530	15.50	15.50	18.50	
	122	5610	18.50	18.50	21.50	
802.11ax-HE160 MCS0	138	5690	18.50	18.50	21.50	
	114	5570	15.50	15.50	18.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	149	5745	21.00	21.00	24.00
		157	5785	21.00	21.00	24.00
		165	5825	21.00	21.00	24.00
	802.11n-HT20 MCS0	149	5745	21.00	21.00	24.00
		157	5785	21.00	21.00	24.00
		165	5825	21.00	21.00	24.00
	802.11n-HT40 MCS0	151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
	802.11ac-VHT20 MCS0	149	5745	21.00	21.00	24.00
		157	5785	21.00	21.00	24.00
		165	5825	21.00	21.00	24.00
	802.11ac-VHT40 MCS0	151	5755	21.00	21.00	24.00
		159	5795	21.00	21.00	24.00
802.11ac-VHT80 MCS0	155	5775	21.00	21.00	24.00	
802.11ax-HE20 MCS0	149	5745	21.00	21.00	24.00	
	157	5785	21.00	21.00	24.00	
	165	5825	21.00	21.00	24.00	
802.11ax-HE40 MCS0	151	5755	21.00	21.00	24.00	
	159	5795	21.00	21.00	24.00	
802.11ax-HE80 MCS0	155	5775	21.00	21.00	24.00	

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN UNII4	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	169	5845	20.00	20.00	23.00
		173	5865	20.00	20.00	23.00
		177	5885	20.00	20.00	23.00
	802.11n-HT20 MCS0	169	5845	20.00	20.00	23.00
		173	5865	20.00	20.00	23.00
		177	5885	20.00	20.00	23.00
	802.11n-HT40 MCS0	167	5835	20.00	20.00	23.00
		175	5875	20.00	20.00	23.00
	802.11ac-VHT20 MCS0	169	5845	20.00	20.00	23.00
		173	5865	20.00	20.00	23.00
		177	5885	20.00	20.00	23.00
	802.11ac-VHT40 MCS0	167	5835	20.00	20.00	23.00
		175	5875	20.00	20.00	23.00
	802.11ac-VHT80 MCS0	171	5855	20.00	20.00	23.00
	802.11ac-VHT160 MCS0	163	5815	20.00	20.00	23.00
	802.11ax-HE20 MCS0	169	5845	20.00	20.00	23.00
173		5865	20.00	20.00	23.00	
177		5885	20.00	20.00	23.00	
802.11ax-HE40 MCS0	167	5835	20.00	20.00	23.00	
	175	5875	20.00	20.00	23.00	
802.11ax-HE80 MCS0	171	5855	20.00	20.00	23.00	
802.11ax-HE160 MCS0	163	5815	20.00	20.00	23.00	



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<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	21.00
		6	2437	21.00
		11	2462	21.00
		12	2467	21.00
		13	2472	21.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	21.00
		6	2437	21.00
		11	2462	21.00
		12	2467	21.00
		13	2472	21.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412	20.00	20.00	23.00
		6	2437	21.00	21.00	24.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11n-HT20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	21.00	21.00	24.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	21.00	21.00	24.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
		13	2472	17.00	17.00	20.00
	802.11ax-HE20 MCS0	1	2412	20.00	20.00	23.00
		6	2437	21.00	21.00	24.00
		11	2462	20.00	20.00	23.00
		12	2467	18.50	18.50	21.50
13		2472	17.00	17.00	20.00	



<5GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.00	15.00	18.00
		40	5200	15.00	15.00	18.00
		44	5220	15.00	15.00	18.00
		48	5240	15.00	15.00	18.00
	802.11n-HT20 MCS0	36	5180	15.00	15.00	18.00
		40	5200	15.00	15.00	18.00
		44	5220	15.00	15.00	18.00
		48	5240	15.00	15.00	18.00
	802.11n-HT40 MCS0	38	5190	15.00	15.00	18.00
		46	5230	15.00	15.00	18.00
	802.11ac-VHT20 MCS0	36	5180	15.00	15.00	18.00
		40	5200	15.00	15.00	18.00
		44	5220	15.00	15.00	18.00
		48	5240	15.00	15.00	18.00
	802.11ac-VHT40 MCS0	38	5190	15.00	15.00	18.00
		46	5230	15.00	15.00	18.00
	802.11ac-VHT80 MCS0	42	5210	15.00	15.00	18.00
	802.11ax-HE20 MCS0	36	5180	15.00	15.00	18.00
		40	5200	15.00	15.00	18.00
		44	5220	15.00	15.00	18.00
48		5240	15.00	15.00	18.00	
802.11ax-HE40 MCS0	38	5190	15.00	15.00	18.00	
	46	5230	15.00	15.00	18.00	
802.11ax-HE80 MCS0	42	5210	15.00	15.00	18.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps		52	5260	17.50	17.50
56			5280	17.50	17.50	20.50
60			5300	17.50	17.50	20.50
64			5320	17.50	17.50	20.50
802.11n-HT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
802.11n-HT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
		64	5320	17.50	17.50	20.50
802.11ac-VHT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ac-VHT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.00
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ax-HE40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.00
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
	802.11n-HT20 MCS0	100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
	802.11n-HT40 MCS0	144	5720	18.50	18.50	21.50
		102	5510	15.00	15.00	18.00
		110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
		100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	124	5620	18.50	18.50	21.50
		132	5660	18.50	18.50	21.50
		144	5720	18.50	18.50	21.50
		102	5510	15.00	15.00	18.00
	802.11ac-VHT80 MCS0	110	5550	18.50	18.50	21.50
		126	5630	18.50	18.50	21.50
		134	5670	18.50	18.50	21.50
		142	5710	18.50	18.50	21.50
	802.11ac-VHT160 MCS0	106	5530	15.50	15.50	18.50
		122	5610	18.50	18.50	21.50
		138	5690	18.50	18.50	21.50
	802.11ax-HE20 MCS0	114	5570	15.50	15.50	18.50
		100	5500	18.50	18.50	21.50
		116	5580	18.50	18.50	21.50
		124	5620	18.50	18.50	21.50
132		5660	18.50	18.50	21.50	
802.11ax-HE40 MCS0	144	5720	18.50	18.50	21.50	
	102	5510	15.00	15.00	18.00	
	110	5550	18.50	18.50	21.50	
	126	5630	18.50	18.50	21.50	
	134	5670	18.50	18.50	21.50	
802.11ax-HE80 MCS0	142	5710	18.50	18.50	21.50	
	106	5530	15.50	15.50	18.50	
	122	5610	18.50	18.50	21.50	
802.11ax-HE160 MCS0	138	5690	18.50	18.50	21.50	
	114	5570	15.50	15.50	18.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	149	5745	18.50	18.50	21.50
		157	5785	18.50	18.50	21.50
		165	5825	18.50	18.50	21.50
	802.11n-HT20 MCS0	149	5745	18.50	18.50	21.50
		157	5785	18.50	18.50	21.50
		165	5825	18.50	18.50	21.50
	802.11n-HT40 MCS0	151	5755	18.50	18.50	21.50
		159	5795	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	149	5745	18.50	18.50	21.50
		157	5785	18.50	18.50	21.50
		165	5825	18.50	18.50	21.50
	802.11ac-VHT40 MCS0	151	5755	18.50	18.50	21.50
		159	5795	18.50	18.50	21.50
802.11ac-VHT80 MCS0	155	5775	18.50	18.50	21.50	
802.11ax-HE20 MCS0	149	5745	18.50	18.50	21.50	
	157	5785	18.50	18.50	21.50	
	165	5825	18.50	18.50	21.50	
802.11ax-HE40 MCS0	151	5755	18.50	18.50	21.50	
	159	5795	18.50	18.50	21.50	
802.11ax-HE80 MCS0	155	5775	18.50	18.50	21.50	

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN UNII4	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11n-HT20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11n-HT40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11ac-VHT40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ac-VHT80 MCS0	171	5855	19.50	19.50	22.50
	802.11ac-VHT160 MCS0	163	5815	19.50	19.50	22.50
	802.11ax-HE20 MCS0	169	5845	19.50	19.50	22.50
173		5865	19.50	19.50	22.50	
177		5885	19.50	19.50	22.50	
802.11ax-HE40 MCS0	167	5835	19.50	19.50	22.50	
	175	5875	19.50	19.50	22.50	
802.11ax-HE80 MCS0	171	5855	19.50	19.50	22.50	
802.11ax-HE160 MCS0	163	5815	19.50	19.50	22.50	



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<2.4GHz WLAN>

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 4
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	17.50
		6	2437	17.50
		11	2462	17.50
		12	2467	17.50
		13	2472	17.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	17.50
		6	2437	17.50
		11	2462	17.50
		12	2467	17.50
		13	2472	17.50

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
		12	2467	17.50	17.50	20.50
		13	2472	17.00	17.00	20.00
	802.11n-HT20 MCS0	1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
		12	2467	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	13	2472	17.00	17.00	20.00
		1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
	802.11ax-HE20 MCS0	12	2467	17.50	17.50	20.50
		13	2472	17.00	17.00	20.00
		1	2412	17.50	17.50	20.50
		6	2437	17.50	17.50	20.50
		11	2462	17.50	17.50	20.50
		12	2467	17.50	17.50	20.50
13		2472	17.00	17.00	20.00	
1		2412	17.50	17.50	20.50	



<5GHz WLAN>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
		48	5240	13.00	13.00	16.00
	802.11n-HT20 MCS0	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
		48	5240	13.00	13.00	16.00
	802.11n-HT40 MCS0	38	5190	13.00	13.00	16.00
		46	5230	13.00	13.00	16.00
	802.11ac-VHT20 MCS0	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
		48	5240	13.00	13.00	16.00
	802.11ac-VHT40 MCS0	38	5190	13.00	13.00	16.00
		46	5230	13.00	13.00	16.00
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	16.00
	802.11ax-HE20 MCS0	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
48		5240	13.00	13.00	16.00	
802.11ax-HE40 MCS0	38	5190	13.00	13.00	16.00	
	46	5230	13.00	13.00	16.00	
802.11ax-HE80 MCS0	42	5210	13.00	13.00	16.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
	802.11n-HT20 MCS0	52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
	802.11n-HT40 MCS0	64	5320	17.50	17.50	20.50
		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
	802.11ac-VHT20 MCS0	52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.00
	802.11ac-VHT160 MCS0	50	5250	15.00	15.00	18.00
	802.11ax-HE20 MCS0	52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
60		5300	17.50	17.50	20.50	
64		5320	17.50	17.50	20.50	
802.11ax-HE40 MCS0	54	5270	17.50	17.50	20.50	
	62	5310	17.00	17.00	20.00	
802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.00	
802.11ax-HE160 MCS0	50	5250	15.00	15.00	18.00	



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
		144	5720	17.50	17.50	20.50
	802.11n-HT20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	17.50	17.50	20.50
		126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	142	5710	17.50	17.50	20.50
		100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	132	5660	17.50	17.50	20.50
		144	5720	17.50	17.50	20.50
		102	5510	15.00	15.00	18.00
		110	5550	17.50	17.50	20.50
	802.11ac-VHT80 MCS0	126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
		142	5710	17.50	17.50	20.50
		106	5530	15.50	15.50	18.50
	802.11ac-VHT160 MCS0	122	5610	17.50	17.50	20.50
		138	5690	17.50	17.50	20.50
		114	5570	15.50	15.50	18.50
	802.11ax-HE20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
		144	5720	17.50	17.50	20.50
	802.11ax-HE40 MCS0	102	5510	17.50	17.50	20.50
		110	5550	17.50	17.50	20.50
		126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
		142	5710	17.50	17.50	20.50
	802.11ax-HE80 MCS0	106	5530	17.50	17.50	20.50
		122	5610	17.50	17.50	20.50
138		5690	17.50	17.50	20.50	
802.11ax-HE160 MCS0	114	5570	15.50	15.50	18.50	



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11n-HT20 MCS0	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11n-HT40 MCS0	151	5755	16.50	16.50	19.50
		159	5795	16.50	16.50	19.50
	802.11ac-VHT20 MCS0	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11ac-VHT40 MCS0	151	5755	16.50	16.50	19.50
		159	5795	16.50	16.50	19.50
	802.11ac-VHT80 MCS0	155	5775	16.50	16.50	19.50
	802.11ax-HE20 MCS0	149	5745	16.50	16.50	19.50
		157	5785	16.50	16.50	19.50
		165	5825	16.50	16.50	19.50
	802.11ax-HE40 MCS0	151	5755	16.50	16.50	19.50
159		5795	16.50	16.50	19.50	
802.11ax-HE80 MCS0	155	5775	16.50	16.50	19.50	

Burst Average Power (dBm)						
5.8GHz WLAN UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.8GHz WLAN UNII4	802.11a 6Mbps	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11n-HT20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11n-HT40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11ac-VHT40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ac-VHT80 MCS0	171	5855	19.50	19.50	22.50
	802.11ac-VHT160 MCS0	163	5815	19.50	19.50	22.50
	802.11ax-HE20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11ax-HE40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ax-HE80 MCS0	171	5855	19.50	19.50	22.50
802.11ax-HE160 MCS0	163	5815	19.50	19.50	22.50	



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<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
		48	5240	13.00	13.00	16.00
	802.11n-HT20 MCS0	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
		48	5240	13.00	13.00	16.00
	802.11n-HT40 MCS0	38	5190	13.00	13.00	16.00
		46	5230	13.00	13.00	16.00
	802.11ac-VHT20 MCS0	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
		48	5240	13.00	13.00	16.00
	802.11ac-VHT40 MCS0	38	5190	13.00	13.00	16.00
		46	5230	13.00	13.00	16.00
	802.11ac-VHT80 MCS0	42	5210	13.00	13.00	16.00
	802.11ax-HE20 MCS0	36	5180	13.00	13.00	16.00
		40	5200	13.00	13.00	16.00
		44	5220	13.00	13.00	16.00
48		5240	13.00	13.00	16.00	
802.11ax-HE40 MCS0	38	5190	13.00	13.00	16.00	
	46	5230	13.00	13.00	16.00	
802.11ax-HE80 MCS0	42	5210	13.00	13.00	16.00	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps		52	5260	17.50	17.50
56			5280	17.50	17.50	20.50
60			5300	17.50	17.50	20.50
64			5320	17.50	17.50	20.50
802.11n-HT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11n-HT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
802.11ac-VHT20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ac-VHT40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
802.11ac-VHT80 MCS0		58	5290	16.00	16.00	19.00
802.11ac-VHT160 MCS0		50	5250	15.00	15.00	18.00
802.11ax-HE20 MCS0		52	5260	17.50	17.50	20.50
		56	5280	17.50	17.50	20.50
		60	5300	17.50	17.50	20.50
		64	5320	17.50	17.50	20.50
802.11ax-HE40 MCS0		54	5270	17.50	17.50	20.50
		62	5310	17.00	17.00	20.00
802.11ax-HE80 MCS0		58	5290	16.00	16.00	19.00
802.11ax-HE160 MCS0		50	5250	15.00	15.00	18.00



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
		144	5720	17.50	17.50	20.50
	802.11n-HT20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
	802.11n-HT40 MCS0	102	5510	15.00	15.00	18.00
		110	5550	17.50	17.50	20.50
		126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	142	5710	17.50	17.50	20.50
		100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	132	5660	17.50	17.50	20.50
		144	5720	17.50	17.50	20.50
		102	5510	15.00	15.00	18.00
		110	5550	17.50	17.50	20.50
	802.11ac-VHT80 MCS0	126	5630	17.50	17.50	20.50
		134	5670	17.50	17.50	20.50
		142	5710	17.50	17.50	20.50
		106	5530	15.50	15.50	18.50
	802.11ac-VHT160 MCS0	122	5610	17.50	17.50	20.50
		138	5690	17.50	17.50	20.50
		114	5570	15.50	15.50	18.50
	802.11ax-HE20 MCS0	100	5500	17.50	17.50	20.50
		116	5580	17.50	17.50	20.50
		124	5620	17.50	17.50	20.50
		132	5660	17.50	17.50	20.50
144		5720	17.50	17.50	20.50	
802.11ax-HE40 MCS0	102	5510	17.50	17.50	20.50	
	110	5550	17.50	17.50	20.50	
	126	5630	17.50	17.50	20.50	
	134	5670	17.50	17.50	20.50	
	142	5710	17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530	17.50	17.50	20.50	
	122	5610	17.50	17.50	20.50	
	138	5690	17.50	17.50	20.50	
802.11ax-HE160 MCS0	114	5570	15.50	15.50	18.50	



Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	149	5745	17.50	17.50	20.50
		157	5785	17.50	17.50	20.50
		165	5825	17.50	17.50	20.50
	802.11n-HT20 MCS0	149	5745	17.50	17.50	20.50
		157	5785	17.50	17.50	20.50
		165	5825	17.50	17.50	20.50
	802.11n-HT40 MCS0	151	5755	17.50	17.50	20.50
		159	5795	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	149	5745	17.50	17.50	20.50
		157	5785	17.50	17.50	20.50
		165	5825	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	151	5755	17.50	17.50	20.50
		159	5795	17.50	17.50	20.50
802.11ac-VHT80 MCS0	155	5775	17.50	17.50	20.50	
802.11ax-HE20 MCS0	149	5745	17.50	17.50	20.50	
	157	5785	17.50	17.50	20.50	
	165	5825	17.50	17.50	20.50	
802.11ax-HE40 MCS0	151	5755	17.50	17.50	20.50	
	159	5795	17.50	17.50	20.50	
802.11ax-HE80 MCS0	155	5775	17.50	17.50	20.50	

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
5.8GHz WLAN UNII4	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11a 6Mbps	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11n-HT20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11n-HT40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ac-VHT20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
		177	5885	19.50	19.50	22.50
	802.11ac-VHT40 MCS0	167	5835	19.50	19.50	22.50
		175	5875	19.50	19.50	22.50
	802.11ac-VHT80 MCS0	171	5855	19.50	19.50	22.50
	802.11ac-VHT160 MCS0	163	5815	19.50	19.50	22.50
	802.11ax-HE20 MCS0	169	5845	19.50	19.50	22.50
		173	5865	19.50	19.50	22.50
177		5885	19.50	19.50	22.50	
802.11ax-HE40 MCS0	167	5835	19.50	19.50	22.50	
	175	5875	19.50	19.50	22.50	
802.11ax-HE80 MCS0	171	5855	19.50	19.50	22.50	
802.11ax-HE160 MCS0	163	5815	19.50	19.50	22.50	



<6GHz WLAN Maximum Power>

<Mobile Condition – Power Index 0>

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	5.50	5.50	8.50
		173	6815	5.50	5.50	8.50
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00
		57	6235	6.00	6.00	9.00
		113	6515	7.00	7.00	10.00
		173	6815	6.00	6.00	9.00
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.00
		59	6245	10.00	10.00	13.00
		107	6485	10.00	10.00	13.00
		227	7085	9.50	9.50	12.50
	802.11ax-HE80 MCS0	7	5985	12.50	12.50	15.50
		71	6305	12.50	12.50	15.50
		119	6545	12.50	12.50	15.50
		167	6785	11.50	11.50	14.50
	802.11ax-HE160 MCS0	215	7025	12.00	12.00	15.00
		15	6025	15.00	15.00	18.00
		47	6185	15.00	15.00	18.00
		111	6505	15.50	15.50	18.50
		175	6825	14.00	14.00	17.00
		207	6985	15.00	15.00	18.00



<Power Index 1 / Power Index 2 >

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	5.50	5.50	8.50
		173	6815	5.50	5.50	8.50
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00
		57	6235	6.00	6.00	9.00
		113	6515	7.00	7.00	10.00
		173	6815	6.00	6.00	9.00
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.00
		59	6245	10.00	10.00	13.00
		107	6485	10.00	10.00	13.00
		171	6805	10.00	10.00	13.00
	802.11ax-HE80 MCS0	227	7085	9.50	9.50	12.50
		7	5985	12.50	12.50	15.50
		71	6305	12.50	12.50	15.50
		119	6545	12.50	12.50	15.50
	802.11ax-HE160 MCS0	167	6785	11.50	11.50	14.50
		215	7025	12.00	12.00	15.00
		15	6025	15.00	15.00	18.00
		47	6185	15.00	15.00	18.00
		111	6505	13.00	13.00	16.00
		175	6825	11.50	11.50	14.50
		207	6985	15.00	15.00	18.00



<Power Index 3 / Power Index 4 >

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	5.50	5.50	8.50
		173	6815	5.50	5.50	8.50
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00
		57	6235	6.00	6.00	9.00
		113	6515	7.00	7.00	10.00
		173	6815	6.00	6.00	9.00
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.00
		59	6245	10.00	10.00	13.00
		107	6485	10.00	10.00	13.00
		171	6805	10.00	10.00	13.00
	802.11ax-HE80 MCS0	227	7085	9.50	9.50	12.50
		7	5985	12.50	12.50	15.50
		71	6305	12.50	12.50	15.50
		119	6545	12.50	12.50	15.50
	802.11ax-HE160 MCS0	167	6785	11.50	11.50	14.50
		215	7025	12.00	12.00	15.00
		15	6025	14.00	14.00	17.00
		47	6185	14.00	14.00	17.00
	111	6505	13.00	13.00	16.00	
	175	6825	11.50	11.50	14.50	
	207	6985	13.50	13.50	16.50	



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

Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
WIFI 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50
		113	6515	5.50	5.50	8.50
		173	6815	5.50	5.50	8.50
	802.11ax-HE20 MCS0	1	5955	6.00	6.00	9.00
		57	6235	6.00	6.00	9.00
		113	6515	7.00	7.00	10.00
		173	6815	6.00	6.00	9.00
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.00
		59	6245	10.00	10.00	13.00
		107	6485	10.00	10.00	13.00
		171	6805	10.00	10.00	13.00
		227	7085	9.50	9.50	12.50
	802.11ax-HE80 MCS0	7	5985	12.50	12.50	15.50
		71	6305	12.50	12.50	15.50
		119	6545	12.50	12.50	15.50
		167	6785	11.50	11.50	14.50
		215	7025	12.00	12.00	15.00
	802.11ax-HE160 MCS0	15	6025	13.50	13.50	16.50
		47	6185	13.50	13.50	16.50
111		6505	13.50	13.50	16.50	
175		6825	13.00	13.00	16.00	
207		6985	15.00	15.00	18.00	



<Bluetooth Maximum Power>

General Note:

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

< Mobile condition – Power Index 0 >

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

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

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18.5	18.5	21.5	15.5	15.5	18.5	15.5	15.5	18.5

Mode	LE	Burst Average Power (dBm)					
		1Mbps			2Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18.5	18.5	21.5	18.5	18.5	21.5

<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

Mode	LE	Burst Average Power (dBm)					
		1Mbps			2Mbps		
		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



<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	18.5	18.5	20	20	

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

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18.5	18.5	21.5	15.5	15.5	18.5	15.5	15.5	18.5

Mode	LE	Burst Average Power (dBm)					
		1Mbps			2Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		18.5	18.5	21.5	18.5	18.5	21.5

<Power Index 4>

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

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

Mode	BR / EDR	Burst Average Power (dBm)								
		1Mbps			2Mbps			3Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		17	17	20	15.5	15.5	18.5	15.5	15.5	18.5

Mode	LE	Burst Average Power (dBm)					
		1Mbps			2Mbps		
		Ant 4+3(4)	Ant 4+3(3)	Ant 4+3	Ant 4+3(4)	Ant 4+3(3)	Ant 4+3
Tune-up Limit		17	17	20	17	17	20



2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																															
FCC ID	A4RGQML3																																																														
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>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 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																														



Transmission (H, M, L) channel numbers and frequencies in each LTE band																
LTE Band 2																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860				
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880				
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900				
LTE Band 4																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720				
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5				
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745				
LTE Band 5																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5				
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844				
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	20850	2510	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	21350	2560				
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	23060	704	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23130	711	23130	711				
LTE Band 13																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23205		779.5		23230		782		23255		784.5		23280		787	
M	23230		782		23255		784.5		23280		787		23305		789.5	
H	23255		784.5		23280		787		23305		789.5		23330		792	
LTE Band 14																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Channel #		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)		Channel #		Freq.(MHz)	
L	23305		790.5		23330		793		23355		795.5		23380		798	
M	23330		793		23355		795.5		23380		798		23405		800.5	
H	23355		795.5		23380		798		23405		800.5		23430		803	
LTE Band 17																
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz				Bandwidth 20 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	23755		706.5		23780		709		23805		711.5		23830		714	
M	23790		710		23815		713		23840		715.5		23865		718	
H	23825		713.5		23850		716		23875		718.5		23900		721	



LTE Band 25												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5		
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5		
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5		
LTE Band 30												
	Bandwidth 5 MHz				Bandwidth 10 MHz							
	Channel #		Freq.(MHz)		Channel #		Freq.(MHz)					
L	27685		2307.5		27710		2310					
M	27710		2310									
H	27735		2312.5									
LTE Band 38												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
L	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
H	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
LTE Band 48												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560				
L	55810	3607	55815	3607.5	55820	3608	55830	3609				
M	56170	3643	56165	3642.5	56160	3642	56150	3641				
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690				
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 71												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133147	665.5	133172	668	133197	670.5	133222	673				
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5				
H	133447	695.5	133422	693	133397	690.5	133372	688				



2.4 General 5G NR SAR Test and Reporting Considerations

5G NR Information								
FCC ID	A4RGQML3							
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 n14 : 788 MHz ~ 798 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 n48 : 3550 MHz ~ 3700 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz							
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz, 50MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n14: 5MHz, 10MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz 30MHz, 40MHz 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 n48: 10MHz, 15MHz, 20MHz, 40MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 25 MHz, 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 B2/4/5/7/12/13/14/30/48/66/71							
LTE Anchor Bands for n5	LTE B2/7/30/48/66							
LTE Anchor Bands for n7	LTE B2/5/12/13/48/71							
LTE Anchor Bands for n12	LTE B2/66							
LTE Anchor Bands for n25	LTE B2/12/13/26/48/66							
LTE Anchor Bands for n30	LTE B2/5/12/14/66							
LTE Anchor Bands for n38	LTE B2/4/5/12/66/71							
LTE Anchor Bands for n41	LTE B2/4/5/12/25/26/66/71							
LTE Anchor Bands for n48	LTE B2/5/13/66/71							
LTE Anchor Bands for n66	LTE B2/5/7/12/13/14/30/48/66/71							
LTE Anchor Bands for n71	LTE B2/7/48/66							
LTE Anchor Bands for n77	LTE B2/5/7/12/13/14/41/66							
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900
NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839



NR Band 7																				
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520	505000	2525				
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535				
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550	509000	2545				
NR Band 12																				
	Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 15MHz											
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)									
L	140300		701.5		140800		704		141300		706.5									
M	141500		707.5		141500		707.5		141500		707.5									
H	142700		713.5		142200		711		141700		708.5									
NR Band 14																				
	Bandwidth 5MHz				Bandwidth 10MHz															
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)													
L	158100		790.5		158600		793													
M	158600		793																	
H	159100		795.5																	
NR Band 25																				
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)						
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870						
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5						
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379000	1895						
NR Band 30																				
	Bandwidth 5MHz				Bandwidth 10MHz															
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)													
L	461500		2307.5		462000		2310													
M	462000		2310																	
H	462500		2312.5																	
NR Band 38																				
	Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz											
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)									
L	515004		2575.02		515502		2577.51		516000		2580									
M	519000		2595		519000		2595		519000		2595									
H	522996		2614.98		522498		2612.49		522000		2610									
NR Band 41																				
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
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 48																				
	Bandwidth10MHz				Bandwidth 15MHz				Bandwidth20MHz				Bandwidth 40MHz							
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)					
L	637000		3555		637168		3557.52		637334		3560.01		638000		3570					
M	641666		3624.99		641666		3624.99		641666		3624.99		641666		3624.99					
H	646332		3694.98		646166		3692.49		646000		3690		645332		3679.98					



NR Band 66														
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	346000	1730
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352000	1760

NR Band 71										
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz			
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	133100	665.5	133600	668	13410	670.5	134600	673		
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5		
H	139100	695.5	138600	693	13810	690.5	137600	688		

NR Band 77 (3450MHz ~ 3550MHz)																												
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495						
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	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99						

NR Band 77 (3700 MHz ~ 3980 MHz)																												
	Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750				
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930				



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)	Antenna	Duty cycle	Mobile condition Index 1	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					
Burst average power (dBm)									
GSM850 GSM/GPRS 1TX	0	12.50%	32.50	39.80	38.60	36.10	37.30	36.10	32.50
GSM850 GPRS 2TX	0	25.00%	31.50	36.80	35.60	33.10	34.30	33.10	31.50
GSM850 GPRS 3TX	0	37.50%	30.50	35.00	33.80	31.30	32.50	31.30	30.50
GSM850 GPRS 4TX	0	50.00%	29.50	33.80	32.60	30.10	31.30	30.10	29.50
GSM850 EDGE 1TX	0	12.50%	27.00	39.80	38.60	36.10	37.30	36.10	27.00
GSM850 EDGE 2TX	0	25.00%	26.50	36.80	35.60	33.10	34.30	33.10	26.50
GSM850 EDGE 3TX	0	37.50%	26.50	35.00	33.80	31.30	32.50	31.30	26.50
GSM850 EDGE 4TX	0	50.00%	24.50	33.80	32.60	30.10	31.30	30.10	24.50
GSM1900 GSM/GPRS 1TX	2	12.50%	30.00	36.00	34.80	32.40	33.80	32.60	30.00
GSM1900 GPRS 2TX	2	25.00%	28.50	33.00	31.80	29.40	30.80	29.60	28.50
GSM1900 GPRS 3TX	2	37.50%	28.00	31.20	30.00	27.60	29.00	27.80	28.00
GSM1900 GPRS 4TX	2	50.00%	27.00	30.00	28.80	26.40	27.80	26.60	27.00
GSM1900 EDGE 1TX	2	12.50%	25.00	36.00	34.80	32.40	33.80	32.60	25.00
GSM1900 EDGE 2TX	2	25.00%	24.00	33.00	31.80	29.40	30.80	29.60	24.00
GSM1900 EDGE 3TX	2	37.50%	24.00	31.20	30.00	27.60	29.00	27.80	24.00
GSM1900 EDGE 4TX	2	50.00%	23.00	30.00	28.80	26.40	27.80	26.60	23.00
WCDMA B2	2	100.00%	24.60	25.20	24.00	21.80	23.40	22.20	24.60
WCDMA B4	2	100.00%	24.60	27.80	26.60	22.20	23.40	22.20	24.60
WCDMA B5	0	100.00%	24.70	30.40	29.20	25.50	26.70	25.50	24.70

Wireless technology/ band (No Accounting duty cycle)	Antenna	Duty cycle	Mobile condition Index 1	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					
Burst average power (dBm)									
GSM850 GSM/GPRS 1TX	1	12.50%	32.50	32.30	31.10	36.80	38.00	36.80	32.50
GSM850 GPRS 2TX	1	25.00%	31.50	29.30	28.10	33.80	35.00	33.80	31.50
GSM850 GPRS 3TX	1	37.50%	30.50	27.50	26.30	32.00	33.20	32.00	30.50
GSM850 GPRS 4TX	1	50.00%	29.50	26.30	25.10	30.80	32.00	30.80	29.50
GSM850 EDGE 1TX	1	12.50%	27.00	32.30	31.10	36.80	38.00	36.80	27.00
GSM850 EDGE 2TX	1	25.00%	26.50	29.30	28.10	33.80	35.00	33.80	26.50
GSM850 EDGE 3TX	1	37.50%	26.50	27.50	26.30	32.00	33.20	32.00	26.50
GSM850 EDGE 4TX	1	50.00%	24.50	26.30	25.10	30.80	32.00	30.80	24.50
GSM1900 GSM/GPRS 1TX	0	12.50%	29.20	46.70	45.50	27.40	28.60	27.40	29.20
GSM1900 GPRS 2TX	0	25.00%	27.70	43.70	42.50	24.40	25.60	24.40	27.70
GSM1900 GPRS 3TX	0	37.50%	27.20	41.90	40.70	22.60	23.80	22.60	27.20
GSM1900 GPRS 4TX	0	50.00%	26.20	40.70	39.50	21.40	22.60	21.40	26.20
GSM1900 EDGE 1TX	0	12.50%	24.20	46.70	45.50	27.40	28.60	27.40	24.20
GSM1900 EDGE 2TX	0	25.00%	23.20	43.70	42.50	24.40	25.60	24.40	23.20
GSM1900 EDGE 3TX	0	37.50%	23.20	41.90	40.70	22.60	23.80	22.60	23.20
GSM1900 EDGE 4TX	0	50.00%	22.20	40.70	39.50	21.40	22.60	21.40	22.20
WCDMA B2	0	100.00%	23.80	35.60	34.40	16.60	18.60	17.40	23.80
WCDMA B4	0	100.00%	23.80	35.50	34.30	16.90	19.00	17.80	23.80
WCDMA B5	1	100.00%	24.70	22.60	21.40	26.00	27.20	26.00	24.70



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

Wireless technology/ band (Accounting duty cycle)	Antenna	Duty cycle	Mobile condition	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
			Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	
			P limit						
LTE B7	2	100.00%	24.50	26.90	25.70	21.10	22.50	21.30	24.50
LTE B12/B17	0	100.00%	24.70	30.90	29.70	27.90	29.10	27.90	24.70
LTE B13	0	100.00%	24.70	29.50	28.30	25.10	27.10	25.90	24.70
LTE B14	0	100.00%	24.70	29.50	28.30	25.50	26.70	25.50	24.70
LTE B25/B2	2	100.00%	24.60	26.10	24.90	22.60	23.80	22.60	24.60
LTE B26/B5	0	100.00%	24.70	29.90	28.70	26.30	27.50	26.30	24.70
LTE B30	2	100.00%	23.40	26.60	25.40	21.20	22.50	21.30	23.40
LTE B38 PC3	2	63.30%	22.50	27.30	26.10	22.80	24.30	23.10	22.50
LTE B38 PC2	2	43.30%	22.50	27.30	26.10	22.80	24.30	23.10	22.40
LTE B41 PC3	2	63.30%	22.50	27.30	26.10	22.80	24.30	23.10	22.50
LTE B41 PC2	2	43.30%	22.50	27.30	26.10	22.80	24.30	23.10	22.40
LTE B48 PC3	6	63.30%	22.30	29.10	27.90	21.20	22.40	21.20	22.30
LTE B66/B4	2	100.00%	24.60	26.60	25.40	22.50	24.00	22.80	24.60
LTE B71	0	100.00%	24.70	32.10	30.90	27.80	30.10	28.90	24.70
FR1 n5	0	100.00%	24.70	29.30	28.10	28.60	29.80	28.60	24.70
FR1 n7	2	100.00%	24.50	27.40	26.20	20.70	23.30	22.10	24.50
FR1 n12	0	100.00%	24.70	31.10	29.90	27.80	29.00	27.80	24.70
FR1 n14	0	100.00%	24.70	30.70	29.50	26.40	27.60	26.40	24.70
FR1 n25/n2	2	100.00%	24.60	25.20	24.00	22.50	23.70	22.50	24.60
FR1 n30	2	100.00%	23.40	26.30	25.10	21.10	22.30	21.10	23.40
FR1 n38 PC3	2	100.00%	24.50	26.50	25.30	21.80	23.50	22.30	24.50
FR1 n41 PC3	2	100.00%	24.50	26.50	25.30	21.80	23.50	22.30	24.50
FR1 n41 PC2	2	50.00%	24.50	26.50	25.30	21.80	23.50	22.30	23.00
FR1 n41 PC1.5 ULMIMO	2	25.00%	24.50	26.50	25.30	21.80	23.50	22.30	19.00
FR1 n48 PC3	6	100.00%	24.30	28.40	27.20	21.60	22.80	21.60	24.30
FR1 n66	2	100.00%	24.60	32.40	31.20	22.50	23.70	22.50	24.60
FR1 n71	0	100.00%	24.70	31.70	30.50	28.10	29.30	28.10	24.70
FR1 n77 PC3	6	100.00%	23.00	30.60	29.40	21.80	23.00	21.80	23.00
FR1 n77 PC2	6	50.00%	23.00	30.60	29.40	21.80	23.00	21.80	23.00
LTE B2 Sub	1	100.00%	24.60	15.20	14.00	19.10	21.60	20.40	24.60
LTE B66/B4 Sub	1	100.00%	24.60	17.20	16.00	22.40	23.80	22.60	24.60
FR1 n2 Sub	1	100.00%	24.60	16.20	15.00	19.60	22.20	21.00	24.60
FR1 n38 PC3 Sub	1	100.00%	24.50	18.10	16.90	22.10	23.30	22.10	24.50
FR1 n41 PC3 Sub	1	100.00%	24.50	18.10	16.90	22.10	23.30	22.10	24.50
FR1 n41 PC2 Sub	1	50.00%	24.50	18.10	16.90	22.10	23.30	22.10	23.00
FR1 n41 PC1.5 Sub ULMIMO	1	25.00%	24.50	18.10	16.90	22.10	23.30	22.10	19.00
FR1 n48 PC3 Sub ULMIMO	1	100.00%	19.40	19.40	18.20	26.00	27.20	26.00	19.40
FR1 n66 Sub	1	100.00%	24.60	18.00	16.80	22.80	24.30	23.10	24.60
FR1 n77 Sub	1	100.00%	24.30	19.60	18.40	24.70	25.90	24.70	24.30

General Note:

1. When the device operate in n41 PC1.5 Ant2 and Ant 1, n48 PC3 Ant1 only support uplink MIMO
2. LTE and 5GNR TDD: P_{limit} power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
3. 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)	Antenna	Duty cycle	Mobile condition	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
			Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	
			P limit						
LTE B7	0	100.00%	23.50	26.60	25.40	16.80	20.30	19.10	23.50
LTE B12/B17	1	100.00%	24.70	23.20	22.00	29.20	30.40	29.20	24.70
LTE B13	1	100.00%	24.70	22.60	21.40	27.50	28.70	27.50	24.70
LTE B14	1	100.00%	24.70	22.70	21.50	27.60	28.80	27.60	24.70
LTE B25/B2	0	100.00%	23.80	34.70	33.50	17.40	18.80	17.60	23.80
LTE B26/B5	1	100.00%	24.70	23.20	22.00	27.50	28.70	27.50	24.70
LTE B30	0	100.00%	23.00	29.20	28.00	16.50	19.70	18.50	23.00
LTE B38 PC3	0	63.30%	22.50	27.70	26.50	17.80	21.30	20.10	22.50
LTE B38 PC2	0	43.30%	22.50	27.70	26.50	17.80	21.30	20.10	22.40
LTE B41 PC3	0	63.30%	22.50	27.70	26.50	17.80	21.30	20.10	22.50
LTE B41 PC2	0	43.30%	22.50	27.70	26.50	17.80	21.30	20.10	22.40
LTE B48 PC3	7	63.30%	21.20	36.30	35.10	23.40	24.60	23.40	21.20
LTE B66/B4	0	100.00%	23.80	33.70	32.50	15.90	19.40	18.20	23.80
LTE B71	1	100.00%	24.70	23.70	22.50	30.30	31.50	30.30	24.70
FR1 n5	1	100.00%	24.70	23.60	22.40	26.90	28.10	26.90	24.70
FR1 n7	0	100.00%	23.50	28.00	26.80	16.20	19.70	18.50	23.50
FR1 n12	1	100.00%	24.70	23.60	22.40	28.70	29.90	28.70	24.70
FR1 n14	1	100.00%	24.70	23.00	21.80	29.30	30.50	29.30	24.70
FR1 n25/n2	0	100.00%	23.80	36.40	35.20	17.50	18.90	17.70	23.80
FR1 n30	0	100.00%	23.00	29.70	28.50	16.30	20.00	18.80	23.00
FR1 n38 PC3	0	100.00%	24.50	28.40	27.20	18.10	22.00	20.80	24.50
FR1 n41 PC3	0	100.00%	24.50	28.40	27.20	18.10	22.00	20.80	24.50
FR1 n41 PC2	0	50.00%	24.50	28.40	27.20	18.10	22.00	20.80	23.00
FR1 n41 PC1.5 ULMIMO	0	25.00%	24.50	28.40	27.20	18.10	22.00	20.80	19.00
FR1 n48 PC3	7	100.00%	23.20	32.40	31.20	19.40	20.60	19.40	23.20
FR1 n66	0	100.00%	23.80	36.90	35.70	16.60	19.30	18.10	23.80
FR1 n71	1	100.00%	24.70	23.40	22.20	29.80	31.00	29.80	24.70
FR1 n77 PC3	7	100.00%	21.90	31.00	29.80	21.90	23.10	21.90	21.90
FR1 n77 PC2	7	50.00%	21.90	31.00	29.80	21.90	23.10	21.90	21.90
LTE B2 Sub	5	100.00%	23.80	20.50	19.30	21.60	26.10	24.90	23.80
LTE B66/B4 Sub	5	100.00%	23.80	23.30	22.10	24.60	26.80	25.60	23.80
FR1 n2 Sub	5	100.00%	23.80	20.90	19.70	22.40	26.30	25.10	23.80
FR1 n38 PC3 Sub	5	100.00%	23.50	20.90	19.70	21.40	22.60	21.40	23.50
FR1 n41 PC3 Sub	5	100.00%	23.50	20.90	19.70	21.40	22.60	21.40	23.50
FR1 n41 PC2 Sub	5	50.00%	23.50	20.90	19.70	21.40	22.60	21.40	22.00
FR1 n41 PC1.5 Sub ULMIMO	5	25.00%	23.50	20.90	19.70	21.40	22.60	21.40	19.00
FR1 n48 PC3 Sub ULMIMO	5	100.00%	17.60	21.80	20.60	24.00	29.30	28.10	17.60
FR1 n66 Sub	5	100.00%	23.80	23.20	22.00	24.40	26.60	25.40	23.80
FR1 n77 Sub	5	100.00%	23.20	20.10	18.90	21.80	25.70	24.50	23.20

General Note:

1. When the device operate in n41 PC1.5 Ant 0 and Ant 5, n48 PC3 Ant5 only support uplink MIMO.
2. 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.
3. 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. RF Exposure Limits

4.1 Uncontrolled Environment

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

4.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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



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

Reviewed by: Jason Wang
Report Producer: Paula Chen

5. Guidance Applied

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

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- FCC KDB 941225 D07 UMPC Mini Tablet v01r02
- IEC/IEEE 62209-1528:2020
- SPEAG DASY6 System Handbook
- SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)

6. Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

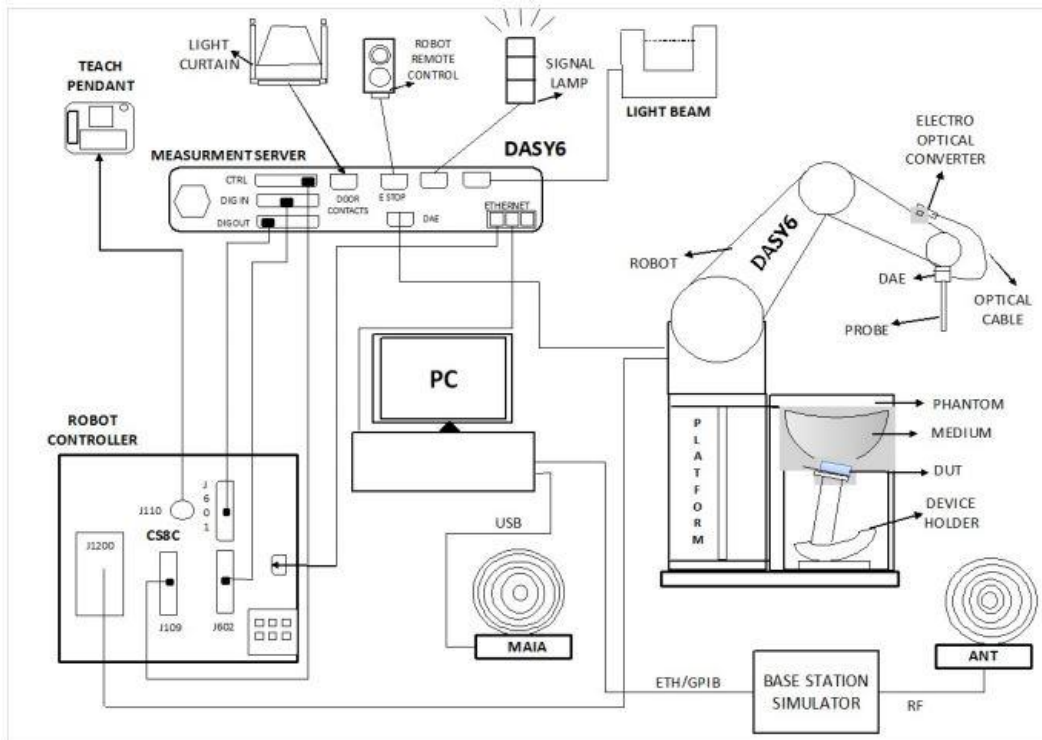
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. System Description and Setup

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



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

7.1 Test Site Location


The SAR measurement facilities used to collect data are within both Sporton Lab list below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 3786) and the FCC designation No. TW1190 and TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Test Site	EMC & Wireless Communications Laboratory TW1190		Wensan Laboratory TW3786		
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		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 μ W/g – >100 mW/g; Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<EX3DV4 Probe>

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

7.3 Data Acquisition Electronics (DAE)

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

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

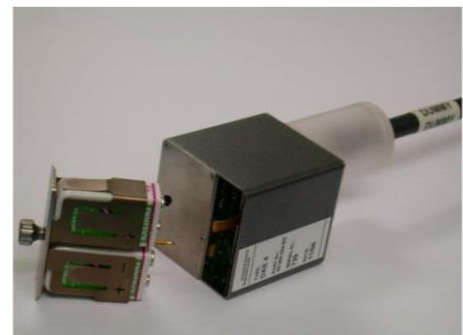


Fig 5.1 Photo of DAE

7.4 Phantom

<SAM Twin Phantom>

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



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

<ELI Phantom>

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



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

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

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

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

		≤ 3 GHz	> 3 GHz	
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}, \Delta y_{Zoom}$		≤ 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 to assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.6 Power Drift Monitoring

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



9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1012	Aug. 18, 2021	Aug. 17, 2022
SPEAG	835MHz System Validation Kit	D835V2	499	Aug. 18, 2021	Aug. 17, 2022
SPEAG	835MHz System Validation Kit ⁽²⁾	D835V2	4d167	Nov. 25, 2019	Nov. 22, 2022
SPEAG	1750MHz System Validation Kit	D1750V2	1068	Nov. 25, 2021	Nov. 24, 2022
SPEAG	1900MHz System Validation Kit	D1900V2	5d041	Aug. 19, 2021	Aug. 18, 2022
SPEAG	2300MHz System Validation Kit	D2300V2	1006	Jan. 18, 2022	Jan. 17, 2023
SPEAG	2450MHz System Validation Kit	D2450V2	736	Aug. 17, 2021	Aug. 17, 2022
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	929	Nov. 21, 2019	Nov. 18, 2022
SPEAG	2600MHz System Validation Kit	D2600V2	1008	Aug. 17, 2021	Aug. 16, 2022
SPEAG	3500MHz System Validation Kit	D3500V2	1014	Jan. 17, 2022	Jan. 16, 2023
SPEAG	3700MHz System Validation Kit	D3700V2	1022	Jul. 14, 2021	Jul. 13, 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. 13, 2022
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1171	Apr. 20, 2021	Apr. 18, 2023
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1003	Sep. 24, 2021	Sep. 23, 2022
SPEAG	5G Verification Source	10 GHz	1020	Jan. 18, 2022	Jan. 17, 2023
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 26, 2022	Jan. 25, 2023
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 19, 2022	Jan. 18, 2023
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 24, 2022	Feb. 23, 2023
SPEAG	Data Acquisition Electronics	DAE4	1399	Feb. 28, 2022	Feb. 27, 2023
SPEAG	Data Acquisition Electronics	DAE4	1424	Jan. 20, 2022	Jan. 19, 2023
SPEAG	Data Acquisition Electronics	DAE4	1512	Mar. 29, 2022	Mar. 28, 2023
SPEAG	Data Acquisition Electronics	DAE4	1696	Nov. 03, 2021	Nov. 02, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3115	Nov. 23, 2021	Nov. 22, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	Sep. 21, 2021	Sep. 20, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Mar. 02, 2022	Mar. 01, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 21, 2021	Oct. 20, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	Jan. 27, 2022	Jan. 26, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Jan. 27, 2022	Jan. 26, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7694	Jan. 24, 2022	Jan. 23, 2023
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9461	Oct. 22, 2021	Oct. 21, 2022
Testo	Hygro meter	608-H1	45196600	Oct. 22, 2021	Oct. 21, 2022
Testo	Hygro meter	608-H1	45207528	Oct. 22, 2021	Oct. 21, 2022
RCPTWN	Thermometer	HTC-1	TM685-1	Oct. 28, 2021	Oct. 27, 2022
RCPTWN	Thermometer	HTC-1	TM560-2	Oct. 28, 2021	Oct. 27, 2022
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Oct. 21, 2021	Oct. 20, 2022
Keysight	Wireless Communication Test Set	E5515C	MY50267236	Mar. 02, 2022	Mar. 01, 2023
R&S	BT Base Station	CBT32	101136	Oct. 17, 2021	Oct. 16, 2022
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Oct. 24, 2021	Oct. 23, 2022
Keysight	ENA Network Analyzer	E5071C	MY46104758	Sep. 19, 2021	Sep. 18, 2022
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 24, 2021	Sep. 23, 2022
LINE SEIKI	Digital Thermometer	DTM3000-spezial	2942	Oct. 26, 2021	Oct. 25, 2022
Anritsu	Power Meter	ML2495A	1419002	Aug. 18, 2021	Aug. 17, 2022
Anritsu	Power Sensor	MA2411B	1911176	Aug. 18, 2021	Aug. 17, 2022
Anritsu	Power Meter	ML2495A	1804003	Oct. 09, 2021	Oct. 08, 2022
Anritsu	Power Sensor	MA2411B	1726150	Oct. 09, 2021	Oct. 08, 2022
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Jan. 12, 2022	Jan. 11, 2023
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 19, 2021	Aug. 18, 2022
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 12, 2021	Oct. 11, 2022
Mini-Circuits	Power Amplifier	ZVE-8G+	479102029	Sep. 06, 2021	Sep. 05, 2022
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	22.6	0.888	42.300	0.89	41.90	-0.22	0.95	±5	2022/4/12
750	22.6	0.890	42.135	0.89	41.90	0.00	0.56	±5	2022/4/16
750	22.5	0.890	43.009	0.89	41.90	0.00	2.65	±5	2022/5/2
750	22.6	0.882	42.167	0.89	41.90	-0.90	0.64	±5	2022/5/3
750	22.7	0.885	42.340	0.89	41.90	-0.56	1.05	±5	2022/5/5
750	22.6	0.875	41.464	0.89	41.90	-1.69	-1.04	±5	2022/5/25
835	22.6	0.881	42.343	0.90	41.50	-2.11	2.03	±5	2022/4/11
835	22.4	0.880	42.330	0.90	41.50	-2.22	2.00	±5	2022/4/15
835	22.6	0.886	42.237	0.90	41.50	-1.56	1.78	±5	2022/4/16
835	22.3	0.897	41.505	0.90	41.50	-0.33	0.01	±5	2022/4/20
835	22.6	0.908	42.078	0.90	41.50	0.89	1.39	±5	2022/5/3
835	22.7	0.922	42.071	0.90	41.50	2.44	1.38	±5	2022/5/5
1750	22.6	1.360	40.632	1.37	40.10	-0.73	1.33	±5	2022/4/15
1750	22.4	1.351	40.537	1.37	40.10	-1.39	1.09	±5	2022/4/17
1750	22.5	1.376	41.436	1.37	40.10	0.44	3.33	±5	2022/4/21
1750	22.5	1.353	39.697	1.37	40.10	-1.24	-1.00	±5	2022/4/23
1750	22.5	1.338	39.730	1.37	40.10	-2.34	-0.92	±5	2022/5/1
1750	22.5	1.376	40.808	1.37	40.10	0.44	1.77	±5	2022/5/2
1750	22.2	1.385	39.624	1.37	40.10	1.09	-1.19	±5	2022/5/4
1750	22.6	1.370	40.633	1.37	40.10	0.00	1.33	±5	2022/5/9
1750	22.4	1.373	40.618	1.37	40.10	0.22	1.29	±5	2022/5/10
1750	22.6	1.373	41.027	1.37	40.10	0.22	2.31	±5	2022/5/11
1750	22.3	1.372	41.013	1.37	40.10	0.15	2.28	±5	2022/5/13
1750	22.3	1.372	40.613	1.37	40.10	0.15	1.28	±5	2022/5/16
1900	22.5	1.446	41.149	1.40	40.00	3.29	2.87	±5	2022/4/13
1900	22.3	1.435	41.003	1.40	40.00	2.50	2.51	±5	2022/4/19
1900	22.5	1.410	40.505	1.40	40.00	0.71	1.26	±5	2022/4/21
1900	22.4	1.449	39.269	1.40	40.00	3.50	-1.83	±5	2022/4/22
1900	22.7	1.424	39.533	1.40	40.00	1.71	-1.17	±5	2022/4/25
1900	22.4	1.391	39.136	1.40	40.00	-0.64	-2.16	±5	2022/5/1
1900	22.2	1.398	39.260	1.40	40.00	-0.14	-1.85	±5	2022/5/4
1900	22.5	1.374	40.280	1.40	40.00	-1.86	0.70	±5	2022/5/10
1900	22.4	1.388	40.366	1.40	40.00	-0.86	0.91	±5	2022/5/10
1900	22.6	1.382	40.520	1.40	40.00	-1.29	1.30	±5	2022/5/11
1900	22.6	1.450	39.479	1.40	40.00	3.57	-1.30	±5	2022/5/11
1900	22.1	1.447	39.446	1.40	40.00	3.36	-1.39	±5	2022/5/14
1900	22.3	1.406	39.861	1.40	40.00	0.43	-0.35	±5	2022/5/17



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
2300	22.8	1.610	40.055	1.67	39.50	-3.59	1.41	±5	2022/4/14
2300	22.2	1.612	40.068	1.67	39.50	-3.47	1.44	±5	2022/4/18
2300	22.4	1.593	39.170	1.67	39.50	-4.61	-0.84	±5	2022/4/24
2300	22.2	1.626	40.221	1.67	39.50	-2.63	1.83	±5	2022/4/30
2300	22.6	1.688	39.973	1.67	39.50	1.08	1.20	±5	2022/5/11
2300	22.3	1.646	40.160	1.67	39.50	-1.44	1.67	±5	2022/5/13
2300	22.3	1.612	41.306	1.67	39.50	-3.47	4.57	±5	2022/5/16
2450	22.1	1.749	39.174	1.80	39.20	-2.83	-0.07	±5	2022/4/8
2450	22.8	1.815	40.004	1.80	39.20	0.83	2.05	±5	2022/4/28
2450	22.7	1.768	38.210	1.80	39.20	-1.78	-2.53	±5	2022/4/29
2450	22.5	1.790	38.524	1.80	39.20	-0.56	-1.72	±5	2022/4/30
2450	22.8	1.789	38.515	1.80	39.20	-0.61	-1.75	±5	2022/5/2
2450	22.5	1.845	39.428	1.80	39.20	2.50	0.58	±5	2022/5/3
2450	22.3	1.812	39.140	1.80	39.20	0.67	-0.15	±5	2022/5/4
2450	22.5	1.810	38.794	1.80	39.20	0.56	-1.04	±5	2022/5/31
2600	22.8	1.918	38.808	1.96	39.00	-2.14	-0.49	±5	2022/4/14
2600	22.2	1.920	38.822	1.96	39.00	-2.04	-0.46	±5	2022/4/18
2600	22.4	1.941	38.112	1.96	39.00	-0.97	-2.28	±5	2022/4/24
2600	22.7	1.957	38.474	1.96	39.00	-0.15	-1.35	±5	2022/4/26
2600	22.2	1.963	38.891	1.96	39.00	0.15	-0.28	±5	2022/4/27
2600	22.2	2.042	38.561	1.96	39.00	4.18	-1.13	±5	2022/4/28
2600	22.4	1.948	38.595	1.96	39.00	-0.61	-1.04	±5	2022/4/29
2600	22.2	1.935	38.974	1.96	39.00	-1.28	-0.07	±5	2022/4/30
2600	22.1	1.978	39.041	1.96	39.00	0.92	0.11	±5	2022/5/8
2600	22.6	2.011	38.786	1.96	39.00	2.60	-0.55	±5	2022/5/11
2600	22.6	1.950	38.620	1.96	39.00	-0.51	-0.97	±5	2022/5/12
2600	22.6	1.956	39.069	1.96	39.00	-0.20	0.18	±5	2022/5/12
2600	22.3	1.944	39.051	1.96	39.00	-0.82	0.13	±5	2022/5/15
3500	22.6	2.846	37.560	2.91	37.90	-2.20	-0.90	±5	2022/4/15
3500	22.5	2.983	37.750	2.91	37.90	2.51	-0.40	±5	2022/4/23
3500	22.4	2.972	37.695	2.91	37.90	2.13	-0.54	±5	2022/4/24
3500	22.7	2.971	37.695	2.91	37.90	2.10	-0.54	±5	2022/4/25
3500	22.6	2.956	37.629	2.91	37.90	1.58	-0.72	±5	2022/5/3
3500	22.3	3.021	38.254	2.91	37.90	3.81	0.93	±5	2022/5/6
3500	22.1	2.979	37.807	2.91	37.90	2.37	-0.25	±5	2022/5/7
3500	22.2	3.002	38.819	2.91	37.90	3.16	2.42	±5	2022/5/28
3500	22.6	2.894	37.485	2.91	37.90	-0.55	-1.09	±5	2022/7/23
3500	22.6	2.990	37.632	2.91	37.90	2.75	-0.71	±5	2022/7/25



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
3700	22.5	3.195	37.548	3.12	37.70	2.40	-0.40	±5	2022/4/23
3700	22.4	3.184	37.493	3.12	37.70	2.05	-0.55	±5	2022/4/24
3700	22.7	3.183	37.493	3.12	37.70	2.02	-0.55	±5	2022/4/25
3700	22.6	3.142	37.330	3.12	37.70	0.71	-0.98	±5	2022/5/3
3700	22.3	3.236	38.052	3.12	37.70	3.72	0.93	±5	2022/5/6
3700	22.1	3.191	37.605	3.12	37.70	2.28	-0.25	±5	2022/5/7
3700	22.2	3.190	38.520	3.12	37.70	2.24	2.18	±5	2022/5/28
3900	22.5	3.408	37.360	3.33	37.51	2.34	-0.40	±5	2022/4/23
3900	22.4	3.396	37.305	3.33	37.51	1.98	-0.55	±5	2022/4/24
3900	22.7	3.395	37.305	3.33	37.51	1.95	-0.55	±5	2022/4/25
5250	22.1	4.628	35.950	4.71	35.95	-1.74	0.00	±5	2022/4/25
5250	22.1	4.793	36.867	4.71	35.95	1.76	2.55	±5	2022/4/26
5250	22.3	4.559	35.639	4.71	35.95	-3.21	-0.87	±5	2022/4/27
5250	22.7	4.691	36.726	4.71	35.95	-0.40	2.16	±5	2022/5/2
5250	22.6	4.787	36.929	4.71	35.95	1.63	2.72	±5	2022/5/4
5250	22.1	4.670	37.234	4.71	35.95	-0.85	3.57	±5	2022/5/4
5250	22.6	4.730	36.057	4.71	35.95	0.42	0.30	±5	2022/5/10
5600	22.1	5.197	36.319	5.07	35.50	2.50	2.31	±5	2022/4/26
5600	22.3	4.880	35.185	5.07	35.50	-3.75	-0.89	±5	2022/4/27
5600	22.7	5.086	36.178	5.07	35.50	0.32	1.91	±5	2022/5/2
5600	22.6	5.189	36.381	5.07	35.50	2.35	2.48	±5	2022/5/4
5600	22.1	5.046	36.699	5.07	35.50	-0.47	3.38	±5	2022/5/4
5600	22.6	5.068	35.623	5.07	35.50	-0.04	0.35	±5	2022/5/10
5750	22.1	5.149	35.242	5.22	35.35	-1.36	-0.31	±5	2022/4/25
5750	22.1	5.149	35.242	5.22	35.35	-1.36	-0.31	±5	2022/4/25
5750	22.1	5.354	36.127	5.22	35.35	2.57	2.20	±5	2022/4/26
5750	22.3	4.996	34.907	5.22	35.35	-4.29	-1.25	±5	2022/4/27
5750	22.7	5.240	35.986	5.22	35.35	0.38	1.80	±5	2022/5/2
5750	22.6	5.347	36.189	5.22	35.35	2.43	2.37	±5	2022/5/4
5750	22.1	5.193	36.523	5.22	35.35	-0.52	3.32	±5	2022/5/4
5850	22.1	5.254	35.111	5.32	35.25	-1.24	-0.39	±5	2022/4/25
5850	22.1	5.479	35.993	5.32	35.25	2.99	2.11	±5	2022/4/26
5850	22.3	5.093	34.816	5.32	35.25	-4.27	-1.23	±5	2022/4/27
5850	22.7	5.363	35.852	5.32	35.25	0.81	1.71	±5	2022/5/2
5850	22.6	5.472	36.054	5.32	35.25	2.86	2.28	±5	2022/5/4
5850	22.4	5.111	34.971	5.32	35.25	-3.93	-0.79	±5	2022/5/7
6500	23.5	6.020	34.330	6.07	34.50	-0.82	-0.49	±5	2022/4/27
6500	23.5	5.870	33.760	6.07	34.50	-3.29	-2.14	±5	2022/4/29



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	Power Drift (dB)	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 (%)
SAR08	2022/4/12	750	50	D750V3-1012	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	0.399	8.56	7.98	-6.78	0.265	5.56	5.3	-4.68
SAR08	2022/4/16	750	50	D750V3-1012	EX3DV4 - SN3931	DAE4 Sn1399	-0.11	0.400	8.56	8	-6.54	0.265	5.56	5.3	-4.68
SAR08	2022/5/2	750	50	D750V3-1012	EX3DV4 - SN3931	DAE4 Sn1399	0.15	0.397	8.56	7.94	-7.24	0.260	5.56	5.2	-6.47
SAR08	2022/5/3	750	50	D750V3-1012	EX3DV4 - SN3931	DAE4 Sn1399	0.16	0.420	8.56	8.4	-1.87	0.276	5.56	5.52	-0.72
SAR08	2022/5/5	750	250	D750V3-1012	EX3DV4 - SN3931	DAE4 Sn1399	-0.15	1.930	8.56	7.72	-9.81	1.300	5.56	5.2	-6.47
SAR08	2022/5/25	750	250	D750V3-1012	ES3DV3 - SN3115	DAE4 Sn656	-0.03	2.130	8.56	8.52	-0.47	1.470	5.56	5.88	5.76
SAR08	2022/4/11	835	50	D835V2-499	EX3DV4 - SN3931	DAE4 Sn1399	-0.06	0.484	9.68	9.68	0.00	0.315	6.28	6.3	0.32
SAR08	2022/4/15	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	-0.05	0.455	9.55	9.1	-4.71	0.297	6.21	5.94	-4.35
SAR08	2022/4/16	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	-0.05	0.458	9.55	9.16	-4.08	0.299	6.21	5.98	-3.70
SAR08	2022/4/20	835	50	D835V2-499	EX3DV4 - SN3931	DAE4 Sn1399	-0.19	0.494	9.68	9.88	2.07	0.317	6.28	6.34	0.96
SAR08	2022/5/3	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	-0.01	0.486	9.55	9.72	1.78	0.329	6.21	6.58	5.96
SAR08	2022/5/5	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	0.477	9.55	9.54	-0.10	0.311	6.21	6.22	0.16
SAR08	2022/4/15	1750	50	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.04	1.840	36.60	36.8	0.55	0.981	19.30	19.62	1.66
SAR08	2022/4/17	1750	50	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	1.830	36.60	36.6	0.00	0.974	19.30	19.48	0.93
SAR08	2022/4/21	1750	250	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.15	8.990	36.60	35.96	-1.75	4.730	19.30	18.92	-1.97
SAR08	2022/4/23	1750	50	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	1.700	36.60	34	-7.10	0.951	19.30	19.02	-1.45
SAR08	2022/5/1	1750	250	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	9.340	36.60	37.36	2.08	5.070	19.30	20.28	5.08
SAR08	2022/5/2	1750	50	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.12	1.730	36.60	34.6	-5.46	0.967	19.30	19.34	0.21
SAR08	2022/5/4	1750	50	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.04	1.820	36.60	36.4	-0.55	0.986	19.30	19.72	2.18
SAR12	2022/5/9	1750	250	D1750V2-1068	EX3DV4 - SN7625	DAE4 Sn1696	-0.05	9.060	36.60	36.24	-0.98	4.830	19.30	19.32	0.10
SAR09	2022/5/10	1750	50	D1750V2-1068	ES3DV3 - SN3115	DAE4 Sn656	-0.12	1.940	36.60	38.8	6.01	1.060	19.30	21.2	9.84
SAR09	2022/5/11	1750	250	D1750V2-1068	ES3DV3 - SN3270	DAE4 Sn1512	-0.11	9.330	36.60	37.32	1.97	5.040	19.30	20.16	4.46
SAR09	2022/5/13	1750	50	D1750V2-1068	EX3DV4 - SN3931	DAE4 Sn1399	-0.04	1.850	36.60	37	1.09	0.989	19.30	19.78	2.49
SAR08	2022/5/16	1750	50	D1750V2-1068	EX3DV4 - SN7694	DAE4 Sn1424	0.04	1.740	36.60	34.8	-4.92	0.921	19.30	18.42	-4.56
SAR08	2022/4/13	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.06	1.990	40.60	39.8	-1.97	1.040	21.10	20.8	-1.42
SAR08	2022/4/19	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.01	1.960	40.60	39.2	-3.45	1.070	21.10	21.4	1.42
SAR08	2022/4/21	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.12	1.930	40.60	38.6	-4.93	1.060	21.10	21.2	0.47
SAR08	2022/4/22	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.16	2.020	40.60	40.4	-0.49	1.050	21.10	21	-0.47
SAR08	2022/4/25	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.09	2.100	40.60	42	3.45	1.060	21.10	21.2	0.47
SAR08	2022/5/1	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.01	1.900	40.60	38	-6.40	1.040	21.10	20.8	-1.42
SAR08	2022/5/4	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.12	1.950	40.60	39	-3.94	1.020	21.10	20.4	-3.32
SAR12	2022/5/10	1900	250	D1900V2-5d041	EX3DV4 - SN7625	DAE4 Sn1696	0.16	9.570	40.60	38.28	-5.71	4.940	21.10	19.76	-6.35
SAR09	2022/5/10	1900	250	D1900V2-5d041	ES3DV3 - SN3115	DAE4 Sn656	0.14	10.000	40.60	40	-1.48	5.220	21.10	20.88	-1.04
SAR12	2022/5/11	1900	250	D1900V2-5d041	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	9.350	40.60	37.4	-7.88	4.940	21.10	19.76	-6.35
SAR09	2022/5/11	1900	250	D1900V2-5d041	ES3DV3 - SN3270	DAE4 Sn1512	-0.11	10.200	40.60	40.8	0.49	5.390	21.10	21.56	2.18
SAR09	2022/5/14	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn1399	-0.05	1.990	40.60	39.8	-1.97	1.040	21.10	20.8	-1.42
SAR08	2022/5/17	1900	50	D1900V2-5d041	EX3DV4 - SN7694	DAE4 Sn1424	0.1	1.920	40.60	38.4	-5.42	0.993	21.10	19.86	-5.88
SAR08	2022/4/14	2300	50	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	-0.13	2.360	48.30	47.2	-2.28	1.140	23.50	22.8	-2.98
SAR08	2022/4/18	2300	250	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	-0.01	12.200	48.30	48.8	1.04	5.870	23.50	23.48	-0.09
SAR08	2022/4/24	2300	50	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	-0.16	2.330	48.30	46.6	-3.52	1.190	23.50	23.8	1.28
SAR08	2022/4/30	2300	50	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	-0.05	2.350	48.30	47	-2.69	1.120	23.50	22.4	-4.68
SAR09	2022/5/11	2300	250	D2300V2-1006	ES3DV3 - SN3270	DAE4 Sn1512	0.03	12.500	48.30	50	3.52	6.100	23.50	24.4	3.83
SAR09	2022/5/13	2300	50	D2300V2-1006	EX3DV4 - SN3931	DAE4 Sn1399	-0.13	2.410	48.30	48.2	-0.21	1.160	23.50	23.2	-1.28
SAR08	2022/5/16	2300	50	D2300V2-1006	EX3DV4 - SN7694	DAE4 Sn1424	0.02	2.250	48.30	45	-6.83	1.080	23.50	21.6	-8.09



FCC SAR TEST REPORT

Report No. : FA102843-05E

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Power Drift (dB)	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	2022/4/8	2450	250	D2450V2-736	EX3DV4 - SN7625	DAE4 Sn1696	-0.12	12.500	54.20	50	-7.75	5.990	25.30	23.96	-5.30
SAR11	2022/4/28	2450	250	D2450V2-929	ES3DV3 - SN3270	DAE4 Sn1512	-0.07	13.700	53.10	54.8	3.20	6.580	24.70	26.32	6.56
SAR12	2022/4/29	2450	250	D2450V2-929	ES3DV3 - SN3115	DAE4 Sn1424	-0.01	12.000	53.10	48	-9.60	5.590	24.70	22.36	-9.47
SAR12	2022/4/30	2450	50	D2450V2-736	ES3DV3 - SN3115	DAE4 Sn1424	0.18	2.620	54.20	52.4	-3.32	1.250	25.30	25	-1.19
SAR12	2022/5/2	2450	50	D2450V2-929	EX3DV4 - SN7694	DAE4 Sn1424	-0.11	2.470	53.10	49.4	-6.97	1.160	24.70	23.2	-6.07
SAR09	2022/5/3	2450	50	D2450V2-929	EX3DV4 - SN3976	DAE4 Sn316	-0.03	2.680	53.10	53.6	0.94	1.280	24.70	25.6	3.64
SAR09	2022/5/4	2450	50	D2450V2-929	EX3DV4 - SN3976	DAE4 Sn316	0.08	2.570	53.10	51.4	-3.20	1.180	24.70	23.6	-4.45
SAR08	2022/5/31	2450	50	D2450V2-929	EX3DV4 - SN7694	DAE4 Sn1424	-0.09	2.450	53.10	49	-7.72	1.130	24.70	22.6	-8.50
SAR08	2022/4/14	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	2.770	58.00	55.4	-4.48	1.250	25.80	25	-3.10
SAR08	2022/4/18	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	2.770	58.00	55.4	-4.48	1.250	25.80	25	-3.10
SAR08	2022/4/24	2600	250	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.12	14.600	58.00	58.4	0.69	6.630	25.80	26.52	2.79
SAR08	2022/4/26	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.12	2.840	58.00	56.8	-2.07	1.300	25.80	26	0.78
SAR08	2022/4/27	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.13	2.960	58.00	59.2	2.07	1.370	25.80	27.4	6.20
SAR08	2022/4/28	2600	250	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.19	15.400	58.00	61.6	6.21	6.720	25.80	26.88	4.19
SAR08	2022/4/29	2600	250	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.13	14.200	58.00	56.8	-2.07	6.380	25.80	25.52	-1.09
SAR08	2022/4/30	2600	250	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.04	14.300	58.00	57.2	-1.38	6.310	25.80	25.24	-2.17
SAR08	2022/5/8	2600	250	D2600V2-1008	EX3DV4 - SN7694	DAE4 Sn1424	0.07	13.800	58.00	55.2	-4.83	6.270	25.80	25.08	-2.79
SAR09	2022/5/11	2600	250	D2600V2-1008	ES3DV3 - SN3270	DAE4 Sn1512	-0.01	15.600	58.00	62.4	7.59	7.000	25.80	28	8.53
SAR12	2022/5/12	2600	250	D2600V2-1008	EX3DV4 - SN7625	DAE4 Sn1696	0.18	14.600	58.00	58.4	0.69	6.610	25.80	26.44	2.48
SAR09	2022/5/12	2600	50	D2600V2-1008	EX3DV4 - SN3931	DAE4 Sn1399	-0.02	2.820	58.00	56.4	-2.76	1.280	25.80	25.6	-0.78
SAR08	2022/5/15	2600	250	D2600V2-1008	EX3DV4 - SN7694	DAE4 Sn1424	0.18	13.600	58.00	54.4	-6.21	6.160	25.80	24.64	-4.50
SAR12	2022/4/15	3500	100	D3500V2-1014	EX3DV4 - SN7625	DAE4 Sn1696	0.03	6.200	67.20	62	-7.74	2.300	25.10	23	-8.37
SAR08	2022/4/23	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1424	0.05	3.130	67.20	62.6	-6.85	1.200	25.10	24	-4.38
SAR08	2022/4/24	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1424	0.03	3.120	67.20	62.4	-7.14	1.190	25.10	23.8	-5.18
SAR08	2022/4/25	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1424	0.03	3.120	67.20	62.4	-7.14	1.190	25.10	23.8	-5.18
SAR08	2022/5/3	3500	50	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn1399	0.12	3.560	67.20	71.2	5.95	1.340	25.10	26.8	6.77
SAR08	2022/5/6	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1424	0.03	3.170	67.20	63.4	-5.65	1.210	25.10	24.2	-3.59
SAR08	2022/5/7	3500	100	D3500V2-1014	EX3DV4 - SN3931	DAE4 Sn1399	0.04	6.940	67.20	69.4	3.27	2.560	25.10	25.6	1.99
SAR08	2022/5/28	3500	50	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1424	0.12	3.150	67.20	63	-6.25	1.200	25.10	24	-4.38
SAR12	2022/7/23	3500	100	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1696	0.1	6.310	67.20	63.1	-6.10	2.350	25.100	23.5	-6.37
SAR12	2022/7/25	3500	100	D3500V2-1014	EX3DV4 - SN7694	DAE4 Sn1696	0.12	7.330	67.20	73.3	9.08	2.710	25.100	27.1	7.97
SAR08	2022/4/23	3700	50	D3700V2-1022	EX3DV4 - SN7694	DAE4 Sn1424	0.1	3.250	68.20	65	-4.69	1.200	24.70	24	-2.83
SAR08	2022/4/24	3700	50	D3700V2-1022	EX3DV4 - SN7694	DAE4 Sn1424	0.02	3.240	68.20	64.8	-4.99	1.200	24.70	24	-2.83
SAR08	2022/4/25	3700	50	D3700V2-1022	EX3DV4 - SN7694	DAE4 Sn1424	0.04	3.240	68.20	64.8	-4.99	1.200	24.70	24	-2.83
SAR08	2022/5/3	3700	100	D3700V2-1022	EX3DV4 - SN3931	DAE4 Sn1399	0.12	7.330	68.20	73.3	7.48	2.650	24.70	26.5	7.29
SAR08	2022/5/6	3700	50	D3700V2-1022	EX3DV4 - SN7694	DAE4 Sn1424	0.02	3.300	68.20	66	-3.23	1.220	24.70	24.4	-1.21
SAR08	2022/5/7	3700	100	D3700V2-1022	EX3DV4 - SN3931	DAE4 Sn1399	-0.04	6.560	68.20	65.6	-3.81	2.340	24.70	23.4	-5.26
SAR08	2022/5/28	3700	50	D3700V2-1022	EX3DV4 - SN7694	DAE4 Sn1424	0.16	3.250	68.20	65	-4.69	1.200	24.70	24	-2.83
SAR08	2022/4/23	3900	100	D3900V2-1017-3900	EX3DV4 - SN7694	DAE4 Sn1424	0.15	6.770	69.50	67.7	-2.59	2.340	24.20	23.4	-3.31
SAR08	2022/4/24	3900	100	D3900V2-1017-3900	EX3DV4 - SN7694	DAE4 Sn1424	0.06	6.740	69.50	67.4	-3.02	2.330	24.20	23.3	-3.72
SAR08	2022/4/25	3900	100	D3900V2-1017-3900	EX3DV4 - SN7694	DAE4 Sn1424	0.05	6.740	69.50	67.4	-3.02	2.330	24.20	23.3	-3.72

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Power Drift (dB)	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 (%)
SAR14	2022/4/25	5250	50	D5GHzV2-1128-5250	EX3DV4 - SN7694	DAE4 Sn1424	-0.01	3.700	80.00	74	-7.50	1.040	22.90	20.8	-9.17
SAR14	2022/4/26	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7625	DAE4 Sn1696	0.09	8.290	80.00	82.9	3.62	2.360	22.90	23.6	3.06
SAR14	2022/4/27	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7625	DAE4 Sn1696	0.09	7.880	80.00	78.8	-1.50	2.240	22.90	22.4	-2.18
SAR14	2022/5/2	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7625	DAE4 Sn1696	0.09	7.450	80.00	74.5	-6.88	2.120	22.90	21.2	-7.42
SAR14	2022/5/4	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN7625	DAE4 Sn1696	0.09	7.600	80.00	76	-5.00	2.160	22.90	21.6	-5.68
SAR13	2022/5/4	5250	100	D5GHzV2-1128-5250	EX3DV4 - SN3728	DAE4 Sn699	-0.15	7.530	80.00	75.3	-5.88	2.190	22.90	21.9	-4.37
SAR12	2022/5/10	5250	50	D5GHzV2-1128-5250	EX3DV4 - SN7625	DAE4 Sn1696	-0.09	3.630	80.00	72.6	-9.25	1.040	22.90	20.8	-9.17
SAR14	2022/4/26	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7625	DAE4 Sn1696	0.1	8.420	82.40	84.2	2.18	2.380	23.60	23.8	0.85
SAR14	2022/4/27	5600	50	D5GHzV2-1128-5600	EX3DV4 - SN7625	DAE4 Sn1696	-0.11	3.910	82.40	78.2	-5.10	1.130	23.60	22.6	-4.24
SAR14	2022/5/2	5600	50	D5GHzV2-1128-5600	EX3DV4 - SN7625	DAE4 Sn1696	-0.11	4.070	82.40	81.4	-1.21	1.180	23.60	23.6	0.00
SAR14	2022/5/4	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN7625	DAE4 Sn1696	0.04	8.410	82.40	84.1	2.06	2.380	23.60	23.8	0.85
SAR13	2022/5/4	5600	100	D5GHzV2-1128-5600	EX3DV4 - SN3728	DAE4 Sn699	-0.04	7.930	82.40	79.3	-3.76	2.310	23.60	23.1	-2.12
SAR12	2022/5/10	5600	50	D5GHzV2-1128-5600	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	3.890	82.40	77.8	-5.58	1.100	23.60	22	-6.78
SAR14	2022/4/25	5750	50	D5GHzV2-1128-5750	EX3DV4 - SN7694	DAE4 Sn1424	-0.04	3.870	79.10	77.4	-2.15	1.100	22.60	22	-2.65
SAR14	2022/4/25	5750	50	D5GHzV2-1128-5750	EX3DV4 - SN7625	DAE4 Sn1696	0.02	3.780	79.10	75.6	-4.42	1.090	22.60	21.8	-3.54
SAR14	2022/4/26	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	8.260	79.10	82.6	4.42	2.350	22.60	23.5	3.98
SAR14	2022/4/27	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	7.710	79.10	77.1	-2.53	2.190	22.60	21.9	-3.10
SAR14	2022/5/2	5750	50	D5GHzV2-1128-5750	EX3DV4 - SN7625	DAE4 Sn1696	-0.06	3.710	79.10	74.2	-6.19	1.080	22.60	21.6	-4.42
SAR14	2022/5/4	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN7625	DAE4 Sn1696	0.03	7.920	79.10	79.2	0.13	2.240	22.60	22.4	-0.88
SAR13	2022/5/4	5750	100	D5GHzV2-1128-5750	EX3DV4 - SN3728	DAE4 Sn699	-0.14	7.650	79.10	76.5	-3.29	2.210	22.60	22.1	-2.21
SAR14	2022/4/25	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	8.300	82.30	83	0.85	2.330	23.10	23.3	0.87
SAR14	2022/4/26	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN7625	DAE4 Sn1696	-0.05	8.650	82.30	86.5	5.10	2.450	23.10	24.5	6.06
SAR14	2022/4/27	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	8.050	82.30	80.5	-2.19	2.260	23.10	22.6	-2.16
SAR14	2022/5/2	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN7625	DAE4 Sn1696	-0.08	8.470	82.30	84.7	2.92	2.380	23.10	23.8	3.03
SAR14	2022/5/4	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN7625	DAE4 Sn1696	-0.02	8.640	82.30	86.4	4.98	2.420	23.10	24.2	4.76
SAR12	2022/5/7	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN7625	DAE4 Sn1696	-0.06	8.410	82.30	84.1	2.19	2.410	23.10	24.1	4.33
SAR13	2022/4/27	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE4 Sn699	0.03	30.300	292.00	303	3.77	5.650	53.80	56.5	5.02
SAR13	2022/4/29	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE4 Sn699	0.02	31.800	292.00	318	8.90	5.910	53.80	59.1	9.85

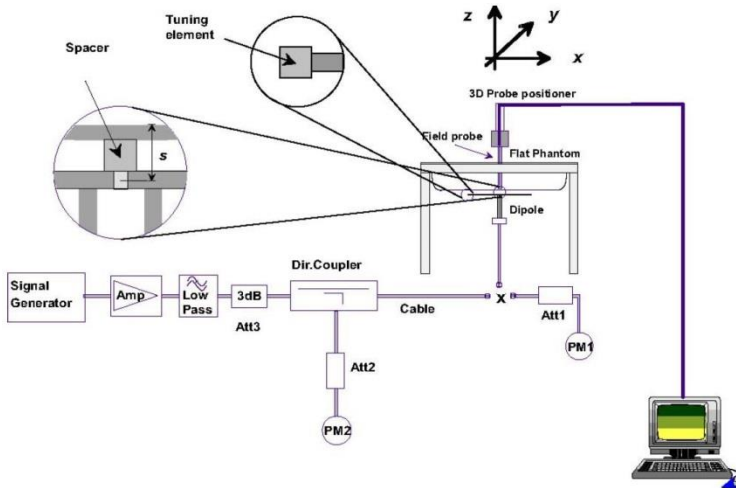


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

10.3 PD System Performance Check Results

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

Test Location	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm ² (W/m ²)	Targeted 4 cm ² (W/m ²)	Deviation (dB)	Date
SAR13-HY	10G	10GHz_1020	EUmmWV4 - SN9461	DAE4 SN699	10	55.7	51.7	0.32	2022/4/9

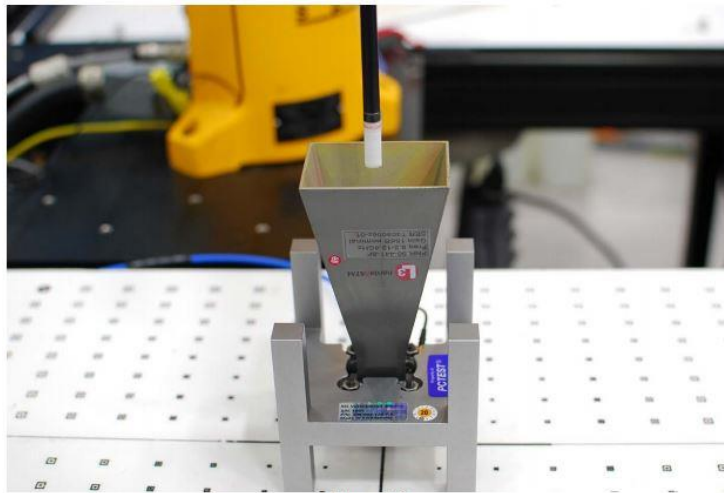


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

11. RF Exposure Positions

11.1 Ear and handset reference point

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

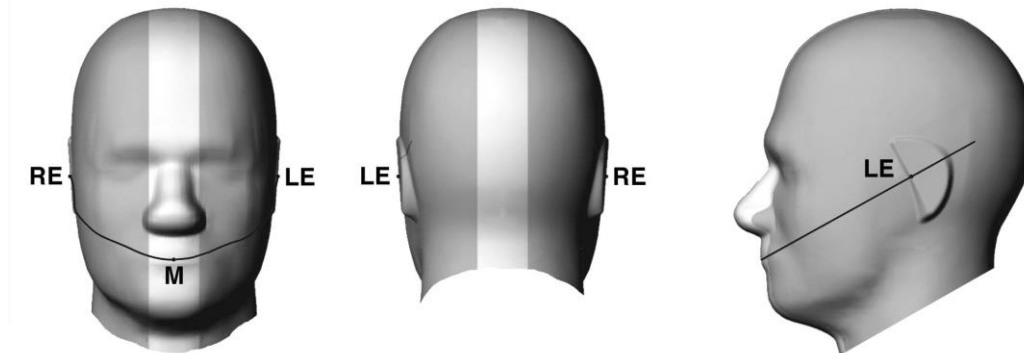


Fig 9.1.1 Front, back, and side views of SAM twin phantom

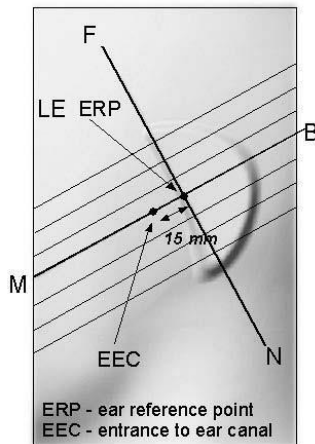


Fig 9.1.2 Close-up side view of phantom showing the ear region.

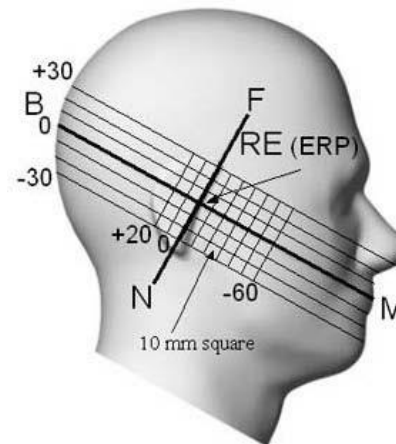


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

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

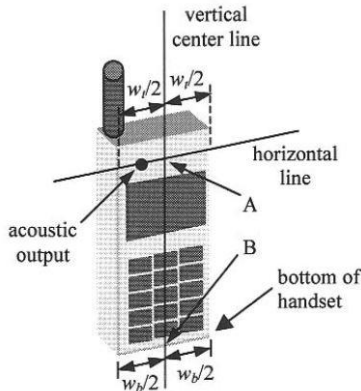


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

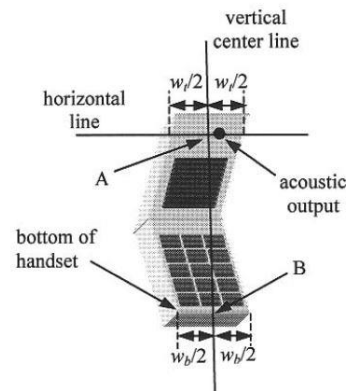


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

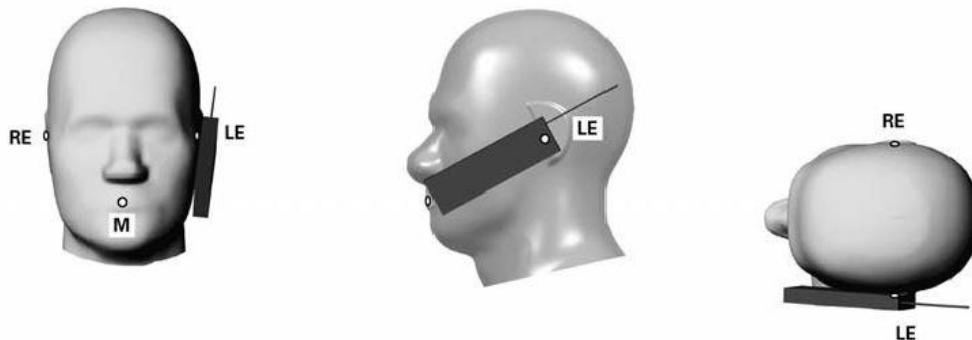


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

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

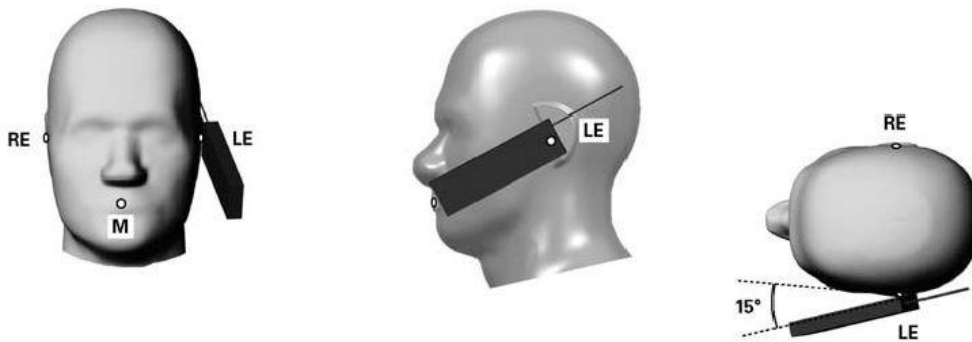


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

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

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

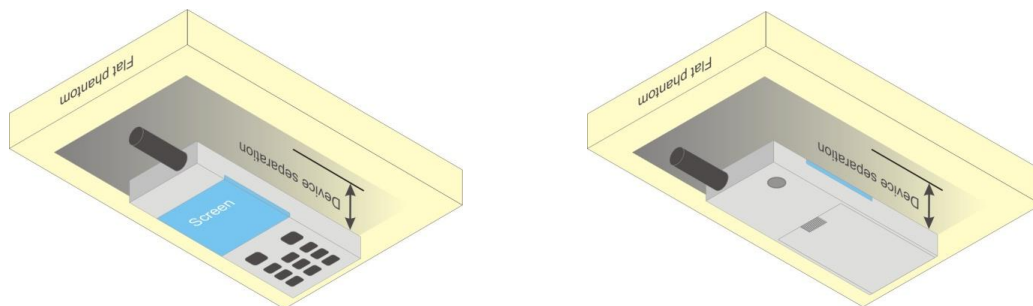


Fig 9.4 Body Worn Position

11.5 Product Specific Exposure

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

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 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 Conducted Power>

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

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. 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.
3. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
4. 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.

A summary of these settings are 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 Conducted Power>****General 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, 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

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

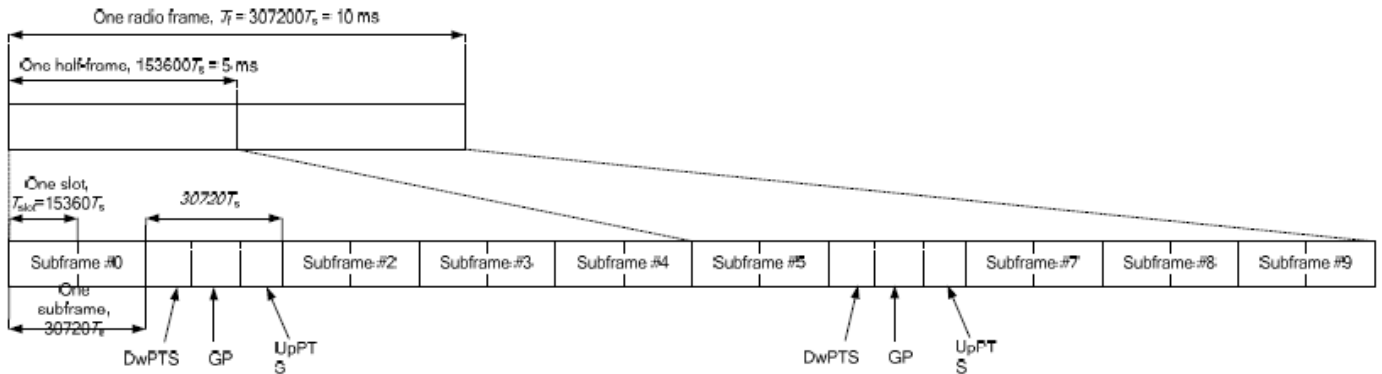


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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



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>

General 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.

<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	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
	QPSK	$\leq 0.5^2$	$\leq 0.5^2$	0 ²
	16 QAM		≤ 1	0
	64 QAM		≤ 2	≤ 1
	256 QAM		≤ 2.5	
CP-OFDM	QPSK		≤ 4.5	
	16 QAM	≤ 3		≤ 1.5
	64 QAM	≤ 3		≤ 2
	256 QAM		≤ 3.5	
			≤ 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. The SISO mode support only when the Antenna 3 and 4 is transmitting on 802.11b mode, other support MIMO mode.
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, 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

<Bluetooth>

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle list below are 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.

	Power Index	Antenna	Duty Cycle %
Bluetooth	1	Ant 4	77.22
	1	Ant 3	77.22
	1	Ant 4+3	77.22
	2/3	Ant 4	77.22
	2/3	Ant 3	77.22
	2/3	Ant 4+3	77.22
	4	Ant 4	77.22
	4	Ant 3	77.22
	4	Ant 4+3	77.22



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			4CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2A-12A	3CC-1	1	CA_2A-12A-30A	4CC-1	1	CA_2A-12A-30A-66A	5CC-1
2	CA_2A-13A	3CC-5	2	CA_2A-12A-66A	4CC-1	2	CA_2A-12A-66A-66A	4CC-1
3	CA_2A-14A	3CC-8	3	CA_2A-12A-12A	3CC-1	3	CA_2A-12A-66C	4CC-1
4	CA_2A-17A	3CC-29	4	CA_2A-12B	3CC-1	4	CA_2A-12B-66A	4CC-1
5	CA_2A-29A	3CC-9	5	CA_2A-13A-46A	4CC-7	5	CA_2A-13A-46C	4CC-7
6	CA_2A-2A	2CC-1	6	CA_2A-13A-48A	4CC-7	6	CA_2A-13A-48A-48A	4CC-7
7	CA_2A-30A	3CC-1	7	CA_2A-13A-66A	4CC-7	7	CA_2A-13A-48A-66A	5CC-4
8	CA_2A-46A	3CC-5	8	CA_2A-14A-30A	4CC-12	8	CA_2A-13A-48C	4CC-7
9	CA_2A-48A	3CC-6	9	CA_2A-29A-30A	4CC-14	9	CA_2A-13A-66A-66A	4CC-7
10	CA_2A-4A	3CC-16	10	CA_2A-29A-66A	4CC-14	10	CA_2A-13A-66B	4CC-7
11	CA_2A-5A	3CC-17	11	CA_2A-2A-12A	3CC-1	11	CA_2A-13A-66C	4CC-7
12	CA_2A-66A	3CC-2	12	CA_2A-2A-13A	3CC-5	12	CA_2A-14A-30A-66A	5CC-12
13	CA_2A-71A	3CC-19	13	CA_2A-2A-29A	3CC-9	13	CA_2A-14A-66A-66A	4CC-12
14	CA_2A-7A	3CC-20	14	CA_2A-2A-30A	3CC-1	14	CA_2A-29A-30A-66A	5CC-19
15	CA_2C	2CC-1	15	CA_2A-2A-46A	3CC-5	15	CA_2A-2A-12A-30A	4CC-1
16	CA_4A-12A	3CC-27	16	CA_2A-2A-4A	3CC-34	16	CA_2A-2A-12A-66A	4CC-1
17	CA_4A-13A	3CC-28	17	CA_2A-2A-5A	3CC-34	17	CA_2A-2A-12B	4CC-1
18	CA_4A-17A	3CC-29	18	CA_2A-2A-66A	3CC-2	18	CA_2A-2A-13A-66A	4CC-7
19	CA_4A-29A	3CC-30	19	CA_2A-2A-71A	3CC-35	19	CA_2A-2A-29A-30A	4CC-14
20	CA_4A-30A	3CC-31	20	CA_2A-2A-7A	3CC-36	20	CA_2A-2A-30A-66A	4CC-1
21	CA_4A-46A	3CC-32	21	CA_2A-30A-66A	4CC-1	21	CA_2A-2A-46C	4CC-84
22	CA_4A-48A	3CC-64	22	CA_2A-46A-66A	4CC-84	22	CA_2A-2A-4A-12A	4CC-45
23	CA_4A-4A	2CC-16	23	CA_2A-46C	3CC-5	23	CA_2A-2A-4A-13A	5CC-22
24	CA_4A-5A	3CC-34	24	CA_2A-48A-48A	3CC-6	24	CA_2A-2A-4A-4A	4CC-22
25	CA_4A-71A	3CC-35	25	CA_2A-48A-66A	4CC-7	25	CA_2A-2A-4A-5A	4CC-53
26	CA_4A-7A	3CC-36	26	CA_2A-48C	3CC-6	26	CA_2A-2A-4A-71A	
27	CA_5A-25A		27	CA_2A-4A-12A	4CC-45	27	CA_2A-2A-5A-30A	4CC-53
28	CA_5A-30A	3CC-37	28	CA_2A-4A-13A	4CC-23	28	CA_2A-2A-5A-5A	3CC-27
29	CA_5A-38A	3CC-95	29	CA_2A-4A-17A		29	CA_2A-2A-5A-66A	4CC-59
30	CA_5A-41A		30	CA_2A-4A-29A	4CC-48	30	CA_2A-2A-5B	3CC-27
31	CA_5A-46A	3CC-38	31	CA_2A-4A-30A	4CC-48	31	CA_2A-2A-66A-66A	4CC-1
32	CA_5A-48A	3CC-39	32	CA_2A-4A-46A		32	CA_2A-2A-66A-71A	4CC-226
33	CA_5A-5A	2CC-24	33	CA_2A-4A-4A	3CC-16	33	CA_2A-2A-66B	4CC-1
34	CA_5A-66A	3CC-40	34	CA_2A-4A-5A	4CC-53	34	CA_2A-2A-66C	4CC-1
35	CA_5A-7A	3CC-41	35	CA_2A-4A-71A	4CC-52	35	CA_2A-2A-7A-12A	4CC-56
36	CA_5B	2CC-24	36	CA_2A-4A-7A	4CC-56	36	CA_2A-2A-7A-66A	4CC-76
37	CA_5C	2CC-24	37	CA_2A-5A-30A	4CC-59	37	CA_2A-30A-66A-66A	4CC-1
38	CA_7A-12A	3CC-47	38	CA_2A-5A-46A	4CC-60	38	CA_2A-46A-66A-66A	4CC-84
39	CA_7A-13A	3CC-48	39	CA_2A-5A-48A	4CC-62	39	CA_2A-46C-66A	4CC-84
40	CA_7A-26A	3CC-105	40	CA_2A-5A-66A	4CC-59	40	CA_2A-46D	4CC-84
41	CA_7A-29A	3CC-49	41	CA_2A-5A-7A	4CC-227	41	CA_2A-48A-48A-66A	4CC-62
42	CA_7A-32A	3CC-189	42	CA_2A-5B	3CC-34	42	CA_2A-48A-48C	4CC-62
43	CA_7A-46A	3CC-52	43	CA_2A-66A-66A	3CC-2	43	CA_2A-48C-66A	4CC-62



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44	CA_7A-66A	3CC-50	44	CA_2A-66A-71A	4CC-71	44	CA_2A-48D	4CC-62
45	CA_7A-7A	2CC-35	45	CA_2A-66B	3CC-2	45	CA_2A-4A-12A-30A	
46	CA_7A-38A	3CC-189	46	CA_2A-66C	3CC-2	46	CA_2A-4A-12A-12A	4CC-45
47	CA_7B	2CC-35	47	CA_2A-7A-12A	4CC-76	47	CA_2A-4A-12B	4CC-45
48	CA_7C	2CC-35	48	CA_2A-7A-13A	4CC-82	48	CA_2A-4A-29A-30A	
49	CA_12A-12A	2CC-50	49	CA_2A-7A-29A	4CC-78	49	CA_2A-4A-4A-12A	4CC-45
50	CA_12A-25A		50	CA_2A-7A-66A	4CC-76	50	CA_2A-4A-4A-13A	4CC-23
51	CA_12A-30A	3CC-1	51	CA_2A-7A-7A	3CC-36	51	CA_2A-4A-4A-5A	4CC-53
52	CA_12A-46A	3CC-115	52	CA_2A-7A-46A	4CC-84	52	CA_2A-4A-4A-71A	4CC-26
53	CA_12A-66A	3CC-2	53	CA_2A-7C	3CC-36	53	CA_2A-4A-5A-30A	
54	CA_12B	2CC-50	54	CA_2C-12A	3CC-1	54	CA_2A-4A-5A-5A	4CC-53
55	CA_13A-46A	3CC-5	55	CA_2C-29A	3CC-9	55	CA_2A-4A-5B	4CC-53
56	CA_13A-48A	3CC-6	56	CA_2C-30A	3CC-9	56	CA_2A-4A-7A-12A	
57	CA_13A-66A	3CC-7	57	CA_2C-5A	3CC-34	57	CA_2A-4A-7A-7A	4CC-56
58	CA_14A-30A	3CC-8	58	CA_2C-66A	3CC-2	58	CA_2A-4A-7C	4CC-56
59	CA_14A-66A	3CC-127	59	CA_4A-12A-12A	3CC-27	59	CA_2A-5A-30A-66A	5CC-45
60	CA_25A-25A	2CC-61	60	CA_4A-12A-30A	4CC-45	60	CA_2A-5A-46C	4CC-193
61	CA_25A-26A	3CC-130	61	CA_4A-12B	3CC-27	61	CA_2A-5A-48A-48A	4CC-62
62	CA_25A-41A	3CC-131	62	CA_4A-29A-30A	4CC-48	62	CA_2A-5A-48A-66A	5CC-48
63	CA_25A-46A	3CC-134	63	CA_4A-46C	3CC-32	63	CA_2A-5A-48C	4CC-62
64	CA_25A-48A	3CC-134	64	CA_4A-48C	3CC-180	64	CA_2A-5A-5A-66A	4CC-62
65	CA_26A-41A	3CC-137	65	CA_4A-4A-12A	3CC-27	65	CA_2A-5A-66A-66A	4CC-62
66	CA_26A-46A		66	CA_4A-4A-13A	3CC-28	66	CA_2A-5A-66B	4CC-62
67	CA_29A-30A	3CC-9	67	CA_4A-4A-29A	3CC-30	67	CA_2A-5A-66C	4CC-62
68	CA_29A-66A	3CC-10	68	CA_4A-4A-30A	3CC-31	68	CA_2A-5B-30A	4CC-59
69	CA_30A-66A	3CC-21	69	CA_4A-4A-5A	3CC-34	69	CA_2A-5B-66A	4CC-62
70	CA_38A-38A	2CC-71	70	CA_4A-4A-71A	3CC-35	70	CA_2A-66A-66A-66A	4CC-62
71	CA_38A-46A		71	CA_4A-4A-7A	3CC-36	71	CA_2A-66A-66A-71A	4CC-32
72	CA_38C	2CC-71	72	CA_4A-5A-30A	4CC-53	72	CA_2A-66A-66B	4CC-62
73	CA_41A-41A	3CC-131	73	CA_4A-5B	3CC-34	73	CA_2A-66A-66C	4CC-62
74	CA_41C	2CC-73	74	CA_4A-7A-12A	4CC-56	74	CA_2A-66C-71A	4CC-71
75	CA_46A-66A	3CC-22	75	CA_4A-7A-7A	3CC-36	75	CA_2A-66D	4CC-62
76	CA_46A-71A	3CC-176	76	CA_4A-7C	3CC-36	76	CA_2A-7A-12A-66A	5CC-32
77	CA_48A-48A	2CC-79	77	CA_4C-12A	3CC-27	77	CA_2A-7A-12B	4CC-76
78	CA_48A-66A	3CC-25	78	CA_4C-5A	3CC-34	78	CA_2A-7A-29A-66A	5CC-56
79	CA_48C	2CC-79	79	CA_4C-7A	3CC-36	79	CA_2A-7A-66A-66A	4CC-76
80	CA_66A-46A	3CC-22	80	CA_5A-30A-66A	4CC-59	80	CA_2A-7A-7A-29A	4CC-78
81	CA_66A-66A	2CC-79	81	CA_5A-46A-66A	4CC-106	81	CA_2A-7A-7A-66A	4CC-76
82	CA_66A-71A	3CC-44	82	CA_5A-46C	3CC-38	82	CA_2A-7A-7A-13A	4CC-190
83	CA_66B	2CC-79	83	CA_5A-48A-48A	3CC-39	83	CA_2A-7A-7A-46A	4CC-84
84	CA_66C	2CC-79	84	CA_5A-48A-66A	4CC-62	84	CA_2A-7A-46A-66A	
85	CA_48A-71A	3CC-165	85	CA_5A-48C	3CC-39	85	CA_2A-7A-46C	4CC-84
86	CA_2A-26A	3CC-167	86	CA_5A-5A-66A	3CC-40	86	CA_2A-7C-66A	4CC-76
87	CA_4A-41A		87	CA_5A-66A-66A	3CC-40	87	CA_2A-7C-13A	4CC-82
88	CA_46A-48A	3CC-188	88	CA_5A-66B	3CC-40	88	CA_2A-7C-29A	4CC-78
89	CA_25C	2CC-97	89	CA_5A-66C	3CC-40	89	CA_2C-12A-30A	4CC-1
90	CA_26A-66A	3CC-168	90	CA_5A-7A-46A	4CC-194	90	CA_2C-29A-30A	4CC-14
91	CA_13A-4A	3CC-28	91	CA_5A-7A-7A	3CC-41	91	CA_2C-5A-66A	4CC-62
92	CA_13A-2A	3CC-5	92	CA_5A-7A-66A	4CC-119	92	CA_2C-66A-66A	4CC-1
93	CA_7A-71A	3CC-194	93	CA_5A-7C	3CC-41	93	CA_4A-13A-46C	
94	CA_12A-48A	3CC-191	94	CA_5B-30A	3CC-37	94	CA_4A-46D	4CC-93
95	CA_41A-46A	3CC-192	95	CA_5B-38A		95	CA_4A-48D	4CC-99
96	CA_25A-66A	3CC-203	96	CA_5B-46A	3CC-38	96	CA_4A-4A-12A-30A	4CC-45
97	CA_7A-25A	3CC-203	97	CA_5B-66A	3CC-40	97	CA_4A-4A-12B	4CC-96
6			98	CA_7A-12A-66A	4CC-126	98	CA_4A-4A-29A-30A	4CC-48
			99	CA_7A-12B	3CC-47	99	CA_4A-4A-48A-48A	5CC-64



			100	CA_7A-29A-66A	4CC-129	100	CA_4A-4A-5A-30A	4CC-53
			101	CA_7A-46A-66A	4CC-242	101	CA_4A-4A-5A-5A	4CC-100
			102	CA_7A-46C	3CC-52	102	CA_4A-4A-5B	4CC-100
			103	CA_7A-66A-66A	3CC-50	103	CA_4A-5B-30A	4CC-100
			104	CA_7A-7A-13A	3CC-48	104	CA_4A-7A-12B	4CC-56
			105	CA_7A-7A-26A	3CC-167	105	CA_5A-30A-66A-66A	4CC-59
			106	CA_7A-7A-29A	3CC-49	106	CA_5A-46C-66A	4CC-193
			107	CA_7A-7A-46A	3CC-52	107	CA_5A-46D	4CC-106
			108	CA_7A-7A-66A	3CC-50	108	CA_5A-48A-48A-66A	4CC-62
			109	CA_7C-29A	3CC-49	109	CA_5A-48A-48C	4CC-108
			110	CA_7C-46A	3CC-52	110	CA_5A-48C-66A	4CC-108
			111	CA_7C-66A	3CC-50	111	CA_5A-48D	4CC-108
			112	CA_7C-13A	3CC-48	112	CA_5A-5A-66A-66A	4CC-108
			113	CA_12A-12A-66A	3CC-2	113	CA_5A-5A-66B	4CC-108
			114	CA_12A-30A-66A	4CC-1	114	CA_5A-5A-66C	4CC-108
			115	CA_12A-46C	4CC-136	115	CA_5A-66A-66A-66A	4CC-108
			116	CA_12A-66A-66A	3CC-2	116	CA_5A-66A-66B	4CC-108
			117	CA_12A-66C	3CC-2	117	CA_5A-66A-66C	4CC-108
			118	CA_12B-66A	3CC-2	118	CA_5A-66D	4CC-108
			119	CA_13A-46A-66A	4CC-138	119	CA_5A-7A-66A-66A	4CC-205
			120	CA_13A-46C	3CC-5	120	CA_5A-7C-66A	4CC-119
			121	CA_13A-48A-48A	3CC-6	121	CA_5B-30A-66A	4CC-105
			122	CA_13A-48A-66A	4CC-7	122	CA_5B-46C	4CC-106
			123	CA_13A-48C	3CC-6	123	CA_5B-66A-66A	4CC-105
			124	CA_13A-66A-66A	3CC-7	124	CA_5B-66B	4CC-105
			125	CA_13A-66B	3CC-7	125	CA_5B-66C	4CC-105
			126	CA_13A-66C	3CC-7	126	CA_7A-12A-66A-66A	4CC-76
			127	CA_14A-30A-66A	4CC-12	127	CA_7A-12B-66A	4CC-126
			128	CA_14A-66A-66A	3CC-127	128	CA_7A-46D	4CC-130
			129	CA_25A-25A-25A	3CC-134	129	CA_7A-7A-29A-66A	4CC-78
			130	CA_25A-25A-26A		130	CA_7A-7A-46C	4CC-84
			131	CA_25A-25A-41A	4CC-151	131	CA_7A-7A-66A-66A	4CC-126
			132	CA_25A-25C	3CC-134	132	CA_7C-29A-66A	4CC-129
			133	CA_25A-41C	3CC-131	133	CA_7C-46C	4CC-130
			134	CA_25A-46A-48A		134	CA_7C-66A-66A	4CC-126
			135	CA_25C-26A	3CC-130	135	CA_12A-30A-66A-66A	4CC-1
			136	CA_25D	3CC-134	136	CA_12A-46D	5CC-80
			137	CA_26A-41C		137	CA_12B-66A-66A	4CC-135
			138	CA_29A-30A-66A	4CC-14	138	CA_13A-46C-66A	4CC-192
			139	CA_29A-66A-66A	3CC-138	139	CA_13A-46D	4CC-138
			140	CA_30A-66A-66A	3CC-138	140	CA_13A-48A-48A-66A	4CC-7
			141	CA_41A-41C	3CC-131	141	CA_13A-48A-48C	4CC-140
			142	CA_41D	3CC-131	142	CA_13A-48A-66B	4CC-140
			143	CA_46A-66A-66A	3CC-22	143	CA_13A-48A-66C	4CC-140
			144	CA_46A-66C	3CC-22	144	CA_13A-48C-66A	4CC-140
			145	CA_46C-66A	3CC-22	145	CA_13A-48D	4CC-140
			146	CA_48A-48A-66A	3CC-25	146	CA_13A-66A-66A-66A	4CC-140
			147	CA_48A-48C	3CC-25	147	CA_13A-66A-66B	4CC-140
			148	CA_48A-66A-66A	3CC-25	148	CA_13A-66A-66C	4CC-140
			149	CA_48A-66B	3CC-25	149	CA_13A-66D	4CC-140
			150	CA_48A-66C	3CC-25	150	CA_14A-30A-66A-66A	4CC-12
			151	CA_48C-66A	3CC-25	151	CA_25A-25A-41C	5CC-90
			152	CA_48D	3CC-25	152	CA_25A-41D	4CC-151
			153	CA_66A-46C	3CC-22	153	CA_29A-30A-66A-66A	4CC-14
			154	CA_66A-66A-66A	3CC-22	154	CA_41A-41A-41C	4CC-151
			155	CA_66A-66A-71A	3CC-44	155	CA_41A-41D	4CC-151



			156	CA_66A-66B	3CC-22	156	CA_41C-41C	4CC-151
			157	CA_66A-66C	3CC-22	157	CA_41E	4CC-151
			158	CA_66C-71A	3CC-44	158	CA_46A-48A-48A-66A	4CC-188
			159	CA_66D	3CC-22	159	CA_46A-66A-66A-66A	4CC-158
			160	CA_46A-48A-66A	4CC-158	160	CA_46C-66A-66A	4CC-158
			161	CA_2A-46A-48A	4CC-188	161	CA_46D-66A	4CC-158
			162	CA_2A-14A-66A	4CC-12	162	CA_46D-48A	4CC-158
			163	CA_2A-2A-14A	3CC-8	163	CA_46D-71A	
			164	CA_48C-48A	3CC-6	164	CA_48A-48A-66A-66A	4CC-158
			165	CA_48A-48A-71A		165	CA_48A-48A-66B	4CC-158
			166	CA_48C-71A	3CC-165	166	CA_48A-48A-66C	4CC-158
			167	CA_2A-7A-26A	4CC-189	167	CA_48A-48D	4CC-158
			168	CA_2A-26A-66A	4CC-189	168	CA_48A-48C-66A	4CC-158
			169	CA_7A-26A-66A	4CC-189	169	CA_48A-66A-66A-66A	4CC-158
			170	CA_7A-13A-66A	4CC-235	170	CA_48C-48C	4CC-158
			171	CA_29A-46A-66A		171	CA_48C-66A-66A	4CC-158
			172	CA_25A-46C	3CC-134	172	CA_48C-66B	4CC-158
			173	CA_2A-5A-5A	3CC-34	173	CA_48C-66C	4CC-158
			174	CA_46A-48A-48A	3CC-134	174	CA_48D-66A	4CC-158
			175	CA_46C-48A	3CC-134	175	CA_48E	4CC-158
			176	CA_46C-71A	4CC-163	176	CA_66A-46D	4CC-158
			177	CA_4A-5A-5A	3CC-34	177	CA_66B-66C	4CC-158
			178	CA_4A-7A-29A	4CC-203	178	CA_2A-2A-2A-12A	4CC-1
			179	CA_4A-13A-46A	4CC-93	179	CA_2A-2A-2A-5A	4CC-53
			180	CA_4A-4A-48A	4CC-99	180	CA_2A-2A-2A-30A	4CC-1
			181	CA_4A-48A-48A	3CC-180	181	CA_2A-2A-2A-66A	4CC-1
			182	CA_25C-41A	3CC-131	182	CA_46C-48A-66A	4CC-184
			183	CA_41A-41A-41A	3CC-131	183	CA_2A-46C-48A	4CC-185
			184	CA_41C-41A	3CC-131	184	CA_46A-48C-66A	4CC-188
			185	CA_46A-48C	3CC-134	185	CA_2A-46A-48C	4CC-188
			186	CA_48A-48A-48A	3CC-186	186	CA_46A-48D	4CC-184
			187	CA_66B-66A	3CC-2	187	CA_2A-2A-14A-66A	4CC-12
			188	CA_4A-7A-71A		188	CA_2A-46A-48A-66A	5CC-115
			189	CA_7A-32A-38A		189	CA_2A-7A-26A-66A	
			190	CA_7C-32A	3CC-189	190	CA_2A-7A-13A-66A	5CC-118
			191	CA_12A-48C		191	CA_7C-13A-66A	4CC-190
			192	CA_41A-46C		192	CA_2A-13A-46A-66A	5CC-119
			193	CA_2A-2A-2A	3CC-1	193	CA_2A-5A-46A-66A	5CC-149
			194	CA_2A-7A-71A	4CC-226	194	CA_5A-7A-46C	5CC-72
			195	CA_7A-66A-71A	4CC-230	195	CA_25A-46D	
			196	CA_7A-7A-12A	3CC-47	196	CA_14A-66A-66A-66A	4CC-12
			197	CA_13A-48B	3CC-122	197	CA_2A-2A-14A-30A	4CC-12
			198	CA_48B-66A	3CC-25	198	CA_2A-2A-29A-66A	4CC-14
			199	CA_7A-38C	3CC-189	199	CA_2A-29A-66A-66A	4CC-14
			200	CA_25A-25A-66A	3CC-203	200	CA_46C-48A-48A	4CC-188
			201	CA_7A-7A-25A	3CC-203	201	CA_46C-48C	4CC-188
			202	CA_7A-25A-25A	3CC-203	202	CA_2A-48C-48A	4CC-188
			203	CA_7A-25A-66A	4CC-237	203	CA_2A-4A-7A-29A	5CC-44
			204	CA_7C-25A	3CC-203	204	CA_4A-7A-7A-29A	4CC-203
			12			205	CA_2A-5A-7A-66A	5CC-158
						206	CA_2C-5A-30A	4CC-59
						207	CA_2C-5B	4CC-205
						208	CA_5A-48C-48A	4CC-223
						209	CA_13A-48C-48A	4CC-7
						210	CA_25C-41C	4CC-151
						211	CA_48A-48A-48C	4CC-188



						212	CA_48C-48A-48A	4CC-188
						213	CA_48A-48C-48A	4CC-188
						214	CA_48C-48A-66A	4CC-188
						215	CA_2A-46A-66C	4CC-188
						216	CA_12A-66A-66A-66A	4CC-1
						217	CA_30A-66A-66A-66A	4CC-1
						218	CA_2A-2A-2A-14A	4CC-12
						219	CA_2A-2A-2A-29A	4CC-14
						220	CA_29A-66A-66A-66A	4CC-14
						221	CA_46C-66C	4CC-188
						222	CA_5A-46A-66A-66A	4CC-106
						223	CA_5A-48A-66A-66A	4CC-108
						224	CA_2A-48A-66A-66A	4CC-188
						225	CA_2A-2A-7A-71A	4CC-226
						226	CA_2A-7A-66A-71A	5CC-155
						227	CA_2A-5A-7A-7A	4CC-205
						228	CA_2A-5A-7C	4CC-227
						229	CA_2A-7A-7A-12A	4CC-76
						230	CA_7A-66A-66A-71A	4CC-226
						231	CA_13A-48A-48A-48A	4CC-7
						232	CA_2A-48A-48A-48A	4CC-188
						233	CA_48A-48A-48A-66A	4CC-188
						234	CA_5A-7A-7A-66A	4CC-119
						235	CA_7A-7A-13A-66A	4CC-190
						236	CA_7A-7A-25A-25A	4CC-237
						237	CA_7A-7A-25A-66A	5CC-162
						238	CA_7A-25A-25A-66A	4CC-237
						239	CA_2A-2A-7A-13A	4CC-82
						240	CA_2A-2A-7A-7A	4CC-56
						241	CA_2A-2A-7C	4CC-56
						242	CA_7A-46C-66A	4CC-84
						243	CA_7C-25A-25A	4CC-244
						244	CA_7C-25A-66A	4CC-237
						245	CA_2A-2A-5A-7A	4CC-227
						246	CA_2A-46A-48A-48A	5CC-33

5CC Downlink Carrier Aggregation			6CC Downlink Carrier Aggregation			7CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2A-12A-30A-66A-66A	6CC-16	1	CA_2A-46A-48E	6CC-2	1	CA_2A-46C-48D-66A	7CC-9
2	CA_2A-12B-66A-66A	5CC-1	2	CA_2A-46A-48D-66A	7CC-9	2	CA_2A-46D-48C-66A	7CC-9
3	CA_2A-13A-46D	5CC-119	3	CA_2A-46C-48C-66A	6CC-2	3	CA_2A-46C-48E	7CC-9
4	CA_2A-13A-48A-48A-66A		4	CA_2A-46D-66A-66A	6CC-2	4	CA_2A-46E-66A-66A	7CC-9
5	CA_2A-13A-48A-48C	5CC-4	5	CA_2A-46E-66A	6CC-2	5	CA_2A-7A-7A-46E	
6	CA_2A-13A-48C-66A	5CC-4	6	CA_2A-48E-66A	6CC-2	6	CA_46C-48E-66A	7CC-9
7	CA_2A-13A-48D	5CC-4	7	CA_2A-7A-7A-46D	7CC-5	7	CA_46E-48C-66A	7CC-9
8	CA_2A-13A-66A-66B	5CC-4	8	CA_2A-7A-46E	6CC-7	8	CA_2A-46E-66C	7CC-9
9	CA_2A-13A-66A-66C	5CC-4	9	CA_7A-7A-46E	6CC-7	9	CA_2A-46E-48A-66A	
10	CA_2A-13A-66D	5CC-4	10	CA_7C-46E	6CC-7	10	CA_2A-46E-48C	7CC-9
11	CA_2A-14A-66A-66A-66A	5CC-12	11	CA_46C-48D-66A	6CC-2	11	CA_2A-13A-46E-66A	
12	CA_2A-14A-30A-66A-66A	6CC-18	12	CA_46C-48E	6CC-11	12	CA_2A-5A-46D-66A-66A	7CC-13
13	CA_2A-2A-12A-30A-66A	5CC-1	13	CA_46E-66A-66A	6CC-11	13	CA_2A-5A-46E-66A	
14	CA_2A-2A-12A-66A-66A	5CC-1	14	CA_48C-48C-48C	6CC-11			
15	CA_2A-2A-12B-66A	5CC-1	15	CA_2A-46D-66C	6CC-2			
16	CA_2A-2A-13A-66A-66A	5CC-4	16	CA_2A-2A-12A-30A-66A-66A				



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17	CA_2A-2A-14A-30A-66A	5CC-12	17	CA_2A-2A-5A-30A-66A-66A			
18	CA_2A-2A-14A-66A-66A	5CC-12	18	CA_2A-2A-14A-30A-66A-66A			
19	CA_2A-2A-29A-30A-66A	6CC-26	19	CA_2A-12A-30A-66A-66A-66A	6CC-16		
20	CA_2A-2A-29A-66A-66A	5CC-19	20	CA_2A-5A-30A-66A-66A-66A	6CC-17		
21	CA_2A-2A-46D	5CC-3	21	CA_2A-14A-30A-66A-66A-66A	6CC-18		
22	CA_2A-2A-4A-4A-13A		22	CA_2A-5B-30A-66A-66A	6CC-17		
23	CA_2A-2A-4A-4A-5A		23	CA_2A-2A-2A-12A-30A-66A	6CC-16		
24	CA_2A-2A-4A-5B	5CC-23	24	CA_2A-2A-2A-5A-30A-66A	6CC-17		
25	CA_2A-2A-5A-30A-66A	6CC-17	25	CA_2A-2A-2A-14A-30A-66A	6CC-18		
26	CA_2A-2A-5A-66A-66A	5CC-25	26	CA_2A-2A-2A-29A-30A-66A			
27	CA_2A-2A-5A-66B	5CC-25	27	CA_2A-29A-30A-66A-66A-66A	6CC-26		
28	CA_2A-2A-5A-66C	5CC-25	28	CA_2A-2A-5B-30A-66A	6CC-17		
29	CA_2A-2A-5B-66A	5CC-25	29	CA_2A-2A-46E	6CC-2		
30	CA_2A-2A-66A-66B	5CC-25	30	CA_2A-46D-48A-66A	6CC-2		
31	CA_2A-2A-66A-66C	5CC-25	31	CA_46E-66C	6CC-2		
32	CA_2A-2A-7A-12A-66A		32	CA_2A-13A-46D-66A	7CC-11		
33	CA_2A-46C-48A-48A	5CC-115	33	CA_2A-5A-46D-66A	7CC-13		
34	CA_2A-46C-66A-66A	5CC-115	34	CA_2A-13A-46E	6CC-32		
35	CA_2A-46D-48A	5CC-33	35	CA_2A-5A-46E	6CC-33		
36	CA_2A-46D-66A	5CC-34	36	CA_5A-46E-66A	6CC-33		
37	CA_2A-46E	5CC-33	37	CA_13A-46E-66A	6CC-32		
38	CA_2A-48A-48C-66A	5CC-41	38	CA_2A-46C-48D	6CC-2		
39	CA_2A-48A-48D	5CC-41	39	CA_2A-46D-48C	6CC-2		
40	CA_2A-48C-48C	5CC-41	40	CA_46D-48C-66A	6CC-2		
41	CA_2A-48D-66A	5CC-115	41	CA_46A-48E-66A	6CC-2		
42	CA_2A-48E	5CC-41	42	CA_46E-48A-66A	6CC-2		
43	CA_2A-4A-4A-5B	5CC-23	43	CA_46E-48C	6CC-2		
44	CA_2A-4A-7A-7A-29A		44	CA_2A-46D-48A-48A	6CC-2		
45	CA_2A-5A-30A-66A-66A	5CC-25	45	CA_46D-48A-48A-66A	6CC-2		
46	CA_2A-5A-46D	5CC-149	46	CA_2A-46E-48A	6CC-2		
47	CA_2A-5A-48A-48C	5CC-48	47	CA_5A-46D-66A-66A	6CC-33		
48	CA_2A-5A-48A-48A-66A	6CC-49	48	CA_2A-5A-46C-66A-66A	6CC-33		
49	CA_2A-5A-48C-66A	5CC-48	49	CA_2A-5A-48C-66A-66A			
50	CA_2A-5A-48D	5CC-48	50	CA_46D-48D	6CC-2		
51	CA_2A-5B-30A-66A	5CC-45	51	CA_7A-46E-66A			
52	CA_2A-5B-66A-66A	5CC-45					
53	CA_2A-5B-66B	5CC-45					
54	CA_2A-5B-66C	5CC-45					
55	CA_2A-7A-12B-66A	5CC-32					
56	CA_2A-7A-7A-29A-66A						
57	CA_2A-7A-7A-66A-66A	5CC-56					
58	CA_2A-7A-7A-46C	7CC-5					
59	CA_2A-7A-46D	5CC-58					
60	CA_2A-7C-66A-66A	5CC-56					
61	CA_2A-7C-29A-66A	5CC-56					
62	CA_2C-5B-30A	5CC-45					
63	CA_4A-46E						
64	CA_4A-48E						
65	CA_5A-46D-66A	5CC-149					
66	CA_5A-46E	5CC-65					
67	CA_5A-48A-48C-66A	5CC-48					
68	CA_5A-48A-48D	5CC-67					
69	CA_5A-48C-48C	5CC-67					
70	CA_5A-48D-66A	5CC-67					
71	CA_5A-48E	5CC-67					
72	CA_5A-7A-46D						



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73	CA_5A-7C-66A-66A	5CC-158					
74	CA_5B-30A-66A-66A	5CC-25					
75	CA_5B-46D	5CC-65					
76	CA_5B-66A-66B	5CC-65					
77	CA_7A-46E	5CC-78					
78	CA_7A-7A-46D	5CC-72					
79	CA_7C-46D	5CC-78					
80	CA_12A-46E						
81	CA_13A-46D-66A	5CC-119					
82	CA_13A-46E	5CC-81					
83	CA_13A-48A-48D	5CC-84					
84	CA_13A-48A-48C-66A	5CC-4					
85	CA_13A-48C-48C	5CC-84					
86	CA_13A-48C-66B	5CC-84					
87	CA_13A-48C-66C	5CC-84					
88	CA_13A-48D-66A	5CC-84					
89	CA_13A-48E	5CC-84					
90	CA_25A-25A-41D						
91	CA_25C-41D	5CC-90					
92	CA_41C-41D	5CC-90					
93	CA_41F	5CC-90					
94	CA_46C-48A-48A-66A	5CC-115					
95	CA_46C-66A-66A-66A	5CC-94					
96	CA_46D-66A-66A	5CC-94					
97	CA_46D-48C	5CC-94					
98	CA_46E-66A	5CC-94					
99	CA_48A-48A-48D	5CC-94					
100	CA_48A-48E	5CC-94					
101	CA_48A-48C-66B	5CC-94					
102	CA_48A-48C-66C	5CC-94					
103	CA_48A-48D-66A	5CC-94					
104	CA_48C-48D	5CC-94					
105	CA_48C-48C-66A	5CC-94					
106	CA_48C-66A-66A-66A	5CC-94					
107	CA_48E-66A	5CC-94					
108	CA_46C-48C-66A	5CC-94					
109	CA_2A-46C-48C	5CC-115					
110	CA_46A-48D-66A	5CC-94					
111	CA_2A-46A-48D	5CC-115					
112	CA_46C-48D	5CC-94					
113	CA_46D-48A-66A	5CC-94					
114	CA_48A-48C-48C	5CC-94					
115	CA_2A-46A-48C-66A	7CC-9					
116	CA_2A-46C-48A-66A	5CC-115					
117	CA_48F	5CC-94					
118	CA_2A-7C-13A-66A	5CC-161					
119	CA_2A-13A-46C-66A	7CC-11					
120	CA_2A-5A-46C-66A	5CC-149					
121	CA_46A-48E	5CC-94					
122	CA_48C-48C-48A	5CC-94					
123	CA_48C-48A-48C	5CC-94					
124	CA_2A-46C-66C	5CC-115					
125	CA_46D-66C	5CC-94					
126	CA_2A-2A-30A-66A-66A	5CC-1					
127	CA_2A-12A-66A-66A-66A	5CC-1					
128	CA_2A-30A-66A-66A-66A	5CC-1					



129	CA_12A-30A-66A-66A-66A	5CC-1						
130	CA_2A-5A-66A-66A-66A	5CC-25						
131	CA_5A-30A-66A-66A-66A	5CC-25						
132	CA_14A-30A-66A-66A-66A	5CC-12						
133	CA_2A-2A-2A-12A-30A	5CC-1						
134	CA_2A-2A-2A-12A-66A	5CC-1						
135	CA_2A-2A-2A-30A-66A	5CC-1						
136	CA_2A-2A-2A-5A-30A	5CC-25						
137	CA_2A-2A-2A-5A-66A	5CC-25						
138	CA_2A-2A-2A-14A-30A	5CC-12						
139	CA_2A-2A-2A-14A-66A	5CC-12						
140	CA_2A-2A-2A-29A-30A	5CC-142						
141	CA_2A-2A-2A-29A-66A	5CC-142						
142	CA_2A-29A-30A-66A-66A	5CC-19						
143	CA_2A-29A-66A-66A-66A	5CC-142						
144	CA_29A-30A-66A-66A-66A	5CC-142						
145	CA_2A-2A-5B-30A	5CC-25						
146	CA_46D-48A-48A	5CC-94						
147	CA_46E-48A	5CC-94						
148	CA_2A-5A-5A-66A-66A	5CC-25						
149	CA_2A-5A-46A-66A-66A	7CC-13						
150	CA_5A-46C-66A-66A	5CC-149						
151	CA_2A-48C-66A-66A	5CC-153						
152	CA_5A-48C-66A-66A	5CC-153						
153	CA_2A-5A-48A-66A-66A	5CC-48						
154	CA_2A-2A-7A-66A-66A	5CC-32						
155	CA_2A-2A-7A-66A-71A							
156	CA_2A-7A-66A-66A-71A	5CC-155						
157	CA_2A-7A-12A-66A-66A	5CC-32						
158	CA_2A-5A-7A-66A-66A							
159	CA_2A-2A-66A-66A-71A	5CC-155						
160	CA_2A-5A-7A-7A-66A	5CC-158						
161	CA_2A-7A-7A-13A-66A							
162	CA_7A-7A-25A-25A-66A							
163	CA_2A-2A-7A-7A-13A	5CC-161						
164	CA_2A-2A-7C-13A	5CC-161						
165	CA_2A-5A-7C-66A	5CC-158						
166	CA_7A-46D-66A	6CC-51						
167	CA_7C-25A-25A-66A	5CC-162						

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

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

<Two Carrier power verification>

Configure	CA Configuration (BCS)	PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_5A-25A	5	10	836.5	20525	QPSK	1	0	25	20	1960	8340	24.47	24.50
	CA_5A-41A	5	10	836.5	20525	QPSK	1	0	41	20	2593	40620	24.45	24.50
	CA_12A-25A	12	10	707.5	23095	QPSK	1	0	25	20	1960	8340	24.53	24.61
	CA_26A-46A	26	10	831.5	26865	QPSK	1	0	46	20	5537.5	50665	24.40	24.45
	CA_38A-46A	38	20	2595	38000	QPSK	1	0	46	20	5537.5	50665	24.64	24.65
	CA_4A-41A	4	20	1732.5	20175	QPSK	1	0	41	20	2593	40620	24.39	24.40

<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-4A-17A	2	20	1880	18900	QPSK	1	0	4	10	2132.5	2175	17	10	740	5790	24.59	24.61
	CA_2A-4A-46A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	46	20	5537.5	50665	24.52	24.61
	CA_5B-38A	5	10	829	20450	QPSK	1	0	5	10	883.9	2549	38	20	2595	38000	24.38	24.44
	CA_25A-25A-26A	25	20	1880	26340	QPSK	1	0	25	5	1932.5	8065	26	5	876.5	8865	24.37	24.42
	CA_25A-46A-48A	25	20	1880	26340	QPSK	1	0	46	20	5537.5	50665	48	20	3641	56150	24.41	24.42
	CA_26A-41C	26	15	831.5	26865	QPSK	1	0	41	20	2593	40620	41	20	2573.2	40422	24.44	24.46
	CA_48A-48A-71A	48	20	3690	56640	QPSK	1	0	48	5	3552.5	55265	71	20	634.5	68761	25.03	25.13
	CA_29A-46A-66A	66	20	1745	132322	QPSK	1	0	29	10	722.5	9715	46	20	5537.5	50665	24.62	24.63
	CA_4A-7A-71A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	71	20	634.5	68761	24.39	24.40
	CA_7A-32A-38A	7	20	2535	21100	QPSK	1	0	32	20	1474	10140	38	20	2595	38000	24.68	24.73
	CA_12A-48C	12	10	707.5	23095	QPSK	1	0	48	20	3552.5	55265	48	20	3532.7	55067	24.54	24.61
	CA_41A-46C	41	20	2549.5	40185	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	24.73	24.80



<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	1880	18900	QPSK	1	0	2	5	1932.5	625	4	20	2132.5	2175	71	20	634.5	68761	24.53	24.61	
	CA_2A-4A-12A-30A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	12	10	737.5	5095	30	10	2355	9820	24.58	24.61	
	CA_2A-4A-29A-30A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	29	10	722.5	9715	30	10	2355	9820	24.51	24.61	
	CA_2A-4A-5A-30A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	5	10	881.5	2525	30	10	2355	9820	24.57	24.61	
	CA_2A-4A-7A-12A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	12	10	737.5	5095	24.54	24.61	
	CA_2A-7A-46A-66A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	46	20	5537.5	50665	66	20	2155	66886	24.53	24.61	
	CA_4A-13A-46C	4	20	1732.5	20175	QPSK	1	0	13	10	751	5230	46	20	5537.5	50665	46	20	5577.3	50863	24.30	24.40	
	CA_46D-71A	71	20	680.5	133297	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	24.74	24.79	
	CA_2A-7A-26A-66A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	26	15	876.5	8865	66	20	2155	66886	24.58	24.61	
CA_25A-46D	25	20	1880	26340	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	24.35	24.42		

<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-13A-48A-48A-66A	2	20	1880	18900	QPSK	1	0	13	10	751	5230	48	20	3641	56150	48	5	3552.5	55265	66	20	2155	66886	24.55	24.61
	CA_2A-2A-4A-4A-13A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	4	20	2132.5	2175	4	5	2112.5	1975	13	10	751	5230	24.58	24.61
	CA_2A-2A-4A-4A-5A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	4	20	2132.5	2175	4	5	2112.5	1975	5	10	881.5	2525	24.59	24.61
	CA_2A-2A-7A-12A-66A	2	20	1880	18900	QPSK	1	0	2	5	1960	900	7	20	2655	3100	12	10	737.5	5095	66	20	2155	66886	24.56	24.61
	CA_2A-4A-7A-7A-29A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	7	5	2622.5	2775	29	10	722.5	9715	24.60	24.61
	CA_2A-7A-7A-29A-66A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	7	5	2622.5	2775	29	10	722.5	9715	66	20	2155	66886	24.54	24.61
	CA_4A-46E	4	20	1732.5	20175	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	24.33	24.40
	CA_4A-48E	4	20	1732.5	20175	QPSK	1	0	48	20	3641	56150	48	20	3621.2	55952	48	20	3601.4	55754	48	20	3581.6	55556	24.39	24.40
	CA_5A-7A-46D	5	10	836.5	20525	QPSK	1	0	7	20	2655	3100	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	24.40	24.50
	CA_12A-46E	12	10	707.5	23095	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	24.56	24.61
	CA_25A-25A-41D	25	20	1880	26340	QPSK	1	0	25	5	1932.5	8065	41	20	2593	40620	41	20	2612.8	40818	41	20	2632.6	41016	24.34	24.42
	CA_2A-2A-7A-66A-71A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	7	20	2655	3100	66	20	2155	66886	71	20	634.5	68761	24.60	24.61
	CA_2A-5A-7A-66A-66A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	7	20	2655	3100	66	20	2155	66886	66	5	2112.5	66486	24.52	24.61
	CA_2A-7A-7A-13A-66A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	7	5	2622.5	2775	13	10	751	5230	66	20	2155	66886	24.59	24.61
CA_7A-7A-25A-25A-66A	7	20	2535	21100	QPSK	1	0	7	5	2622.5	2775	25	20	1960	8340	25	5	1932.5	8065	66	20	2155	66886	24.68	24.73	

<Six Carrier power verification>

Configure	CA Configuration (BCS)	PCC								SCC1				SCC2				SCC3				SCC4				SCC5		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	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-12A-30A-66A-66A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	12	10	737.5	5095	30	10	2355	9820	66	20	2155	66886	66	5	2112.5	66486	24.54	24.61
	CA_2A-2A-5A-30A-66A-66A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	5	10	881.5	2525	30	10	2355	9820	66	20	2155	66886	66	5	2112.5	66486	24.56	24.61
	CA_2A-2A-14A-30A-66A-66A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	14	10	763	5330	30	10	2355	9820	66	20	2155	66886	66	5	2112.5	66486	24.55	24.61
	CA_2A-2A-29A-30A-66A	2	20	1880	18900	QPSK	1	0	2	5	1932.5	625	2	5	1932.5	625	29	10	722.5	9715	30	10	2355	9820	66	20	2155	66886	24.59	24.61
	CA_2A-5A-48C-66A-66A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	48	20	3641	56150	48	20	3660.8	56348	66	20	2155	66886	66	5	2112.5	66486	24.58	24.61
CA_7A-46E-66A	7	20	2535	21100	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	66	20	2155	66886	24.66	24.73	

<Seven Carrier power verification>

Configure	CA Configuration (BCS)	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				SCC6		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	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-7A-7A-46E	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	7	5	2622.5	2775	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	24.54	24.61
	CA_2A-46E-48A-66A	2	20	1880	18900	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	48	20	3641	56150	66	20	2155	66886	24.54	24.61
	CA_2A-13A-46E-66A	2	20	1880	18900	QPSK	1	0	13	10	751	5230	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	66	20	2155	66886	24.53	24.61
	CA_2A-5A-46E-66A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	46	20	5596.9	51259	66	20	2155	66886	24.52	24.61



<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.

Index 1/2/3/4/5/6								
Ant 0								
CA_5B								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	49	1	0	22.84	23.7
20525	20624	QPSK	1	0	1	49	23.07	23.7
20600	20501	QPSK	1	0	1	49	23.06	23.7



Index 1/2/3								
Ant 2								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.79	23.9
21100	20902	QPSK	1	0	1	99	23.01	23.9
21350	21152	QPSK	1	0	1	99	22.99	23.9

Index 4								
Ant 2								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.55	22
21100	20902	QPSK	1	0	1	99	20.57	22
21350	21152	QPSK	1	0	1	99	20.46	22

Index 5								
Ant 2								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.79	23.4
21100	20902	QPSK	1	0	1	99	23.01	23.4
21350	21152	QPSK	1	0	1	99	22.99	23.4

Index 6								
Ant 2								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.55	22.2
21100	20902	QPSK	1	0	1	99	20.57	22.2
21350	21152	QPSK	1	0	1	99	20.46	22.2



Index 1/2/3								
Ant 2								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	22.81	23.8
132322	132229	QPSK	1	0	1	24	22.83	23.8
132597	132504	QPSK	1	0	1	24	22.82	23.8

Index 4								
Ant 2								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	22.81	23.3
132322	132229	QPSK	1	0	1	24	22.83	23.3
132597	132504	QPSK	1	0	1	24	22.82	23.3

Index 5								
Ant 2								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	22.81	23.8
132322	132229	QPSK	1	0	1	24	22.83	23.8
132597	132504	QPSK	1	0	1	24	22.82	23.8

Index 6								
Ant 2								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	22.81	23.6
132322	132229	QPSK	1	0	1	24	22.83	23.6
132597	132504	QPSK	1	0	1	24	22.82	23.6



Index 1/2/3								
Ant 2								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	22.83	23.8
132322	132124	QPSK	1	0	1	99	23.26	23.8
132572	132374	QPSK	1	0	1	99	22.96	23.8

Index 4								
Ant 2								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	22.83	23.3
132322	132124	QPSK	1	0	1	99	22.97	23.3
132572	132374	QPSK	1	0	1	99	22.96	23.3

Index 5								
Ant 2								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	22.83	23.8
132322	132124	QPSK	1	0	1	99	22.97	23.8
132572	132374	QPSK	1	0	1	99	22.96	23.8

Index 6								
Ant 2								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	22.83	23.6
132322	132124	QPSK	1	0	1	99	22.97	23.6
132572	132374	QPSK	1	0	1	99	22.96	23.6

Index 1/2/3/4/5/6								
Ant 2								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	23.41	23.9
40185	39987	QPSK	1	0	1	99	23.56	23.9
40620	40422	QPSK	1	0	1	99	23.58	23.9
41055	40857	QPSK	1	0	1	99	23.49	23.9
41490	41292	QPSK	1	0	1	99	23.51	23.9



Index 1/4/5/6								
Ant 1								
CA_5B								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	49	1	0	23.88	24.0
20525	20624	QPSK	1	0	1	49	23.89	24.0
20600	20501	QPSK	1	0	1	49	23.81	24.0

Index 2								
Ant 1								
CA_5B								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	49	1	0	23.88	23.9
20525	20624	QPSK	1	0	1	49	23.89	23.9
20600	20501	QPSK	1	0	1	49	23.81	23.9

Index 3								
Ant 1								
CA_5B								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	49	1	0	20.83	22.7
20525	20624	QPSK	1	0	1	49	21.55	22.7
20600	20501	QPSK	1	0	1	49	20.81	22.7



Index 1/2/3								
Ant 0								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	23.05	23.9
21100	20902	QPSK	1	0	1	99	23.09	23.9
21350	21152	QPSK	1	0	1	99	23.07	23.9

Index 4								
Ant 0								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	16.32	18.3
21100	20902	QPSK	1	0	1	99	16.36	18.3
21350	21152	QPSK	1	0	1	99	16.31	18.3

Index 5								
Ant 0								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	20.97	21.8
21100	20902	QPSK	1	0	1	99	21.12	21.8
21350	21152	QPSK	1	0	1	99	20.91	21.8

Index 6								
Ant 0								
CA_7C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	19.48	20.6
21100	20902	QPSK	1	0	1	99	19.49	20.6
21350	21152	QPSK	1	0	1	99	19.25	20.6



Index 1/2/3								
Ant 0								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	22.85	23.8
132322	132229	QPSK	1	0	1	24	22.97	23.8
132597	132504	QPSK	1	0	1	24	22.90	23.8

Index 4								
Ant 0								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	15.31	17.3
132322	132229	QPSK	1	0	1	24	15.33	17.3
132597	132504	QPSK	1	0	1	24	15.32	17.3

Index 5								
Ant 0								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	18.82	20.8
132322	132229	QPSK	1	0	1	24	18.83	20.8
132597	132504	QPSK	1	0	1	24	18.81	20.8

Index 6								
Ant 0								
CA_66B								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	74	1	0	17.61	19.6
132322	132229	QPSK	1	0	1	24	17.65	19.6
132597	132504	QPSK	1	0	1	24	17.61	19.6



Index 1/2/3								
Ant 0								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	23.24	23.8
132322	132124	QPSK	1	0	1	99	23.26	23.8
132572	132374	QPSK	1	0	1	99	23.22	23.8

Index 4								
Ant 0								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	15.96	17.3
132322	132124	QPSK	1	0	1	99	15.98	17.3
132572	132374	QPSK	1	0	1	99	15.77	17.3

Index 5								
Ant 0								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	19.12	20.8
132322	132124	QPSK	1	0	1	99	19.21	20.8
132572	132374	QPSK	1	0	1	99	19.12	20.8

Index 6								
Ant 0								
CA_66C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	99	1	0	18.48	19.6
132322	132124	QPSK	1	0	1	99	18.57	19.6
132572	132374	QPSK	1	0	1	99	18.53	19.6



Index 1/2/3								
Ant 0								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	23.15	23.9
40185	39987	QPSK	1	0	1	99	23.26	23.9
40620	40422	QPSK	1	0	1	99	23.27	23.9
41055	40857	QPSK	1	0	1	99	23.25	23.9
41490	41292	QPSK	1	0	1	99	23.17	23.9

Index 4								
Ant 0								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	18.95	20.7
40185	39987	QPSK	1	0	1	99	18.96	20.7
40620	40422	QPSK	1	0	1	99	19.10	20.7
41055	40857	QPSK	1	0	1	99	19.05	20.7
41490	41292	QPSK	1	0	1	99	18.95	20.7

Index 5								
Ant 0								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	23.15	23.9
40185	39987	QPSK	1	0	1	99	23.26	23.9
40620	40422	QPSK	1	0	1	99	23.27	23.9
41055	40857	QPSK	1	0	1	99	23.25	23.9
41490	41292	QPSK	1	0	1	99	23.17	23.9

Index 6								
Ant 0								
CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	99	1	0	21.23	23
40185	39987	QPSK	1	0	1	99	21.21	23
40620	40422	QPSK	1	0	1	99	21.28	23
41055	40857	QPSK	1	0	1	99	21.25	23
41490	41292	QPSK	1	0	1	99	21.20	23

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
WWAN Ant 7	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 3	≤ 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
WWAN Ant 7	Yes	Yes	No	Yes	Yes	Yes
2.4GHz WLAN Ant 4	Yes	Yes	Yes	No	Yes	Yes
2.4GHz WLAN Ant 3	Yes	Yes	Yes	No	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. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per 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 B25/66, FR1 n25/66 Bottom Side 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; 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.
 - g. NR n2/38 SAR test was covered by NR n25/41; SAR test for overlapping bands can be reduced if the maximum output power, including tolerance, for the smaller band is \leq the larger band and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band to qualify for the SAR test exclusion.

WLAN Note:

1. The SISO mode support only when the Antenna 3 and 4 is transmitting on 802.11b mode, other support MIMO mode.
2. Per KDB 248227 D01v02r02, For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test position when 802.11 DSS mode is active at transmit antenna 3 and 4
3. Per KDB 248227 D01v02r02, for 2.4GHz WLAN MIMO operation for 802.11g/n, when the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured, so 802.11g mode is selected to be tested.
4. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required when the WLAN5.3GHz band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for WLAN5.2GHz band.
5. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
6. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
7. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain, Ant 4+3(3) is for enabling 2TX mode for SAR test and reporting the result which associates with the Ant 3
8. 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. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
3. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
4. 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.
5. 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.
6. The measurement procedure consists of measuring the PD_{inc} at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPD_n fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at $d=2$ mm.

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



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	2/3	128	824.2	30.35	30.50	1.035	0.02	0.238	0.246
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	128	824.2	30.35	30.50	1.035	-0.02	0.138	0.143
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	128	824.2	30.35	30.50	1.035	0	0.426	0.441
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	189	836.4	29.80	30.50	1.175	0.03	0.356	0.418
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	251	848.8	29.77	30.50	1.183	-0.01	0.352	0.416
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	128	824.2	30.35	30.50	1.035	0.05	0.214	0.222
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	128	824.2	26.77	27.30	1.130	0.05	0.917	1.036
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	189	836.4	26.66	27.30	1.159	0.01	0.878	1.017
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	251	848.8	26.56	27.30	1.186	0.03	0.863	1.023
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2	128	824.2	26.77	27.30	1.130	0.02	0.738	0.834
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2	189	836.4	26.66	27.30	1.159	0	0.725	0.840
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2	251	848.8	26.56	27.30	1.186	0.05	0.697	0.826
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	2	128	824.2	26.77	27.30	1.130	-0.06	0.644	0.728
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	2	128	824.2	26.77	27.30	1.130	-0.03	0.595	0.672
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	128	824.2	25.35	26.10	1.189	-0.06	0.594	0.706
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	25.26	26.10	1.213	0.02	0.538	0.653
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	251	848.8	25.33	26.10	1.194	0.01	0.517	0.617
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	3	128	824.2	25.35	26.10	1.189	0	0.508	0.604
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	3	128	824.2	25.35	26.10	1.189	0.05	0.437	0.519
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	3	128	824.2	25.35	26.10	1.189	-0.06	0.389	0.462
02	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	512	1850.2	27.09	28.00	1.233	-0.03	0.484	0.597
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	661	1880	27.08	28.00	1.236	-0.02	0.335	0.414
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	810	1909.8	26.86	28.00	1.300	-0.1	0.309	0.402
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	512	1850.2	27.09	28.00	1.233	0.05	0.215	0.265
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	512	1850.2	27.09	28.00	1.233	0	0.172	0.212
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	512	1850.2	27.09	28.00	1.233	0.03	0.131	0.162
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	512	1850.2	27.49	27.80	1.074	0.01	0.001	0.001
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	512	1850.2	27.49	27.80	1.074	0	0.001	0.001
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	512	1850.2	27.49	27.80	1.074	-0.1	0.024	0.026
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	661	1880	27.15	27.80	1.161	-0.19	0.036	0.042
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	810	1909.8	26.76	27.80	1.271	-0.01	0.028	0.036
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	512	1850.2	27.49	27.80	1.074	0.04	0.001	0.001



<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	2	9400	1880	24.59	25.40	1.205	0.05	0.824	0.993
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2	9262	1852.4	24.54	25.40	1.219	0.03	0.726	0.885
03	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2	9538	1907.6	24.52	25.40	1.225	0.09	0.832	1.019
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	2	9400	1880	24.59	25.40	1.205	0.1	0.308	0.371
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	2	9400	1880	24.59	25.40	1.205	0.08	0.349	0.421
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	2	9400	1880	24.59	25.40	1.205	-0.13	0.287	0.346
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	3	9400	1880	24.59	24.80	1.050	0.05	0.824	0.865
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	3	9262	1852.4	24.54	24.80	1.062	0.03	0.726	0.771
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	3	9538	1907.6	24.52	24.80	1.067	0.09	0.832	0.887
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	3	9400	1880	24.59	24.80	1.050	0.1	0.308	0.323
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	3	9400	1880	24.59	24.80	1.050	0.08	0.349	0.366
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	3	9400	1880	24.59	24.80	1.050	-0.13	0.287	0.301
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	9400	1880	23.95	25.20	1.334	0.12	0.043	0.057
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	9262	1852.4	23.83	25.20	1.371	0.05	0.057	0.078
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	9538	1907.6	23.75	25.20	1.396	0.19	0.033	0.046
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	9400	1880	23.95	25.20	1.334	-0.15	0.019	0.025
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	9400	1880	23.95	25.20	1.334	-0.16	0.040	0.053
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	9400	1880	23.95	25.20	1.334	0.04	0.001	0.001
04	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	1513	1752.6	24.76	25.40	1.159	-0.02	0.490	0.568
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	1312	1712.4	24.60	25.40	1.202	-0.17	0.372	0.447
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	1413	1732.6	24.52	25.40	1.225	-0.08	0.411	0.503
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	2/3	1513	1752.6	24.76	25.40	1.159	-0.09	0.254	0.294
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	2/3	1513	1752.6	24.76	25.40	1.159	-0.01	0.201	0.233
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	2/3	1513	1752.6	24.76	25.40	1.159	0.04	0.248	0.287
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	1513	1752.6	23.72	25.20	1.406	0.09	0.053	0.075
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	1312	1712.4	23.68	25.20	1.419	-0.01	0.056	0.079
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	1413	1732.6	23.56	25.20	1.459	-0.08	0.047	0.069
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	1513	1752.6	23.72	25.20	1.406	0.19	0.039	0.055
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	1513	1752.6	23.72	25.20	1.406	-0.07	0.052	0.073
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	1513	1752.6	23.72	25.20	1.406	-0.15	0.051	0.072
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	4182	836.4	24.69	25.40	1.178	0.06	0.142	0.167
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	4182	836.4	24.69	25.40	1.178	-0.18	0.088	0.104
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	4182	836.4	24.69	25.40	1.178	-0.06	0.273	0.321
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	4132	826.4	24.67	25.40	1.183	0.17	0.219	0.259
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	4233	846.6	24.67	25.40	1.183	-0.17	0.209	0.247
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	4182	836.4	24.69	25.40	1.178	0.02	0.121	0.142
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4233	846.6	21.96	23.30	1.361	-0.03	0.655	0.892
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4132	826.4	21.88	23.30	1.387	-0.13	0.782	1.084
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4182	836.4	21.94	23.30	1.368	-0.09	0.721	0.986
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	2	4233	846.6	21.96	23.30	1.361	0.05	0.506	0.689
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	2	4233	846.6	21.96	23.30	1.361	0	0.453	0.617
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	2	4233	846.6	21.96	23.30	1.361	0.01	0.390	0.531
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4233	846.6	21.96	22.10	1.033	-0.03	0.655	0.676
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4132	826.4	21.88	22.10	1.052	-0.13	0.782	0.823
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4182	836.4	21.94	22.10	1.038	-0.09	0.721	0.748
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	3	4233	846.6	21.96	22.10	1.033	0.05	0.506	0.523
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	3	4233	846.6	21.96	22.10	1.033	0	0.453	0.468
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	3	4233	846.6	21.96	22.10	1.033	0.01	0.390	0.403



<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 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2	18900	1880	14.86	16.00	1.300	0.13	0.816	1.061
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2	18700	1860	14.79	16.00	1.321	0.01	0.748	0.988
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2	19100	1900	14.79	16.00	1.321	0.05	0.751	0.992
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2	18900	1880	14.88	16.00	1.294	-0.02	0.786	1.017
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2	18700	1860	14.83	16.00	1.309	-0.03	0.765	1.002
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2	19100	1900	14.84	16.00	1.306	0.04	0.748	0.977
	LTE Band 2_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	2	18900	1880	14.71	16.00	1.346	0.01	0.754	1.015
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	18900	1880	14.86	16.00	1.300	0	0.796	1.035
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	18700	1860	14.79	16.00	1.321	0.06	0.772	1.020
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	19100	1900	14.79	16.00	1.321	-0.07	0.763	1.008
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	18900	1880	14.88	16.00	1.294	0.18	0.818	1.059
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	18700	1860	14.83	16.00	1.309	-0.04	0.777	1.017
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	19100	1900	14.84	16.00	1.306	0.05	0.755	0.986
	LTE Band 2_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	2	18900	1880	14.71	16.00	1.346	0.01	0.770	1.036
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2	18900	1880	14.86	16.00	1.300	0.03	0.360	0.468
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2	18900	1880	14.88	16.00	1.294	-0.02	0.356	0.461
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	2	18900	1880	14.86	16.00	1.300	0.07	0.449	0.584
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	2	18900	1880	14.88	16.00	1.294	-0.08	0.448	0.580
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	3	18900	1880	13.91	14.80	1.227	0.03	0.667	0.819
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	3	18700	1860	13.84	14.80	1.247	0.02	0.590	0.736
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	3	19100	1900	13.81	14.80	1.256	0	0.592	0.744
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	3	18900	1880	13.89	14.80	1.233	0.05	0.619	0.763
	LTE Band 2_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	3	18900	1880	13.81	14.80	1.256	0.04	0.595	0.747
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	3	18900	1880	13.91	14.80	1.227	0.1	0.628	0.771
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	3	18900	1880	13.89	14.80	1.233	0.08	0.645	0.795
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	3	18900	1880	13.91	14.80	1.227	0.01	0.284	0.349
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	3	18900	1880	13.89	14.80	1.233	0.05	0.281	0.347
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	3	18900	1880	13.91	14.80	1.227	-0.04	0.354	0.435
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	3	18900	1880	13.89	14.80	1.233	-0.03	0.353	0.435
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2	18700	1860	21.00	21.90	1.230	0.01	0.764	0.940
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2	18900	1880	20.96	21.90	1.242	0.05	0.624	0.775
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2	19100	1900	20.96	21.90	1.242	-0.03	0.632	0.785
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	2	18700	1860	20.85	21.90	1.274	-0.06	0.774	0.986
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	2	18900	1880	20.82	21.90	1.282	-0.04	0.618	0.792
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	2	19100	1900	20.83	21.90	1.279	0.05	0.621	0.794
	LTE Band 2_Ant 5	20M	QPSK	100	0	Right Cheek	0mm	2	18700	1860	20.59	21.90	1.352	0.01	0.695	0.940
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	2	18700	1860	21.00	21.90	1.230	0.02	0.097	0.119
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	2	18700	1860	20.85	21.90	1.274	0.07	0.096	0.122
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2	18700	1860	21.00	21.90	1.230	-0.04	0.841	1.035
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2	18900	1880	20.96	21.90	1.242	0.06	0.849	1.054
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2	19100	1900	20.96	21.90	1.242	0.08	0.770	0.956
06	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2	18700	1860	20.85	21.90	1.274	-0.05	0.857	1.091
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2	18900	1880	20.82	21.90	1.282	-0.02	0.841	1.078
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2	19100	1900	20.83	21.90	1.279	0.03	0.743	0.951
	LTE Band 2_Ant 5	20M	QPSK	100	0	Left Cheek	0mm	2	18700	1860	20.59	21.90	1.352	0	0.797	1.078
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	2	18700	1860	21.00	21.90	1.230	0.04	0.142	0.175
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	2	18700	1860	20.85	21.90	1.274	-0.1	0.125	0.159
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	3	18700	1860	19.98	20.70	1.180	0.05	0.653	0.771
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	3	18700	1860	19.84	20.70	1.219	-0.13	0.630	0.768
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	3	18700	1860	19.98	20.70	1.180	0.02	0.083	0.098
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	3	18700	1860	19.84	20.70	1.219	-0.03	0.082	0.100
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	3	18700	1860	19.98	20.70	1.180	-0.01	0.718	0.847
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	3	18900	1880	19.91	20.70	1.199	0	0.725	0.870
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	3	19100	1900	19.91	20.70	1.199	0.06	0.658	0.789
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	3	18700	1860	19.84	20.70	1.219	0.09	0.732	0.892
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	3	18900	1880	19.82	20.70	1.225	0.07	0.718	0.879
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	3	19100	1900	19.83	20.70	1.222	-0.1	0.634	0.775
	LTE Band 2_Ant 5	20M	QPSK	100	0	Left Cheek	0mm	3	18700	1860	19.55	20.70	1.303	0.08	0.680	0.886
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	3	18700	1860	19.98	20.70	1.180	0.02	0.121	0.143
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	3	18700	1860	19.84	20.70	1.219	0.01	0.107	0.130



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	0	Right Cheek	0mm	2/3	21100	2535	24.73	25.40	1.167	0.01	0.511	0.596
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	20850	2510	24.71	25.40	1.172	0	0.452	0.530
07	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	21350	2560	24.68	25.40	1.180	-0.13	0.577	0.681
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2/3	21100	2535	23.68	24.40	1.180	0.05	0.403	0.476
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2/3	21100	2535	24.73	25.40	1.167	-0.02	0.120	0.140
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2/3	21100	2535	23.68	24.40	1.180	-0.04	0.094	0.111
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	21100	2535	24.73	25.40	1.167	0.03	0.219	0.256
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2/3	21100	2535	23.68	24.40	1.180	0	0.174	0.205
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2/3	21100	2535	24.73	25.40	1.167	0.01	0.172	0.201
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2/3	21100	2535	23.68	24.40	1.180	0.05	0.138	0.163
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	21100+20920	2535	23.01	23.90	1.227	0.01	0.449	0.551
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	21100	2535	23.63	25.00	1.371	0.01	0.184	0.252
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	21100	2535	22.55	24.00	1.396	0.02	0.146	0.204
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	21100	2535	23.63	25.00	1.371	-0.03	0.146	0.200
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	21100	2535	22.55	24.00	1.396	0	0.110	0.154
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	21100	2535	23.63	25.00	1.371	0.04	0.415	0.569
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	20850	2510	23.61	25.00	1.377	-0.02	0.392	0.540
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	21350	2560	23.58	25.00	1.387	0.04	0.429	0.595
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	21100	2535	22.55	24.00	1.396	-0.05	0.326	0.455
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	21100	2535	23.63	25.00	1.371	0.06	0.096	0.132
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	21100	2535	22.55	24.00	1.396	0.1	0.073	0.102
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	21100+20920	2535	23.09	23.90	1.205	0.08	0.276	0.333
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	2/3	23095	707.5	24.61	25.40	1.199	0.03	0.133	0.160
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	2/3	23095	707.5	23.60	24.40	1.202	0.01	0.110	0.132
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	2/3	23095	707.5	24.61	25.40	1.199	0.08	0.060	0.072
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	2/3	23095	707.5	23.60	24.40	1.202	0.15	0.050	0.060
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	23095	707.5	24.61	25.40	1.199	0.03	0.236	0.283
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	2/3	23095	707.5	23.60	24.40	1.202	0.02	0.178	0.214
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	2/3	23095	707.5	24.61	25.40	1.199	0.03	0.103	0.124
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	2/3	23095	707.5	23.60	24.40	1.202	0.09	0.086	0.103
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23095	707.5	23.30	23.90	1.148	0.02	0.855	0.982
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23095	707.5	23.28	23.90	1.153	0	0.868	1.001
08	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23095	707.5	23.27	23.90	1.156	-0.09	0.868	1.004
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23095	707.5	23.30	23.90	1.148	-0.01	0.759	0.871
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23095	707.5	23.28	23.90	1.153	0.05	0.768	0.886
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	2	23095	707.5	23.27	23.90	1.156	0.03	0.751	0.868
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23095	707.5	23.30	23.90	1.148	-0.02	0.608	0.698
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23095	707.5	23.28	23.90	1.153	0.04	0.619	0.714
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23095	707.5	23.30	23.90	1.148	-0.06	0.612	0.703
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23095	707.5	23.28	23.90	1.153	0.1	0.589	0.679
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23095	707.5	22.13	22.70	1.140	0.05	0.777	0.886
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23095	707.5	22.15	22.70	1.135	0.02	0.785	0.891
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	3	23095	707.5	22.16	22.70	1.132	0.14	0.789	0.893
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23095	707.5	22.13	22.70	1.140	-0.03	0.690	0.787
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23095	707.5	22.15	22.70	1.135	0	0.698	0.792
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23095	707.5	22.13	22.70	1.140	0.05	0.552	0.629
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23095	707.5	22.15	22.70	1.135	-0.1	0.562	0.638
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23095	707.5	22.13	22.70	1.140	-0.06	0.556	0.634
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23095	707.5	22.15	22.70	1.135	0.02	0.536	0.608



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	2/3	23230	782	24.47	25.40	1.239	0.01	0.198	0.245
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	2/3	23230	782	23.50	24.40	1.230	-0.11	0.155	0.191
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	2/3	23230	782	24.47	25.40	1.239	0.05	0.149	0.185
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	2/3	23230	782	23.50	24.40	1.230	0.11	0.116	0.143
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	23230	782	24.47	25.40	1.239	-0.1	0.315	0.390
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	2/3	23230	782	23.50	24.40	1.230	0.01	0.250	0.308
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	2/3	23230	782	24.47	25.40	1.239	0.09	0.190	0.235
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	2/3	23230	782	23.50	24.40	1.230	0.06	0.151	0.186
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23230	782	22.91	23.30	1.094	0.05	0.918	1.004
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23230	782	22.91	23.30	1.094	-0.04	0.952	1.041
09	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23230	782	22.83	23.30	1.114	-0.06	0.943	1.051
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23230	782	22.91	23.30	1.094	0.03	0.678	0.742
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23230	782	22.91	23.30	1.094	0.02	0.704	0.770
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23230	782	22.91	23.30	1.094	0.01	0.674	0.737
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23230	782	22.91	23.30	1.094	0.05	0.696	0.761
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23230	782	22.91	23.30	1.094	0.01	0.604	0.661
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23230	782	22.91	23.30	1.094	0.07	0.627	0.686
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23230	782	21.62	22.10	1.117	0.01	0.767	0.857
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23230	782	21.59	22.10	1.125	0	0.796	0.895
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	3	23230	782	21.54	22.10	1.138	-0.08	0.788	0.896
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23230	782	21.62	22.10	1.117	0.05	0.566	0.632
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23230	782	21.59	22.10	1.125	-0.02	0.589	0.662
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23230	782	21.62	22.10	1.117	-0.04	0.563	0.629
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23230	782	21.59	22.10	1.125	0.05	0.582	0.655
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23230	782	21.62	22.10	1.117	0.1	0.504	0.563
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23230	782	21.59	22.10	1.125	0.08	0.524	0.589
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	2/3	23330	793	24.55	25.40	1.216	0.03	0.200	0.243
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	2/3	23330	793	23.55	24.40	1.216	-0.01	0.159	0.193
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	2/3	23330	793	24.55	25.40	1.216	-0.05	0.139	0.169
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	2/3	23330	793	23.55	24.40	1.216	-0.11	0.111	0.135
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	23330	793	24.55	25.40	1.216	-0.19	0.319	0.388
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	2/3	23330	793	23.55	24.40	1.216	0.15	0.248	0.302
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	2/3	23330	793	24.55	25.40	1.216	-0.11	0.182	0.221
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	2/3	23330	793	23.55	24.40	1.216	0.12	0.143	0.174
10	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23330	793	22.70	23.40	1.175	-0.07	0.914	1.074
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23330	793	22.64	23.40	1.191	0.01	0.729	0.868
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23330	793	22.61	23.40	1.199	0	0.712	0.854
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23330	793	22.70	23.40	1.175	0.05	0.538	0.632
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23330	793	22.64	23.40	1.191	-0.02	0.533	0.635
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23330	793	22.70	23.40	1.175	0	0.624	0.733
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23330	793	22.64	23.40	1.191	0.01	0.649	0.773
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23330	793	22.70	23.40	1.175	-0.04	0.457	0.537
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23330	793	22.64	23.40	1.191	0.06	0.456	0.543
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23330	793	21.23	22.20	1.250	-0.06	0.705	0.881
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23330	793	21.17	22.20	1.268	0.01	0.562	0.712
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	3	23330	793	21.13	22.20	1.279	0	0.550	0.704
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23330	793	21.23	22.20	1.250	0.05	0.415	0.519
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23330	793	21.17	22.20	1.268	-0.02	0.411	0.521
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23330	793	21.23	22.20	1.250	0.03	0.481	0.601
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23330	793	21.17	22.20	1.268	0.01	0.501	0.635
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23330	793	21.23	22.20	1.250	0.02	0.353	0.441
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23330	793	21.17	22.20	1.268	0.05	0.352	0.446



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
11	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	26340	1880	24.42	25.40	1.253	0.01	0.629	0.788
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	26140	1860	24.35	25.40	1.274	-0.03	0.657	0.837
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	26590	1905	24.21	25.40	1.315	0	0.594	0.781
	LTE Band 25_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2/3	26340	1880	23.30	24.40	1.288	-0.01	0.487	0.627
	LTE Band 25_Ant 2	20M	QPSK	100	0	Right Cheek	0mm	2/3	26340	1880	23.26	24.40	1.300	0.01	0.467	0.607
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2/3	26340	1880	24.42	25.40	1.253	-0.04	0.287	0.360
	LTE Band 25_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2/3	26340	1880	23.30	24.40	1.288	0.05	0.240	0.309
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	26340	1880	24.42	25.40	1.253	-0.02	0.233	0.292
	LTE Band 25_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2/3	26340	1880	23.30	24.40	1.288	0	0.214	0.276
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2/3	26340	1880	24.42	25.40	1.253	0.01	0.198	0.248
	LTE Band 25_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2/3	26340	1880	23.30	24.40	1.288	0.06	0.201	0.259
LTE Band 25_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	26340	1880	23.88	25.20	1.355	0.05	0.045	0.061	
LTE Band 25_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	26340	1880	22.82	24.20	1.374	0.01	0.001	0.001	
LTE Band 25_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	26340	1880	23.88	25.20	1.355	-0.06	0.001	0.001	
LTE Band 25_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	26340	1880	22.82	24.20	1.374	0.03	0.001	0.001	
LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	26340	1880	23.88	25.20	1.355	-0.18	0.062	0.084	
LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	26140	1860	23.87	25.20	1.358	0	0.054	0.073	
LTE Band 25_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	26590	1905	23.62	25.20	1.439	0.01	0.054	0.078	
LTE Band 25_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	26340	1880	22.82	24.20	1.374	-0.04	0.041	0.056	
LTE Band 25_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	26340	1880	23.88	25.20	1.355	0.05	0.001	0.001	
LTE Band 25_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	26340	1880	22.82	24.20	1.374	-0.1	0.001	0.001	
LTE Band 26_Ant 0	15M	QPSK	1	0	Right Cheek	0mm	2/3	26865	831.5	24.46	25.40	1.242	0.01	0.180	0.223	
LTE Band 26_Ant 0	15M	QPSK	36	0	Right Cheek	0mm	2/3	26865	831.5	23.45	24.40	1.245	0	0.147	0.183	
LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	2/3	26865	831.5	24.46	25.40	1.242	0.05	0.098	0.122	
LTE Band 26_Ant 0	15M	QPSK	36	0	Right Tilted	0mm	2/3	26865	831.5	23.45	24.40	1.245	-0.02	0.082	0.102	
LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	2/3	26865	831.5	24.46	25.40	1.242	-0.16	0.286	0.355	
LTE Band 26_Ant 0	15M	QPSK	36	0	Left Cheek	0mm	2/3	26865	831.5	23.45	24.40	1.245	-0.03	0.230	0.286	
LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	2/3	26865	831.5	24.46	25.40	1.242	0.01	0.135	0.168	
LTE Band 26_Ant 0	15M	QPSK	36	0	Left Tilted	0mm	2/3	26865	831.5	23.45	24.40	1.245	0.07	0.114	0.142	
LTE Band 5B_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	20525+20624	836.5	23.07	23.70	1.156	0.02	0.240	0.277	
12	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	2	26865	831.5	22.91	23.90	1.256	-0.14	0.834	1.048
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	2	26865	831.5	22.91	23.40	1.119	0.01	0.824	0.922
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	2	26865	831.5	22.85	23.40	1.135	0.05	0.789	0.896
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	2	26865	831.5	22.91	23.90	1.256	-0.02	0.680	0.854
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	2	26865	831.5	22.91	23.40	1.119	0.03	0.672	0.752
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Tilted	0mm	2	26865	831.5	22.85	23.40	1.135	-0.01	0.640	0.726
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	2	26865	831.5	22.91	23.90	1.256	0	0.624	0.784
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	2	26865	831.5	22.91	23.40	1.119	0.04	0.637	0.713
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	2	26865	831.5	22.91	23.90	1.256	0.07	0.562	0.706
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	2	26865	831.5	22.91	23.40	1.119	0.05	0.552	0.618
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	20525+20624	836.5	23.89	23.90	1.002	0.01	0.628	0.629
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	3	26865	831.5	22.05	22.70	1.161	-0.16	0.613	0.712
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	3	26865	831.5	21.31	22.70	1.377	-0.13	0.590	0.813
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	3	26865	831.5	21.26	22.70	1.393	-0.08	0.559	0.779
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	3	26865	831.5	21.35	22.70	1.365	0.02	0.496	0.677
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	3	26865	831.5	21.31	22.70	1.377	-0.05	0.474	0.653
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	3	26865	831.5	21.35	22.70	1.365	0	0.476	0.650
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	3	26865	831.5	21.31	22.70	1.377	0.03	0.454	0.625
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	3	26865	831.5	21.35	22.70	1.365	-0.06	0.420	0.573
LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	3	26865	831.5	21.31	22.70	1.377	0.08	0.404	0.556	
LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	20525+20624	836.5	21.55	22.70	1.303	0.02	0.365	0.476	



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
13	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Cheek	0mm	2/3	27710	2310	24.22	24.30	1.019	-0.01	0.593	0.604
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Cheek	0mm	2/3	27710	2310	23.16	23.30	1.033	0.02	0.454	0.469
	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Tilted	0mm	2/3	27710	2310	24.22	24.30	1.019	0	0.206	0.210
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Tilted	0mm	2/3	27710	2310	23.16	23.30	1.033	0.05	0.160	0.165
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Cheek	0mm	2/3	27710	2310	24.22	24.30	1.019	-0.03	0.305	0.311
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Cheek	0mm	2/3	27710	2310	23.16	23.30	1.033	0.01	0.218	0.225
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Tilted	0mm	2/3	27710	2310	24.22	24.30	1.019	0.07	0.291	0.296
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Tilted	0mm	2/3	27710	2310	23.16	23.30	1.033	-0.1	0.233	0.241
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	2/3	27710	2310	23.27	24.50	1.327	0.01	0.104	0.138
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	2/3	27710	2310	22.25	23.50	1.334	0	0.082	0.109
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	2/3	27710	2310	23.27	24.50	1.327	0.02	0.060	0.080
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	2/3	27710	2310	22.25	23.50	1.334	-0.03	0.001	0.001
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	27710	2310	23.27	24.50	1.327	-0.01	0.211	0.280
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	2/3	27710	2310	22.25	23.50	1.334	-0.05	0.166	0.221
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	2/3	27710	2310	23.27	24.50	1.327	0.04	0.065	0.086
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	2/3	27710	2310	22.25	23.50	1.334	0.1	0.052	0.069

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	2/3	132322	1745	24.63	25.40	1.194	0.01	0.526	0.628
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	132072	1720	24.31	25.40	1.285	0	0.465	0.598
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	132572	1770	24.60	25.40	1.202	-0.02	0.615	0.739
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2/3	132322	1745	23.50	24.40	1.230	0.05	0.433	0.533
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2/3	132322	1745	24.63	25.40	1.194	-0.04	0.295	0.352
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2/3	132322	1745	23.50	24.40	1.230	0.03	0.244	0.300
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	132322	1745	24.63	25.40	1.194	0.02	0.266	0.318
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2/3	132322	1745	23.50	24.40	1.230	0.05	0.218	0.268
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2/3	132322	1745	24.63	25.40	1.194	-0.04	0.306	0.365
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2/3	132322	1745	23.50	24.40	1.230	0.1	0.228	0.281
	LTE Band 66B_Ant 2	15M	QPSK	1	0	Right Cheek	0mm	2/3	132322+132229	1745	22.83	23.80	1.250	0.05	0.371	0.464
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	132322+132124	1745	23.23	23.80	1.140	0.03	0.410	0.468
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	132322	1745	23.82	25.20	1.374	0.01	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	132322	1745	22.76	24.20	1.393	0.05	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	132322	1745	23.82	25.20	1.374	-0.02	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	132322	1745	22.76	24.20	1.393	0	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	132322	1745	23.82	25.20	1.374	0.07	0.073	0.100
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	132072	1720	23.81	25.20	1.377	-0.18	0.087	0.120
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	132572	1770	23.54	25.20	1.466	-0.1	0.070	0.103
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	132322	1745	22.76	24.20	1.393	0.05	0.059	0.082
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	132322	1745	23.82	25.20	1.374	-0.03	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	132322	1745	22.76	24.20	1.393	0.04	0.001	0.001
	LTE Band 66B_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	2/3	132322+132229	1745	22.97	23.80	1.211	-0.09	0.040	0.048
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	132322+132124	1745	23.26	23.80	1.132	-0.05	0.043	0.049
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2	132072	1720	17.57	18.00	1.104	0.05	0.689	0.761
	LTE Band 66_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2	132072	1720	17.38	18.00	1.153	0.02	0.691	0.797
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	132072	1720	17.57	18.00	1.104	-0.03	0.794	0.877
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	132322	1745	17.49	18.00	1.125	-0.05	0.934	1.050
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	132572	1770	17.57	18.00	1.104	0.01	0.982	1.084
	LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	132072	1720	17.38	18.00	1.153	0	0.834	0.962
	LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	132322	1745	17.34	18.00	1.164	0.06	0.946	1.101
14	LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	132572	1770	17.33	18.00	1.167	0.03	0.985	1.149
	LTE Band 66_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	2	132072	1720	17.10	18.00	1.230	0.02	0.856	1.053
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2	132072	1720	17.57	18.00	1.104	-0.01	0.371	0.410
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2	132072	1720	17.38	18.00	1.153	0.04	0.379	0.437
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	2	132072	1720	17.57	18.00	1.104	-0.07	0.389	0.429
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	2	132072	1720	17.38	18.00	1.153	0.08	0.408	0.471



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LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	3	132072	1720	16.58	16.80	1.052	0.01	0.592	0.623
LTE Band 66_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	3	132072	1720	16.44	16.80	1.086	0	0.593	0.644
LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	3	132072	1720	16.58	16.80	1.052	0.05	0.612	0.644
LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	3	132072	1720	16.44	16.80	1.086	-0.04	0.643	0.699
LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	3	132322	1745	16.39	16.80	1.099	-0.03	0.729	0.801
LTE Band 66_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	3	132572	1770	16.40	16.80	1.096	0.07	0.759	0.832
LTE Band 66_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	3	132072	1720	16.01	16.80	1.199	0.01	0.660	0.792
LTE Band 66_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	3	132072	1720	16.58	16.80	1.052	0.07	0.286	0.301
LTE Band 66_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	3	132072	1720	16.44	16.80	1.086	-0.08	0.292	0.317
LTE Band 66_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	3	132072	1720	16.58	16.80	1.052	-0.02	0.299	0.315
LTE Band 66_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	3	132072	1720	16.44	16.80	1.086	0.04	0.314	0.341
LTE Band 66_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2	132072	1720	24.60	24.70	1.023	0.01	0.582	0.596
LTE Band 66_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	2	132072	1720	23.45	24.20	1.189	0.03	0.490	0.582
LTE Band 66_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	2	132072	1720	24.60	24.70	1.023	0.05	0.081	0.083
LTE Band 66_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	2	132072	1720	23.45	24.20	1.189	-0.04	0.063	0.075
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2	132072	1720	24.60	24.70	1.023	-0.02	0.858	0.878
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2	132322	1745	24.48	24.70	1.052	0.01	0.833	0.876
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2	132572	1770	24.19	24.70	1.125	-0.03	0.938	1.055
LTE Band 66_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2	132072	1720	23.45	24.20	1.189	0.01	0.694	0.825
LTE Band 66_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2	132322	1745	23.31	24.20	1.227	0.05	0.665	0.816
LTE Band 66_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2	132572	1770	22.99	24.20	1.321	-0.03	0.792	1.046
LTE Band 66_Ant 5	20M	QPSK	100	0	Left Cheek	0mm	2	132072	1720	23.41	24.20	1.199	0.06	0.652	0.782
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	2	132072	1720	24.60	24.70	1.023	0	0.133	0.136
LTE Band 66_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	2	132072	1720	23.45	24.20	1.189	0.1	0.110	0.131
LTE Band 66_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	3	132072	1720	23.18	23.50	1.076	0.02	0.480	0.517
LTE Band 66_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	3	132072	1720	23.15	23.50	1.084	0	0.496	0.538
LTE Band 66_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	3	132072	1720	23.18	23.50	1.076	0.05	0.064	0.069
LTE Band 66_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	3	132072	1720	23.15	23.50	1.084	-0.03	0.065	0.070
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	3	132072	1720	23.18	23.50	1.076	-0.04	0.599	0.645
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	3	132322	1745	23.14	23.50	1.086	0.06	0.569	0.618
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	3	132572	1770	23.17	23.50	1.079	-0.1	0.760	0.820
LTE Band 66_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	3	132072	1720	23.15	23.50	1.084	0.1	0.519	0.563
LTE Band 66_Ant 5	20M	QPSK	100	0	Left Cheek	0mm	3	132072	1720	23.11	23.50	1.094	0.08	0.537	0.587
LTE Band 66_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	3	132072	1720	23.18	23.50	1.076	-0.02	0.098	0.105
LTE Band 66_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	3	132072	1720	23.15	23.50	1.084	-0.01	0.102	0.111



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 71_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	133297	680.5	24.79	25.40	1.151	0.01	0.129	0.148
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	133297	680.5	23.78	24.40	1.153	0.02	0.099	0.114
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	133297	680.5	24.79	25.40	1.151	-0.03	0.073	0.084
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	133297	680.5	23.78	24.40	1.153	0	0.057	0.066
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	133297	680.5	24.79	25.40	1.151	-0.04	0.186	0.214
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	133297	680.5	23.78	24.40	1.153	0.05	0.157	0.181
	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	133297	680.5	24.79	25.40	1.151	-0.07	0.094	0.108
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	133297	680.5	23.78	24.40	1.153	0.1	0.077	0.089
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2	133297	680.5	22.99	24.40	1.384	-0.07	0.720	0.996
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2	133297	680.5	22.86	24.40	1.426	0.01	0.809	1.153
15	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	2	133297	680.5	22.78	24.40	1.452	-0.02	0.810	1.176
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	133297	680.5	22.99	24.40	1.384	0	0.733	1.014
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	133297	680.5	22.86	24.40	1.426	-0.05	0.736	1.049
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	2	133297	680.5	22.78	24.40	1.452	0.02	0.722	1.048
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2	133297	680.5	22.99	24.40	1.384	0.03	0.512	0.708
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2	133297	680.5	22.86	24.40	1.426	-0.04	0.585	0.834
	LTE Band 71_Ant 1	20M	QPSK	100	0	Left Cheek	0mm	2	133297	680.5	22.78	24.40	1.452	-0.02	0.676	0.982
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	2	133297	680.5	22.99	24.40	1.384	0.02	0.563	0.779
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	2	133297	680.5	22.86	24.40	1.426	0.05	0.621	0.885
	LTE Band 71_Ant 1	20M	QPSK	100	0	Left Tilted	0mm	2	133297	680.5	22.78	24.40	1.452	0.13	0.608	0.883
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	3	133297	680.5	22.99	23.20	1.050	-0.07	0.720	0.756
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	3	133297	680.5	22.86	23.20	1.081	0.01	0.809	0.875
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	3	133297	680.5	22.78	23.20	1.102	-0.02	0.810	0.892
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	3	133297	680.5	22.99	23.20	1.050	0	0.733	0.769
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	3	133297	680.5	22.86	23.20	1.081	-0.05	0.736	0.796
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	3	133297	680.5	22.99	23.20	1.050	0.03	0.512	0.537
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	3	133297	680.5	22.86	23.20	1.081	-0.04	0.585	0.633
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	3	133297	680.5	22.99	23.20	1.050	0.02	0.563	0.591
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	3	133297	680.5	22.86	23.20	1.081	0.05	0.621	0.672



<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	0	Right Cheek	0mm	2/3	40185	2549.5	24.80	25.40	1.148	62.9	1.006	0.01	0.269	0.311
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	39750	2506	24.29	25.40	1.291	62.9	1.006	-0.11	0.293	0.381
16	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	40620	2593	24.59	25.40	1.205	62.9	1.006	-0.11	0.325	0.394
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	41055	2636.5	24.54	25.40	1.219	62.9	1.006	0	0.293	0.359
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	41490	2680	24.58	25.40	1.208	62.9	1.006	0.13	0.188	0.228
	LTE Band 41_Ant 2	20M	QPSK	50	50	Right Cheek	0mm	2/3	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0.01	0.172	0.196
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2/3	40185	2549.5	24.80	25.40	1.148	62.9	1.006	0.13	0.083	0.096
	LTE Band 41_Ant 2	20M	QPSK	50	50	Right Tilted	0mm	2/3	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0.11	0.066	0.075
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	40185	2549.5	24.80	25.40	1.148	62.9	1.006	-0.05	0.101	0.117
	LTE Band 41_Ant 2	20M	QPSK	50	50	Left Cheek	0mm	2/3	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0.03	0.063	0.072
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2/3	40185	2549.5	24.80	25.40	1.148	62.9	1.006	-0.1	0.119	0.137
	LTE Band 41_Ant 2	20M	QPSK	50	50	Left Tilted	0mm	2/3	40185	2549.5	22.86	23.40	1.132	62.9	1.006	-0.11	0.076	0.087
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	40185	2549.5	26.38	26.90	1.127	42.9	1.009	-0.19	0.310	0.353
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	40620+40422	2593	23.58	23.90	1.076	62.9	1.006	0.03	0.256	0.277
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	40185	2549.5	24.78	25.40	1.153	62.9	1.006	-0.05	0.136	0.158
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	40185	2549.5	22.77	23.40	1.156	62.9	1.006	0.02	0.089	0.104
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	40185	2549.5	24.78	25.40	1.153	62.9	1.006	0.03	0.056	0.065
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	40185	2549.5	22.77	23.40	1.156	62.9	1.006	0.09	0.038	0.044
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	40185	2549.5	24.78	25.40	1.153	62.9	1.006	-0.06	0.239	0.277
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	39750	2506	24.18	25.40	1.324	62.9	1.006	-0.02	0.224	0.298
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	40620	2593	24.49	25.40	1.233	62.9	1.006	0.06	0.279	0.346
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	41055	2636.5	24.21	25.40	1.315	62.9	1.006	0.14	0.273	0.361
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	41490	2680	24.43	25.40	1.250	62.9	1.006	0.09	0.230	0.289
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	40185	2549.5	22.77	23.40	1.156	62.9	1.006	0.02	0.159	0.185
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	40185	2549.5	24.78	25.40	1.153	62.9	1.006	0.01	0.059	0.068
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	40185	2549.5	22.77	23.40	1.156	62.9	1.006	0	0.030	0.035
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	40185	2549.5	26.32	26.90	1.143	42.9	1.009	0.1	0.278	0.321
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	40620+40422	2593	23.27	23.90	1.156	62.9	1.006	0.08	0.206	0.240
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Cheek	0mm	2/3	56640	3690	25.13	25.40	1.064	62.9	1.006	0.01	0.086	0.092
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Cheek	0mm	2/3	56640	3690	24.11	24.40	1.069	62.9	1.006	-0.12	0.075	0.081
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Tilted	0mm	2/3	56640	3690	25.13	25.40	1.064	62.9	1.006	0.09	0.058	0.062
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Tilted	0mm	2/3	56640	3690	24.11	24.40	1.069	62.9	1.006	-0.15	0.048	0.052
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Cheek	0mm	2/3	56640	3690	25.13	25.40	1.064	62.9	1.006	-0.11	0.209	0.224
17	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Cheek	0mm	2/3	55340	3560	24.30	25.40	1.288	62.9	1.006	-0.01	0.191	0.248
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Cheek	0mm	2/3	55830	3609	24.69	25.40	1.178	62.9	1.006	-0.06	0.189	0.224
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Cheek	0mm	2/3	56150	3641	24.88	25.40	1.127	62.9	1.006	0.03	0.212	0.240
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Cheek	0mm	2/3	56640	3690	24.11	24.40	1.069	62.9	1.006	0.09	0.160	0.172
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Tilted	0mm	2/3	56640	3690	25.13	25.40	1.064	62.9	1.006	-0.1	0.056	0.060
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Tilted	0mm	2/3	56640	3690	24.11	24.40	1.069	62.9	1.006	-0.15	0.045	0.048
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	2/3	56640	3690	23.88	24.80	1.236	62.9	1.006	-0.11	0.024	0.030
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Cheek	0mm	2/3	56640	3690	22.82	23.80	1.253	62.9	1.006	-0.09	0.016	0.020
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Tilted	0mm	2/3	56640	3690	23.88	24.80	1.236	62.9	1.006	-0.01	0.022	0.027
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Tilted	0mm	2/3	56640	3690	22.82	23.80	1.253	62.9	1.006	-0.05	0.015	0.019
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	2/3	56640	3690	23.88	24.80	1.236	62.9	1.006	0	0.025	0.031
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	2/3	55340	3560	23.15	24.80	1.462	62.9	1.006	-0.15	0.024	0.035
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	2/3	55830	3609	23.41	24.80	1.377	62.9	1.006	0.02	0.019	0.026
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	2/3	56150	3641	23.59	24.80	1.321	62.9	1.006	0.09	0.022	0.029
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Cheek	0mm	2/3	56640	3690	22.82	23.80	1.253	62.9	1.006	-0.16	0.017	0.021
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	2/3	56640	3690	23.88	24.80	1.236	62.9	1.006	-0.12	0.020	0.025
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Tilted	0mm	2/3	56640	3690	22.82	23.80	1.253	62.9	1.006	-0.03	0.011	0.014



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	2	376000	1880	16.10	17.00	1.230	0.09	0.841	1.035
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	2	372000	1860	16.01	17.00	1.256	0.09	0.798	1.002
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	2	380000	1900	16.02	17.00	1.253	-0.06	0.869	1.089
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	2	376000	1880	15.92	17.00	1.282	0.01	0.788	1.010
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	2	372000	1860	15.83	17.00	1.309	0.03	0.774	1.013
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	2	380000	1900	15.91	17.00	1.285	0.06	0.753	0.968
	FR1 n2_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	2	376000	1880	15.87	17.00	1.297	0.11	0.781	1.013
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	2	376000	1880	16.10	17.00	1.230	0.19	0.890	1.095
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	2	372000	1860	16.01	17.00	1.256	0.15	0.887	1.114
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	2	380000	1900	16.02	17.00	1.253	-0.06	0.869	1.089
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	2	376000	1880	15.92	17.00	1.282	0.09	0.817	1.048
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	2	372000	1860	15.83	17.00	1.309	0.12	0.804	1.053
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	2	380000	1900	15.91	17.00	1.285	0.05	0.780	1.003
	FR1 n2_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	2	376000	1880	15.87	17.00	1.297	0.17	0.811	1.052
	FR1 n2_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	2	376000	1880	16.10	17.00	1.230	0.02	0.366	0.450
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	2	376000	1880	15.92	17.00	1.282	-0.1	0.342	0.439
	FR1 n2_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	2	376000	1880	16.10	17.00	1.230	-0.03	0.461	0.567
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	2	376000	1880	15.92	17.00	1.282	-0.02	0.447	0.573
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	3	376000	1880	15.06	15.80	1.186	0.18	0.688	0.816
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	3	372000	1860	15.01	15.80	1.199	0.03	0.683	0.819
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	3	380000	1900	14.98	15.80	1.208	-0.11	0.653	0.789
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	3	376000	1880	14.91	15.80	1.227	-0.09	0.671	0.824
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	3	372000	1860	14.86	15.80	1.242	-0.12	0.652	0.810
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	3	380000	1900	14.81	15.80	1.256	0.01	0.654	0.821
	FR1 n2_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	3	376000	1880	14.87	15.80	1.239	-0.15	0.665	0.824
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	3	376000	1880	15.06	15.80	1.186	0.02	0.733	0.869
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	3	372000	1860	15.01	15.80	1.199	0.18	0.713	0.855
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	3	380000	1900	14.98	15.80	1.208	0.05	0.683	0.825
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	3	376000	1880	14.91	15.80	1.227	0.02	0.714	0.876
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	3	372000	1860	14.86	15.80	1.242	0.09	0.712	0.884
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	3	380000	1900	14.81	15.80	1.256	-0.12	0.673	0.845
	FR1 n2_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	3	376000	1880	14.87	15.80	1.239	-0.15	0.696	0.862
	FR1 n2_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	3	376000	1880	15.06	15.80	1.186	0.02	0.315	0.374
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	3	376000	1880	14.91	15.80	1.227	0.09	0.300	0.368
	FR1 n2_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	3	376000	1880	15.06	15.80	1.186	-0.11	0.372	0.441
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	3	376000	1880	14.91	15.80	1.227	-0.15	0.370	0.454
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Cheek	0mm	2	376000	1880	21.68	22.30	1.153	0.01	0.671	0.774
	FR1 n2_Ant 5	20M	BPSK	50	28	Right Cheek	0mm	2	376000	1880	21.56	22.30	1.186	0.15	0.646	0.766
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Tilted	0mm	2	376000	1880	21.68	22.30	1.153	0.09	0.068	0.078
	FR1 n2_Ant 5	20M	BPSK	50	28	Right Tilted	0mm	2	376000	1880	21.56	22.30	1.186	-0.12	0.063	0.075
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Cheek	0mm	2	376000	1880	21.68	22.30	1.153	-0.16	0.805	0.929
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Cheek	0mm	2	372000	1860	21.67	22.30	1.156	-0.11	0.937	1.083
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Cheek	0mm	2	380000	1900	21.61	22.30	1.172	0.03	0.738	0.865
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	2	376000	1880	21.56	22.30	1.186	-0.06	0.818	0.970
18	FR1 n2_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	2	372000	1860	21.52	22.30	1.197	-0.08	0.966	1.156
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	2	380000	1900	21.53	22.30	1.194	-0.12	0.867	1.035
	FR1 n2_Ant 5	20M	BPSK	100	0	Left Cheek	0mm	2	376000	1880	21.45	22.30	1.216	-0.01	0.770	0.936
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Tilted	0mm	2	376000	1880	21.68	22.30	1.153	-0.11	0.100	0.115
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Tilted	0mm	2	376000	1880	21.56	22.30	1.186	-0.18	0.093	0.110
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Cheek	0mm	3	376000	1880	20.69	21.10	1.099	0.02	0.455	0.500
	FR1 n2_Ant 5	20M	BPSK	50	28	Right Cheek	0mm	3	376000	1880	20.55	21.10	1.135	0	0.442	0.502
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Tilted	0mm	3	376000	1880	20.69	21.10	1.099	0.05	0.047	0.052
	FR1 n2_Ant 5	20M	BPSK	50	28	Right Tilted	0mm	3	376000	1880	20.55	21.10	1.135	-0.06	0.043	0.049
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Cheek	0mm	3	376000	1880	20.69	21.10	1.099	0.02	0.586	0.644
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	3	376000	1880	20.55	21.10	1.135	-0.06	0.737	0.837
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	3	372000	1860	20.46	21.10	1.159	-0.15	0.703	0.815
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Cheek	0mm	3	380000	1900	20.54	21.10	1.138	0.03	0.509	0.579
	FR1 n2_Ant 5	20M	BPSK	100	0	Left Cheek	0mm	3	376000	1880	20.47	21.10	1.156	-0.04	0.561	0.649
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Tilted	0mm	3	376000	1880	20.69	21.10	1.099	-0.07	0.073	0.080
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Tilted	0mm	3	376000	1880	20.55	21.10	1.135	0.1	0.067	0.076



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	2/3	167300	836.5	24.66	25.40	1.186	0.01	0.208	0.247
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	2/3	167300	836.5	24.55	25.40	1.216	0.16	0.199	0.242
	FR1 n5_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	2/3	167300	836.5	24.66	25.40	1.186	0.07	0.132	0.157
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	2/3	167300	836.5	24.55	25.40	1.216	-0.11	0.129	0.157
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	2/3	167300	836.5	24.66	25.40	1.186	-0.02	0.344	0.408
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	2/3	167300	836.5	24.55	25.40	1.216	-0.02	0.333	0.405
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	2/3	167300	836.5	24.66	25.40	1.186	-0.14	0.187	0.222
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	2/3	167300	836.5	24.55	25.40	1.216	0.17	0.177	0.215
19	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	2	167300	836.5	23.07	24.30	1.327	-0.1	0.890	1.181
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	2	167300	836.5	22.92	24.30	1.374	-0.04	0.803	1.103
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	2	167300	836.5	22.92	24.30	1.374	-0.08	0.813	1.117
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	2	167300	836.5	23.07	24.30	1.327	-0.01	0.728	0.966
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	2	167300	836.5	22.92	24.30	1.374	-0.17	0.677	0.931
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	2	167300	836.5	22.92	24.30	1.374	-0.04	0.659	0.905
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	2	167300	836.5	23.07	24.30	1.327	0.18	0.649	0.861
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	2	167300	836.5	22.92	24.30	1.374	-0.12	0.629	0.864
	FR1 n5_Ant 1	20M	BPSK	100	0	Left Cheek	0mm	2	167300	836.5	22.92	24.30	1.374	0.03	0.617	0.848
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	2	167300	836.5	23.07	24.30	1.327	0.04	0.563	0.747
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	2	167300	836.5	22.92	24.30	1.374	0.15	0.535	0.735
	FR1 n5_Ant 1	20M	BPSK	100	0	Left Tilted	0mm	2	167300	836.5	22.92	24.30	1.374	0.05	0.524	0.720
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	3	167300	836.5	23.07	23.10	1.007	-0.1	0.890	0.896
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	3	167300	836.5	22.92	23.10	1.042	-0.04	0.803	0.837
	FR1 n5_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	3	167300	836.5	22.92	23.10	1.042	-0.04	0.813	0.847
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	3	167300	836.5	23.07	23.10	1.007	-0.18	0.728	0.733
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	3	167300	836.5	22.92	23.10	1.042	0.04	0.677	0.706
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	3	167300	836.5	23.07	23.10	1.007	-0.17	0.649	0.653
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	3	167300	836.5	22.92	23.10	1.042	0.08	0.629	0.655
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	3	167300	836.5	23.07	23.10	1.007	0.01	0.563	0.567
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	3	167300	836.5	22.92	23.10	1.042	0.19	0.535	0.557



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)
20	FR1 n7_Ant 2	50M	BPSK	1	1	Right Cheek	0mm	2/3	507000	2535	24.36	25.40	1.271	-0.17	0.453	0.576
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Cheek	0mm	2/3	507000	2535	24.07	25.40	1.358	-0.18	0.440	0.598
	FR1 n7_Ant 2	50M	BPSK	1	1	Right Tilted	0mm	2/3	507000	2535	24.36	25.40	1.271	0.08	0.106	0.135
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Tilted	0mm	2/3	507000	2535	24.07	25.40	1.358	-0.17	0.089	0.121
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Cheek	0mm	2/3	507000	2535	24.36	25.40	1.271	-0.17	0.237	0.300
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Cheek	0mm	2/3	507000	2535	24.07	25.40	1.358	-0.08	0.206	0.280
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Tilted	0mm	2/3	507000	2535	24.36	25.40	1.271	-0.04	0.112	0.142
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Tilted	0mm	2/3	507000	2535	24.07	25.40	1.358	0.15	0.110	0.149
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Cheek	0mm	2/3	507000	2535	23.77	25.00	1.327	-0.08	0.122	0.162
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Cheek	0mm	2/3	507000	2535	23.56	25.00	1.393	-0.03	0.116	0.161
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Tilted	0mm	2/3	507000	2535	23.77	25.00	1.327	0.02	0.078	0.104
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Tilted	0mm	2/3	507000	2535	23.56	25.00	1.393	0.02	0.072	0.101
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Cheek	0mm	2/3	507000	2535	23.77	25.00	1.327	0.14	0.312	0.414
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Cheek	0mm	2/3	507000	2535	23.56	25.00	1.393	-0.13	0.272	0.379
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Tilted	0mm	2/3	507000	2535	23.77	25.00	1.327	0.12	0.062	0.082
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Tilted	0mm	2/3	507000	2535	23.56	25.00	1.393	0.16	0.060	0.084
	FR1 n12_Ant 0	15M	BPSK	1	77	Right Cheek	0mm	2/3	141500	707.5	24.75	25.40	1.161	0.1	0.133	0.154
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	2/3	141500	707.5	24.72	25.40	1.169	0.05	0.125	0.146
	FR1 n12_Ant 0	15M	BPSK	1	77	Right Tilted	0mm	2/3	141500	707.5	24.75	25.40	1.161	-0.08	0.069	0.080
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	2/3	141500	707.5	24.72	25.40	1.169	-0.16	0.092	0.108
	FR1 n12_Ant 0	15M	BPSK	1	77	Left Cheek	0mm	2/3	141500	707.5	24.75	25.40	1.161	-0.11	0.231	0.268
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	2/3	141500	707.5	24.72	25.40	1.169	0.13	0.209	0.244
	FR1 n12_Ant 0	15M	BPSK	1	77	Left Tilted	0mm	2/3	141500	707.5	24.75	25.40	1.161	0.01	0.115	0.134
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	2/3	141500	707.5	24.72	25.40	1.169	0.06	0.111	0.130
21	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	2	141500	707.5	24.22	24.30	1.019	-0.03	1.170	1.192
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	2	141500	707.5	24.14	24.30	1.038	0.15	1.134	1.176
	FR1 n12_Ant 1	15M	BPSK	75	0	Right Cheek	0mm	2	141500	707.5	24.12	24.30	1.042	-0.04	1.125	1.172
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	2	141500	707.5	24.22	24.30	1.019	-0.07	0.970	0.989
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	2	141500	707.5	24.14	24.30	1.038	0.15	0.961	0.997
	FR1 n12_Ant 1	15M	BPSK	75	0	Right Tilted	0mm	2	141500	707.5	24.12	24.30	1.042	0.13	0.954	0.994
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	2	141500	707.5	24.22	24.30	1.019	0.03	0.760	0.774
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	2	141500	707.5	24.14	24.30	1.038	-0.19	0.764	0.792
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	2	141500	707.5	24.22	24.30	1.019	-0.18	0.750	0.764
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	2	141500	707.5	24.14	24.30	1.038	0.15	0.747	0.775
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Cheek	0mm	3	141500	707.5	22.32	23.10	1.197	-0.06	0.750	0.898
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Cheek	0mm	3	141500	707.5	22.13	23.10	1.250	0.06	0.704	0.880
	FR1 n12_Ant 1	15M	BPSK	75	0	Right Cheek	0mm	3	141500	707.5	22.12	23.10	1.253	0.03	0.708	0.887
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Tilted	0mm	3	141500	707.5	22.32	23.10	1.197	-0.17	0.646	0.773
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Tilted	0mm	3	141500	707.5	22.13	23.10	1.250	0.06	0.615	0.769
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Cheek	0mm	3	141500	707.5	22.32	23.10	1.197	0.07	0.484	0.580
FR1 n12_Ant 1	15M	BPSK	36	22	Left Cheek	0mm	3	141500	707.5	22.13	23.10	1.250	-0.12	0.479	0.599	
FR1 n12_Ant 1	15M	BPSK	1	1	Left Tilted	0mm	3	141500	707.5	22.32	23.10	1.197	-0.01	0.473	0.567	
FR1 n12_Ant 1	15M	BPSK	36	22	Left Tilted	0mm	3	141500	707.5	22.13	23.10	1.250	-0.11	0.464	0.581	



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 n14_Ant 0	10M	BPSK	1	26	Right Cheek	0mm	2/3	158600	793	24.92	25.40	1.117	-0.02	0.167	0.187
	FR1 n14_Ant 0	10M	BPSK	25	14	Right Cheek	0mm	2/3	158600	793	24.79	25.40	1.151	-0.08	0.132	0.152
	FR1 n14_Ant 0	10M	BPSK	1	26	Right Tilted	0mm	2/3	158600	793	24.92	25.40	1.117	0.02	0.116	0.130
	FR1 n14_Ant 0	10M	BPSK	25	14	Right Tilted	0mm	2/3	158600	793	24.79	25.40	1.151	-0.06	0.092	0.106
	FR1 n14_Ant 0	10M	BPSK	1	26	Left Cheek	0mm	2/3	158600	793	24.92	25.40	1.117	-0.04	0.267	0.298
	FR1 n14_Ant 0	10M	BPSK	25	14	Left Cheek	0mm	2/3	158600	793	24.79	25.40	1.151	0.05	0.207	0.238
	FR1 n14_Ant 0	10M	BPSK	1	26	Left Tilted	0mm	2/3	158600	793	24.92	25.40	1.117	0.05	0.152	0.170
	FR1 n14_Ant 0	10M	BPSK	25	14	Left Tilted	0mm	2/3	158600	793	24.79	25.40	1.151	0	0.119	0.137
	FR1 n14_Ant 1	10M	BPSK	1	26	Right Cheek	0mm	2	158600	793	22.24	23.70	1.400	-0.09	0.720	1.008
22	FR1 n14_Ant 1	10M	BPSK	25	14	Right Cheek	0mm	2	158600	793	22.19	23.70	1.416	-0.05	0.728	1.031
	FR1 n14_Ant 1	10M	BPSK	50	0	Right Cheek	0mm	2	158600	793	22.09	23.70	1.449	0.14	0.709	1.027
	FR1 n14_Ant 1	10M	BPSK	1	26	Right Tilted	0mm	2	158600	793	22.24	23.70	1.400	0.11	0.536	0.750
	FR1 n14_Ant 1	10M	BPSK	25	14	Right Tilted	0mm	2	158600	793	22.19	23.70	1.416	0.14	0.531	0.752
	FR1 n14_Ant 1	10M	BPSK	1	26	Left Cheek	0mm	2	158600	793	22.24	23.70	1.400	0.02	0.622	0.871
	FR1 n14_Ant 1	10M	BPSK	25	14	Left Cheek	0mm	2	158600	793	22.19	23.70	1.416	0.17	0.647	0.916
	FR1 n14_Ant 1	10M	BPSK	50	0	Left Cheek	0mm	2	158600	793	22.09	23.70	1.449	0.13	0.638	0.924
	FR1 n14_Ant 1	10M	BPSK	1	26	Left Tilted	0mm	2	158600	793	22.24	23.70	1.400	0.04	0.455	0.637
	FR1 n14_Ant 1	10M	BPSK	25	14	Left Tilted	0mm	2	158600	793	22.19	23.70	1.416	0.04	0.454	0.643
	FR1 n14_Ant 1	10M	BPSK	1	26	Right Cheek	0mm	3	158600	793	22.24	22.50	1.062	-0.09	0.720	0.764
	FR1 n14_Ant 1	10M	BPSK	25	14	Right Cheek	0mm	3	158600	793	22.19	22.50	1.074	-0.05	0.728	0.782
	FR1 n14_Ant 1	10M	BPSK	1	26	Right Tilted	0mm	3	158600	793	22.24	22.50	1.062	0.11	0.536	0.569
	FR1 n14_Ant 1	10M	BPSK	25	14	Right Tilted	0mm	3	158600	793	22.19	22.50	1.074	0.14	0.531	0.570
	FR1 n14_Ant 1	10M	BPSK	1	26	Left Cheek	0mm	3	158600	793	22.24	22.50	1.062	0.02	0.660	0.701
	FR1 n14_Ant 1	10M	BPSK	25	14	Left Cheek	0mm	3	158600	793	22.19	22.50	1.074	0.17	0.647	0.695
	FR1 n14_Ant 1	10M	BPSK	1	26	Left Tilted	0mm	3	158600	793	22.24	22.50	1.062	0.04	0.455	0.483
	FR1 n14_Ant 1	10M	BPSK	25	14	Left Tilted	0mm	3	158600	793	22.19	22.50	1.074	0.04	0.454	0.488



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)
23	FR1 n25_Ant 2	40M	BPSK	1	108	Right Cheek	0mm	2	376500	1882.5	24.41	25.40	1.256	0.16	0.821	1.031
	FR1 n25_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	2	376500	1882.5	24.34	25.40	1.276	-0.1	0.667	0.851
	FR1 n25_Ant 2	40M	BPSK	216	0	Right Cheek	0mm	2	376500	1882.5	24.37	24.90	1.130	-0.01	0.656	0.741
	FR1 n25_Ant 2	40M	BPSK	1	108	Right Tilted	0mm	2	376500	1882.5	24.41	25.40	1.256	-0.17	0.342	0.430
	FR1 n25_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	2	376500	1882.5	24.34	25.40	1.276	-0.15	0.333	0.425
	FR1 n25_Ant 2	40M	BPSK	1	108	Left Cheek	0mm	2	376500	1882.5	24.41	25.40	1.256	0.02	0.354	0.445
	FR1 n25_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	2	376500	1882.5	24.34	25.40	1.276	0	0.328	0.419
	FR1 n25_Ant 2	40M	BPSK	1	108	Left Tilted	0mm	2	376500	1882.5	24.41	25.40	1.256	0.06	0.317	0.398
	FR1 n25_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	2	376500	1882.5	24.34	25.40	1.276	0.16	0.290	0.370
	FR1 n25_Ant 2	40M	BPSK	1	108	Right Cheek	0mm	3	376500	1882.5	24.41	24.80	1.094	0.16	0.821	0.898
	FR1 n25_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	3	376500	1882.5	24.34	24.80	1.112	-0.1	0.667	0.742
	FR1 n25_Ant 2	40M	BPSK	216	0	Right Cheek	0mm	3	376500	1882.5	24.37	24.80	1.104	-0.01	0.656	0.724
	FR1 n25_Ant 2	40M	BPSK	1	108	Right Tilted	0mm	3	376500	1882.5	24.41	24.80	1.094	0.11	0.342	0.375
	FR1 n25_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	3	376500	1882.5	24.34	24.80	1.112	-0.01	0.333	0.371
	FR1 n25_Ant 2	40M	BPSK	1	108	Left Cheek	0mm	3	376500	1882.5	24.41	24.80	1.094	-0.18	0.355	0.388
	FR1 n25_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	3	376500	1882.5	24.34	24.80	1.112	-0.1	0.329	0.366
	FR1 n25_Ant 2	40M	BPSK	1	108	Left Tilted	0mm	3	376500	1882.5	24.41	24.80	1.094	0.12	0.318	0.347
	FR1 n25_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	3	376500	1882.5	24.34	24.80	1.112	0.1	0.290	0.323
	FR1 n25_Ant 0	40M	BPSK	1	108	Right Cheek	0mm	2/3	376500	1882.5	24.13	25.20	1.279	0.19	0.037	0.047
	FR1 n25_Ant 0	40M	BPSK	108	54	Right Cheek	0mm	2/3	376500	1882.5	24.05	25.20	1.303	-0.01	0.036	0.047
	FR1 n25_Ant 0	40M	BPSK	1	108	Right Tilted	0mm	2/3	376500	1882.5	24.13	25.20	1.279	0	0.001	0.001
	FR1 n25_Ant 0	40M	BPSK	108	54	Right Tilted	0mm	2/3	376500	1882.5	24.05	25.20	1.303	-0.02	0.001	0.001
	FR1 n25_Ant 0	40M	BPSK	1	108	Left Cheek	0mm	2/3	376500	1882.5	24.13	25.20	1.279	-0.09	0.050	0.064
	FR1 n25_Ant 0	40M	BPSK	108	54	Left Cheek	0mm	2/3	376500	1882.5	24.05	25.20	1.303	0.09	0.046	0.060
	FR1 n25_Ant 0	40M	BPSK	1	108	Left Tilted	0mm	2/3	376500	1882.5	24.13	25.20	1.279	-0.11	0.001	0.001
	FR1 n25_Ant 0	40M	BPSK	108	54	Left Tilted	0mm	2/3	376500	1882.5	24.05	25.20	1.303	-0.03	0.001	0.001
	FR1 n30_Ant 2	10M	BPSK	1	1	Right Cheek	0mm	2/3	462000	2310	24.25	24.30	1.012	-0.15	0.636	0.643
24	FR1 n30_Ant 2	10M	BPSK	25	14	Right Cheek	0mm	2/3	462000	2310	24.17	24.30	1.030	-0.17	0.645	0.665
	FR1 n30_Ant 2	10M	BPSK	1	1	Right Tilted	0mm	2/3	462000	2310	24.25	24.30	1.012	0.01	0.189	0.191
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Tilted	0mm	2/3	462000	2310	24.17	24.30	1.030	0.03	0.186	0.192
	FR1 n30_Ant 2	10M	BPSK	1	1	Left Cheek	0mm	2/3	462000	2310	24.25	24.30	1.012	-0.04	0.336	0.340
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Cheek	0mm	2/3	462000	2310	24.17	24.30	1.030	0.15	0.316	0.326
	FR1 n30_Ant 2	10M	BPSK	1	1	Left Tilted	0mm	2/3	462000	2310	24.25	24.30	1.012	-0.13	0.303	0.307
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Tilted	0mm	2/3	462000	2310	24.17	24.30	1.030	-0.09	0.296	0.305
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Cheek	0mm	2/3	462000	2310	23.54	24.50	1.247	-0.16	0.086	0.108
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Cheek	0mm	2/3	462000	2310	23.43	24.50	1.279	0	0.085	0.108
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Tilted	0mm	2/3	462000	2310	23.54	24.50	1.247	0.12	0.066	0.082
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Tilted	0mm	2/3	462000	2310	23.43	24.50	1.279	-0.07	0.065	0.083
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Cheek	0mm	2/3	462000	2310	23.54	24.50	1.247	0.13	0.201	0.251
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Cheek	0mm	2/3	462000	2310	23.43	24.50	1.279	-0.1	0.179	0.230
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Tilted	0mm	2/3	462000	2310	23.54	24.50	1.247	0.08	0.054	0.068
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Tilted	0mm	2/3	462000	2310	23.43	24.50	1.279	-0.02	0.053	0.067



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	2/3	349000	1745	24.87	25.40	1.130	-0.04	0.160	0.181
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Cheek	0mm	2/3	349000	1745	24.58	25.40	1.208	-0.13	0.161	0.194
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Tilted	0mm	2/3	349000	1745	24.87	25.40	1.130	-0.09	0.084	0.095
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Tilted	0mm	2/3	349000	1745	24.58	25.40	1.208	-0.06	0.087	0.105
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Cheek	0mm	2/3	349000	1745	24.87	25.40	1.130	0.08	0.086	0.097
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Cheek	0mm	2/3	349000	1745	24.58	25.40	1.208	0	0.071	0.086
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Tilted	0mm	2/3	349000	1745	24.87	25.40	1.130	-0.09	0.095	0.107
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Tilted	0mm	2/3	349000	1745	24.58	25.40	1.208	-0.06	0.085	0.103
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Cheek	0mm	2/3	349000	1745	23.94	25.20	1.337	0.08	0.001	0.001
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Cheek	0mm	2/3	349000	1745	23.86	25.20	1.361	0.08	0.001	0.001
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Tilted	0mm	2/3	349000	1745	23.94	25.20	1.337	0.07	0.001	0.001
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Tilted	0mm	2/3	349000	1745	23.86	25.20	1.361	-0.08	0.001	0.001
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Cheek	0mm	2/3	349000	1745	23.94	25.20	1.337	0.05	0.043	0.057
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Cheek	0mm	2/3	349000	1745	23.86	25.20	1.361	0.07	0.039	0.053
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Tilted	0mm	2/3	349000	1745	23.94	25.20	1.337	-0.08	0.001	0.001
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Tilted	0mm	2/3	349000	1745	23.86	25.20	1.361	-0.05	0.001	0.001
	FR1 n66_Ant 1	40M	BPSK	1	108	Right Cheek	0mm	2	349000	1745	18.26	18.80	1.132	0.01	0.962	1.089
	FR1 n66_Ant 1	40M	BPSK	108	54	Right Cheek	0mm	2	349000	1745	18.22	18.80	1.143	0	0.923	1.055
	FR1 n66_Ant 1	40M	BPSK	216	0	Right Cheek	0mm	2	349000	1745	18.04	18.80	1.191	0.05	0.901	1.073
25	FR1 n66_Ant 1	40M	BPSK	1	108	Right Tilted	0mm	2	349000	1745	18.26	18.80	1.132	0.13	1.030	1.166
	FR1 n66_Ant 1	40M	BPSK	108	54	Right Tilted	0mm	2	349000	1745	18.22	18.80	1.143	-0.01	0.978	1.118
	FR1 n66_Ant 1	40M	BPSK	216	0	Right Tilted	0mm	2	349000	1745	18.04	18.80	1.191	0.04	0.972	1.158
	FR1 n66_Ant 1	40M	BPSK	1	108	Left Cheek	0mm	2	349000	1745	18.26	18.80	1.132	0	0.525	0.595
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Cheek	0mm	2	349000	1745	18.22	18.80	1.143	0.02	0.455	0.520
	FR1 n66_Ant 1	40M	BPSK	1	108	Left Tilted	0mm	2	349000	1745	18.26	18.80	1.132	-0.06	0.607	0.687
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Tilted	0mm	2	349000	1745	18.22	18.80	1.143	-0.1	0.553	0.632
	FR1 n66_Ant 1	40M	BPSK	1	108	Right Cheek	0mm	3	349000	1745	17.33	17.60	1.064	0.01	0.755	0.803
	FR1 n66_Ant 1	40M	BPSK	108	54	Right Cheek	0mm	3	349000	1745	17.22	17.60	1.091	0	0.724	0.790
	FR1 n66_Ant 1	40M	BPSK	216	0	Right Cheek	0mm	3	349000	1745	17.04	17.60	1.138	-0.02	0.710	0.808
	FR1 n66_Ant 1	40M	BPSK	1	108	Right Tilted	0mm	3	349000	1745	17.33	17.60	1.064	0.05	0.780	0.830
	FR1 n66_Ant 1	40M	BPSK	108	54	Right Tilted	0mm	3	349000	1745	17.22	17.60	1.091	0.18	0.808	0.882
	FR1 n66_Ant 1	40M	BPSK	1	108	Left Cheek	0mm	3	349000	1745	17.33	17.60	1.064	-0.02	0.356	0.379
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Cheek	0mm	3	349000	1745	17.22	17.60	1.091	-0.03	0.364	0.397
	FR1 n66_Ant 1	40M	BPSK	1	108	Left Tilted	0mm	3	349000	1745	17.33	17.60	1.064	0	0.436	0.464
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Tilted	0mm	3	349000	1745	17.22	17.60	1.091	0.05	0.468	0.511
	FR1 n66_Ant 5	40M	BPSK	1	108	Right Cheek	0mm	2	349000	1745	24.28	24.60	1.076	-0.04	0.815	0.877
	FR1 n66_Ant 5	40M	BPSK	108	54	Right Cheek	0mm	2	349000	1745	24.13	24.60	1.114	0.01	0.807	0.899
	FR1 n66_Ant 5	40M	BPSK	216	0	Right Cheek	0mm	2	349000	1745	23.55	24.60	1.274	0	0.671	0.855
	FR1 n66_Ant 5	40M	BPSK	1	108	Right Tilted	0mm	2	349000	1745	24.28	24.60	1.076	0.02	0.104	0.112
	FR1 n66_Ant 5	40M	BPSK	108	54	Right Tilted	0mm	2	349000	1745	24.13	24.60	1.114	0.05	0.100	0.111
	FR1 n66_Ant 5	40M	BPSK	1	108	Left Cheek	0mm	2	349000	1745	24.28	24.60	1.076	-0.13	1.080	1.163
	FR1 n66_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	2	349000	1745	24.13	24.60	1.114	-0.14	0.968	1.079
	FR1 n66_Ant 5	40M	BPSK	216	0	Left Cheek	0mm	2	349000	1745	23.55	24.60	1.274	-0.07	0.850	1.082
	FR1 n66_Ant 5	40M	BPSK	1	108	Left Tilted	0mm	2	349000	1745	24.28	24.60	1.076	0.06	0.164	0.177
	FR1 n66_Ant 5	40M	BPSK	108	54	Left Tilted	0mm	2	349000	1745	24.13	24.60	1.114	0.1	0.157	0.175
	FR1 n66_Ant 5	40M	BPSK	1	108	Right Cheek	0mm	3	349000	1745	22.94	23.40	1.112	0.01	0.614	0.683
	FR1 n66_Ant 5	40M	BPSK	108	54	Right Cheek	0mm	3	349000	1745	22.79	23.40	1.151	0	0.611	0.703
	FR1 n66_Ant 5	40M	BPSK	1	108	Right Tilted	0mm	3	349000	1745	22.94	23.40	1.112	-0.06	0.069	0.077
	FR1 n66_Ant 5	40M	BPSK	108	54	Right Tilted	0mm	3	349000	1745	22.79	23.40	1.151	-0.07	0.063	0.073
	FR1 n66_Ant 5	40M	BPSK	1	108	Left Cheek	0mm	3	349000	1745	22.94	23.40	1.112	0.02	0.728	0.809
	FR1 n66_Ant 5	40M	BPSK	108	54	Left Cheek	0mm	3	349000	1745	22.79	23.40	1.151	-0.09	0.730	0.840
	FR1 n66_Ant 5	40M	BPSK	216	0	Left Cheek	0mm	3	349000	1745	22.62	23.40	1.197	0.04	0.698	0.835
	FR1 n66_Ant 5	40M	BPSK	1	108	Left Tilted	0mm	3	349000	1745	22.94	23.40	1.112	-0.05	0.108	0.120
	FR1 n66_Ant 5	40M	BPSK	108	54	Left Tilted	0mm	3	349000	1745	22.79	23.40	1.151	-0.03	0.106	0.122



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	Right Cheek	0mm	2/3	136100	680.5	24.88	25.40	1.127	-0.06	0.137	0.154
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Cheek	0mm	2/3	136100	680.5	24.76	25.40	1.159	0.09	0.132	0.153
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Tilted	0mm	2/3	136100	680.5	24.88	25.40	1.127	0.05	0.078	0.088
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Tilted	0mm	2/3	136100	680.5	24.76	25.40	1.159	-0.18	0.075	0.087
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Cheek	0mm	2/3	136100	680.5	24.88	25.40	1.127	-0.17	0.209	0.236
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Cheek	0mm	2/3	136100	680.5	24.76	25.40	1.159	-0.16	0.199	0.231
	FR1 n71_Ant 0	20M	BPSK	1	53	Left Tilted	0mm	2/3	136100	680.5	24.88	25.40	1.127	-0.13	0.113	0.127
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Tilted	0mm	2/3	136100	680.5	24.76	25.40	1.159	0.11	0.107	0.124
26	FR1 n71_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	2	136100	680.5	23.25	24.10	1.216	-0.05	0.948	1.153
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	2	136100	680.5	23.20	24.10	1.230	0.18	0.920	1.132
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	2	136100	680.5	23.13	24.10	1.250	0.13	0.914	1.143
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	2	136100	680.5	23.25	24.10	1.216	-0.08	0.873	1.061
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	2	136100	680.5	23.20	24.10	1.230	0.15	0.851	1.047
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	2	136100	680.5	23.13	24.10	1.250	0.12	0.841	1.051
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	2	136100	680.5	23.25	24.10	1.216	-0.11	0.610	0.742
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	2	136100	680.5	23.20	24.10	1.230	-0.17	0.586	0.721
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	2	136100	680.5	23.25	24.10	1.216	-0.08	0.623	0.758
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	2	136100	680.5	23.20	24.10	1.230	-0.16	0.598	0.736
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Cheek	0mm	3	136100	680.5	22.20	22.90	1.175	-0.07	0.755	0.887
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	3	136100	680.5	22.10	22.90	1.202	-0.1	0.721	0.867
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Cheek	0mm	3	136100	680.5	22.08	22.90	1.208	0.15	0.715	0.863
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Tilted	0mm	3	136100	680.5	22.20	22.90	1.175	0.18	0.699	0.821
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	3	136100	680.5	22.10	22.90	1.202	0.16	0.673	0.809
	FR1 n71_Ant 1	20M	BPSK	100	0	Right Tilted	0mm	3	136100	680.5	22.08	22.90	1.208	-0.11	0.655	0.791
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Cheek	0mm	3	136100	680.5	22.20	22.90	1.175	-0.01	0.488	0.573
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	3	136100	680.5	22.10	22.90	1.202	0.09	0.468	0.562
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Tilted	0mm	3	136100	680.5	22.20	22.90	1.175	-0.06	0.499	0.586
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	3	136100	680.5	22.10	22.90	1.202	-0.05	0.483	0.581



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Cheek	0mm	2/3	518598	2592.99	24.94	25.40	1.112	-0.16	0.591	0.657
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Cheek	0mm	2/3	518598	2592.99	23.48	25.40	1.556	0.12	0.439	0.683
	FR1 n41_Ant 2	100M	BPSK	270	0	Right Cheek	0mm	2/3	518598	2592.99	23.60	24.90	1.349	-0.09	0.421	0.568
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Tilted	0mm	2/3	518598	2592.99	24.94	25.40	1.112	0.01	0.139	0.155
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Tilted	0mm	2/3	518598	2592.99	23.48	25.40	1.556	0.07	0.125	0.194
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Cheek	0mm	2/3	518598	2592.99	24.94	25.40	1.112	-0.02	0.204	0.227
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Cheek	0mm	2/3	518598	2592.99	23.48	25.40	1.556	0.04	0.147	0.229
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Tilted	0mm	2/3	518598	2592.99	24.94	25.40	1.112	-0.04	0.167	0.186
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Tilted	0mm	2/3	518598	2592.99	23.48	25.40	1.556	0.03	0.163	0.254
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Cheek	0mm	2/3	518598	2592.99	24.39	25.40	1.262	0.01	0.159	0.201
	FR1 n41_Ant 0	100M	BPSK	135	69	Right Cheek	0mm	2/3	518598	2592.99	23.91	25.40	1.409	-0.04	0.126	0.178
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Tilted	0mm	2/3	518598	2592.99	24.39	25.40	1.262	0.04	0.095	0.120
	FR1 n41_Ant 0	100M	BPSK	135	69	Right Tilted	0mm	2/3	518598	2592.99	23.91	25.40	1.409	0.06	0.071	0.100
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Cheek	0mm	2/3	518598	2592.99	24.39	25.40	1.262	-0.12	0.376	0.474
	FR1 n41_Ant 0	100M	BPSK	135	69	Left Cheek	0mm	2/3	518598	2592.99	23.91	25.40	1.409	-0.07	0.330	0.465
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Tilted	0mm	2/3	518598	2592.99	24.39	25.40	1.262	-0.09	0.091	0.115
	FR1 n41_Ant 0	100M	BPSK	135	69	Left Tilted	0mm	2/3	518598	2592.99	23.91	25.40	1.409	-0.07	0.082	0.116
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	2	518598	2592.99	18.23	19	1.194	-0.08	0.840	1.003
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	2	518598	2592.99	17.88	19	1.294	0.01	0.569	0.736
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	2	518598	2592.99	17.79	19	1.321	0	0.610	0.806
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	2	518598	2592.99	18.23	19	1.194	0.05	0.780	0.931
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	2	518598	2592.99	17.88	19	1.294	-0.03	0.550	0.712
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	2	518598	2592.99	17.79	19	1.321	0.02	0.301	0.398
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	2	518598	2592.99	18.23	19	1.194	-0.06	0.314	0.375
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	2	518598	2592.99	17.88	19	1.294	-0.07	0.228	0.295
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	2	518598	2592.99	18.23	19	1.194	0.1	0.393	0.469
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	2	518598	2592.99	17.88	19	1.294	0.09	0.268	0.347
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	3	518598	2592.99	17.32	17.8	1.117	0.03	0.742	0.829
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	3	518598	2592.99	16.85	17.8	1.245	0.02	0.514	0.640
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	3	518598	2592.99	16.83	17.8	1.250	0	0.535	0.669
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	3	518598	2592.99	17.32	17.8	1.117	0.05	0.733	0.819
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	3	518598	2592.99	16.85	17.8	1.245	-0.06	0.500	0.622
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	3	518598	2592.99	16.83	17.8	1.250	0.18	0.495	0.619
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	3	518598	2592.99	17.32	17.8	1.117	-0.02	0.294	0.328
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	3	518598	2592.99	16.85	17.8	1.245	0.01	0.194	0.241
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	3	518598	2592.99	17.32	17.8	1.117	0.07	0.352	0.393
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	3	518598	2592.99	16.85	17.8	1.245	-0.1	0.242	0.301
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	2	518598	2592.99	21.38	21.8	1.102	0.09	0.795	0.876
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	2	518598	2592.99	20.86	21.8	1.242	-0.01	0.756	0.939
	FR1 n41_Ant 5	100M	BPSK	270	0	Right Cheek	0mm	2	518598	2592.99	20.9	21.8	1.230	0.09	0.840	1.033
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	2	518598	2592.99	21.38	21.8	1.102	-0.02	0.110	0.121
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	2	518598	2592.99	20.86	21.8	1.242	0.06	0.110	0.137
27	FR1 n41_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	2	518598	2592.99	21.38	21.8	1.102	-0.15	1.060	1.168
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	2	518598	2592.99	20.86	21.8	1.242	0.01	0.911	1.131
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	518598	2592.99	20.9	21.8	1.230	-0.12	0.888	1.092
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	2	518598	2592.99	21.38	21.8	1.102	-0.11	0.201	0.221
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	2	518598	2592.99	20.86	21.8	1.242	-0.16	0.225	0.279
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	3	518598	2592.99	20.36	20.6	1.057	-0.03	0.585	0.618
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	3	518598	2592.99	19.85	20.6	1.189	-0.1	0.557	0.662
	FR1 n41_Ant 5	100M	BPSK	270	0	Right Cheek	0mm	3	518598	2592.99	19.83	20.6	1.194	0.05	0.619	0.739
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	3	518598	2592.99	20.36	20.6	1.057	0.03	0.081	0.086
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	3	518598	2592.99	19.85	20.6	1.189	0.08	0.081	0.096
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	3	518598	2592.99	20.36	20.6	1.057	-0.14	0.760	0.803
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	3	518598	2592.99	19.85	20.6	1.189	-0.13	0.671	0.797
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	3	518598	2592.99	19.83	20.6	1.194	-0.01	0.671	0.801
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	3	518598	2592.99	20.36	20.6	1.057	-0.11	0.148	0.156
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	3	518598	2592.99	19.85	20.6	1.189	-0.15	0.165	0.196



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Cheek	0mm	2/3	656000	3840	23.70	24.10	1.096	0.05	0.115	0.126
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	2/3	656000	3840	23.12	24.10	1.253	0.03	0.103	0.129
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Tilted	0mm	2/3	656000	3840	23.70	24.10	1.096	-0.02	0.102	0.112
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	2/3	656000	3840	23.12	24.10	1.253	0.05	0.088	0.110
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	2/3	656000	3840	23.70	24.10	1.096	0.01	0.187	0.205
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	2/3	656000	3840	23.12	24.10	1.253	-0.04	0.155	0.194
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Tilted	0mm	2/3	656000	3840	23.70	24.10	1.096	0.02	0.073	0.080
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	2/3	656000	3840	23.12	24.10	1.253	0.03	0.064	0.080
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Cheek	0mm	2/3	633332	3499.98	23.27	24.10	1.211	0.01	0.071	0.086
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Cheek	0mm	2/3	633332	3499.98	22.81	24.10	1.346	0	0.065	0.087
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Tilted	0mm	2/3	633332	3499.98	23.27	24.10	1.211	0.05	0.082	0.099
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Tilted	0mm	2/3	633332	3499.98	22.81	24.10	1.346	-0.03	0.057	0.077
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Cheek	0mm	2/3	633332	3499.98	23.27	24.10	1.211	-0.17	0.169	0.205
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Cheek	0mm	2/3	633332	3499.98	22.81	24.10	1.346	0.02	0.142	0.191
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Tilted	0mm	2/3	633332	3499.98	23.27	24.10	1.211	0.01	0.060	0.073
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Tilted	0mm	2/3	633332	3499.98	22.81	24.10	1.346	-0.03	0.052	0.070
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	2/3	656000	3840	22.80	23.50	1.175	-0.06	0.088	0.103
	FR1 n77_Ant 7	100M	BPSK	135	69	Right Cheek	0mm	2/3	656000	3840	22.24	23.50	1.337	0.15	0.074	0.099
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Tilted	0mm	2/3	656000	3840	22.80	23.50	1.175	-0.04	0.062	0.073
	FR1 n77_Ant 7	100M	BPSK	135	69	Right Tilted	0mm	2/3	656000	3840	22.24	23.50	1.337	0.02	0.054	0.072
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Cheek	0mm	2/3	656000	3840	22.80	23.50	1.175	-0.18	0.074	0.087
	FR1 n77_Ant 7	100M	BPSK	135	69	Left Cheek	0mm	2/3	656000	3840	22.24	23.50	1.337	0.16	0.065	0.087
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Tilted	0mm	2/3	656000	3840	22.80	23.50	1.175	-0.02	0.081	0.095
	FR1 n77_Ant 7	100M	BPSK	135	69	Left Tilted	0mm	2/3	656000	3840	22.24	23.50	1.337	0.16	0.071	0.095
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	2/3	633332	3499.98	22.00	23.50	1.413	-0.09	0.092	0.130
	FR1 n77_Ant 7	100M	BPSK	135	69	Right Cheek	0mm	2/3	633332	3499.98	21.72	23.50	1.507	0.08	0.082	0.124
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Tilted	0mm	2/3	633332	3499.98	22.00	23.50	1.413	-0.13	0.054	0.076
	FR1 n77_Ant 7	100M	BPSK	135	69	Right Tilted	0mm	2/3	633332	3499.98	21.72	23.50	1.507	0	0.044	0.066
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Cheek	0mm	2/3	633332	3499.98	22.00	23.50	1.413	-0.18	0.044	0.062
	FR1 n77_Ant 7	100M	BPSK	135	69	Left Cheek	0mm	2/3	633332	3499.98	21.72	23.50	1.507	0.14	0.042	0.063
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Tilted	0mm	2/3	633332	3499.98	22.00	23.50	1.413	0.09	0.058	0.082
	FR1 n77_Ant 7	100M	BPSK	135	69	Left Tilted	0mm	2/3	633332	3499.98	21.72	23.50	1.507	0.05	0.049	0.074



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 1	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	19.85	20.70	1.216	-0.08	0.829	1.008
29	FR1 n77_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	2	656000	3840	19.01	20.70	1.476	-0.17	0.776	1.145
	FR1 n77_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	2	656000	3840	19.11	20.7	1.442	0.05	0.774	1.116
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	2	656000	3840	19.85	20.7	1.216	0	0.525	0.638
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	2	656000	3840	19.01	20.7	1.476	0.02	0.482	0.711
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	19.85	20.7	1.216	-0.03	0.372	0.452
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	2	656000	3840	19.01	20.7	1.476	0.05	0.369	0.545
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	2	656000	3840	19.85	20.7	1.216	0.04	0.386	0.469
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	2	656000	3840	19.01	20.7	1.476	-0.01	0.415	0.612
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	18.88	19.5	1.153	0.02	0.682	0.787
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	3	656000	3840	18.05	19.5	1.396	-0.01	0.626	0.874
	FR1 n77_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	3	656000	3840	18.12	19.5	1.374	0.03	0.624	0.857
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	3	656000	3840	18.88	19.5	1.153	-0.05	0.424	0.489
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	3	656000	3840	18.05	19.5	1.396	-0.02	0.389	0.543
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	18.88	19.5	1.153	0.01	0.300	0.346
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	3	656000	3840	18.05	19.5	1.396	0.1	0.297	0.415
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	3	656000	3840	18.88	19.5	1.153	0.05	0.312	0.360
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	3	656000	3840	18.05	19.5	1.396	-0.06	0.335	0.468
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	19.76	20.7	1.242	-0.09	0.644	0.800
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	2	633332	3499.98	19.47	20.7	1.327	-0.03	0.626	0.831
	FR1 n77_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	2	633332	3499.98	19.08	20.7	1.452	0.01	0.568	0.825
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	2	633332	3499.98	19.76	20.7	1.242	0	0.533	0.662
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	2	633332	3499.98	19.47	20.7	1.327	0.05	0.482	0.640
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	19.76	20.7	1.242	-0.02	0.305	0.379
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	2	633332	3499.98	19.47	20.7	1.327	-0.04	0.255	0.338
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	2	633332	3499.98	19.76	20.7	1.242	0.03	0.409	0.508
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	2	633332	3499.98	19.47	20.7	1.327	0.01	0.358	0.475
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	18.74	19.5	1.191	0.05	0.530	0.631
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	3	633332	3499.98	18.38	19.5	1.294	-0.1	0.495	0.641
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	3	633332	3499.98	18.74	19.5	1.191	0.06	0.422	0.503
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	3	633332	3499.98	18.38	19.5	1.294	-0.01	0.381	0.493
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	18.74	19.5	1.191	-0.04	0.241	0.287
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	3	633332	3499.98	18.38	19.5	1.294	0.03	0.202	0.261
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	3	633332	3499.98	18.74	19.5	1.191	0.02	0.323	0.385
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	3	633332	3499.98	18.38	19.5	1.294	0.07	0.283	0.366



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 5	100M	BPSK	1	1	Right Cheek	0mm	2	656000	3840	21.55	21.7	1.035	0.05	0.486	0.503
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	2	656000	3840	21.16	21.7	1.132	0	0.420	0.476
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	2	656000	3840	21.55	21.7	1.035	0.02	0.105	0.109
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	2	656000	3840	21.16	21.7	1.132	-0.03	0.075	0.085
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	2	656000	3840	21.55	21.7	1.035	-0.04	0.901	0.933
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	2	656000	3840	21.16	21.7	1.132	-0.04	0.734	0.831
	FR1 n77_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	656000	3840	21.17	21.7	1.130	-0.02	0.848	0.958
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	2	656000	3840	21.55	21.7	1.035	0.1	0.235	0.243
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	2	656000	3840	21.16	21.7	1.132	0.04	0.174	0.197
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	3	656000	3840	20.5	20.5	1.000	0.05	0.333	0.333
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	3	656000	3840	20.2	20.5	1.072	0.02	0.288	0.309
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	3	656000	3840	20.5	20.5	1.000	-0.01	0.072	0.072
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	3	656000	3840	20.2	20.5	1.072	0.03	0.052	0.056
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	3	656000	3840	20.5	20.5	1.000	-0.02	0.618	0.618
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	3	656000	3840	20.2	20.5	1.072	-0.04	0.538	0.576
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	3	656000	3840	20.5	20.5	1.000	0.06	0.161	0.161
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	3	656000	3840	20.2	20.5	1.072	-0.1	0.120	0.129
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	2	633332	3499.98	21.39	21.7	1.074	0.01	0.688	0.739
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	2	633332	3499.98	20.95	21.7	1.189	0.02	0.519	0.617
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	2	633332	3499.98	21.39	21.7	1.074	0	0.251	0.270
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	2	633332	3499.98	20.95	21.7	1.189	0.04	0.160	0.190
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	2	633332	3499.98	21.39	21.7	1.074	0.16	1.030	1.106
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	2	633332	3499.98	20.95	21.7	1.189	-0.07	0.795	0.945
	FR1 n77_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	633332	3499.98	20.81	21.7	1.227	0.08	0.725	0.890
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	2	633332	3499.98	21.39	21.7	1.074	-0.1	0.460	0.494
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	2	633332	3499.98	20.95	21.7	1.189	-0.09	0.321	0.382
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	3	633332	3499.98	20.43	20.5	1.016	0.05	0.511	0.519
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	3	633332	3499.98	19.95	20.5	1.135	0.02	0.385	0.437
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	3	633332	3499.98	20.43	20.5	1.016	-0.02	0.186	0.189
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	3	633332	3499.98	19.95	20.5	1.135	0.01	0.119	0.135
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	3	633332	3499.98	20.43	20.5	1.016	0.11	0.764	0.776
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	3	633332	3499.98	19.95	20.5	1.135	0.04	0.590	0.670
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	3	633332	3499.98	20.43	20.5	1.016	-0.07	0.341	0.347
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	3	633332	3499.98	19.95	20.5	1.135	0.08	0.238	0.270



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	1	6	2437	17.35	17.50	1.035	98.9	1.011	-0.03	0.381	0.399
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	1	6	2437	17.35	17.50	1.035	98.9	1.011	-0.04	0.450	0.471
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	6	2437	17.35	17.50	1.035	98.9	1.011	-0.03	1.030	1.078
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	1	2412	17.25	17.50	1.059	98.9	1.011	-0.07	0.859	0.920
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	11	2462	17.25	17.50	1.059	98.9	1.011	-0.07	0.829	0.888
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	12	2467	17.15	17.50	1.084	98.9	1.011	0	0.923	1.011
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	1	13	2472	17.35	17.50	1.035	98.9	1.011	0.09	0.896	0.938
30	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	1	6	2437	17.35	17.50	1.035	98.9	1.011	0.01	1.100	1.151
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	1	1	2412	17.25	17.50	1.059	98.9	1.011	0.02	0.943	1.010
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	1	11	2462	17.25	17.50	1.059	98.9	1.011	-0.11	0.910	0.975
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	1	12	2467	17.15	17.50	1.084	98.9	1.011	-0.07	0.960	1.052
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	1	13	2472	17.35	17.50	1.035	98.9	1.011	0.12	1.010	1.057
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	1	11	2462	17.45	17.50	1.012	98.9	1.011	-0.17	0.339	0.347
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	1	11	2462	17.45	17.50	1.012	98.9	1.011	-0.02	0.087	0.089
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	1	11	2462	17.45	17.50	1.012	98.9	1.011	-0.17	0.445	0.455
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	1	11	2462	17.45	17.50	1.012	98.9	1.011	0.1	0.077	0.079
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	1	1	2412	17.45	17.50	1.012	98.9	1.011	-0.11	0.531	0.543
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	1	6	2437	17.15	17.50	1.084	98.9	1.011	-0.18	0.592	0.649
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	1	12	2467	17.45	17.50	1.012	98.9	1.011	-0.19	0.593	0.606
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	1	13	2472	17.25	17.50	1.059	98.9	1.011	-0.16	0.554	0.593
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(4)	1	11	2462	17.45	17.50	1.012	93.4	1.071	-0.06	0.319	0.346
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(3)	1	11	2462	17.15	17.50	1.084	93.4	1.071	-0.06	0.351	0.407
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(4)	1	11	2462	17.45	17.50	1.012	93.4	1.071	-0.02	0.437	0.473
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(3)	1	11	2462	17.15	17.50	1.084	93.4	1.071	-0.02	0.050	0.058
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	1	11	2462	17.45	17.50	1.012	93.4	1.071	-0.07	0.890	0.964
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	1	11	2462	17.15	17.50	1.084	93.4	1.071	-0.07	0.381	0.442
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	1	1	2412	17.35	17.50	1.035	93.4	1.071	-0.05	0.756	0.838
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	1	1	2412	17.05	17.50	1.109	93.4	1.071	-0.05	0.496	0.589
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	1	6	2437	17.45	17.50	1.012	93.4	1.071	-0.03	0.810	0.878
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	1	6	2437	16.45	17.50	1.274	93.4	1.071	-0.03	0.437	0.596
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	1	12	2467	17.15	17.50	1.084	93.4	1.071	-0.06	0.800	0.929
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	1	12	2467	17.05	17.50	1.109	93.4	1.071	-0.06	0.484	0.575
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	1	11	2462	17.45	17.50	1.012	93.4	1.071	-0.02	0.917	0.993
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	1	11	2462	17.15	17.50	1.084	93.4	1.071	-0.02	0.042	0.049
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	1	11	2462	17.15	17.50	1.084	93.4	1.071	-0.04	0.036	0.042
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	1	1	2412	17.35	17.50	1.035	93.4	1.071	0	0.894	0.991
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	1	1	2412	17.05	17.50	1.109	93.4	1.071	0	0.040	0.048
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	1	6	2437	17.45	17.50	1.012	93.4	1.071	0.01	0.990	1.073
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	1	6	2437	16.45	17.50	1.274	93.4	1.071	0.01	0.038	0.052
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	1	12	2467	17.15	17.50	1.084	93.4	1.071	0	0.896	1.040
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	1	12	2467	17.05	17.50	1.109	93.4	1.071	0	0.039	0.046
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	2	6	2437	15.45	15.50	1.012	98.9	1.011	0.04	0.244	0.250
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	2	6	2437	15.45	15.50	1.012	98.9	1.011	0.09	0.269	0.275
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	2	6	2437	15.45	15.50	1.012	98.9	1.011	-0.01	0.592	0.605
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	2	6	2437	15.45	15.50	1.012	98.9	1.011	-0.13	0.687	0.703
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	2	11	2462	15.45	15.50	1.012	98.9	1.011	-0.1	0.181	0.185
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	2	11	2462	15.45	15.50	1.012	98.9	1.011	-0.07	0.057	0.058
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	2	11	2462	15.45	15.50	1.012	98.9	1.011	-0.18	0.276	0.282
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	2	11	2462	15.45	15.50	1.012	98.9	1.011	-0.04	0.030	0.031



FCC SAR TEST REPORT

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WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	11	2462	15.45	15.50	1.012	93.4	1.071	-0.11	0.184	0.199
WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	11	2462	15.25	15.50	1.059	93.4	1.071	-0.11	0.184	0.209
WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(4)	2	11	2462	15.45	15.50	1.012	93.4	1.071	-0.07	0.274	0.297
WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(3)	2	11	2462	15.25	15.50	1.059	93.4	1.071	-0.07	0.274	0.311
WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	11	2462	15.45	15.50	1.012	93.4	1.071	-0.14	0.537	0.582
WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	11	2462	15.25	15.50	1.059	93.4	1.071	-0.14	0.302	0.343
WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	2	11	2462	15.45	15.50	1.012	93.4	1.071	0.01	0.610	0.661
WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	2	11	2462	15.25	15.50	1.059	93.4	1.071	0.01	0.025	0.028
WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	3	1	2412	14.45	14.50	1.012	98.9	1.011	-0.02	0.165	0.169
WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	3	1	2412	14.45	14.50	1.012	98.9	1.011	0.08	0.211	0.216
WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	3	1	2412	14.45	14.50	1.012	98.9	1.011	-0.07	0.422	0.432
WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	3	1	2412	14.45	14.50	1.012	98.9	1.011	-0.1	0.499	0.510
WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	3	11	2462	14.45	14.50	1.012	98.9	1.011	-0.08	0.193	0.197
WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	3	11	2462	14.45	14.50	1.012	98.9	1.011	-0.16	0.020	0.020
WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	3	11	2462	14.45	14.50	1.012	98.9	1.011	-0.14	0.207	0.212
WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	3	11	2462	14.45	14.50	1.012	98.9	1.011	0.15	0.019	0.019
WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(4)	3	11	2462	14.45	14.50	1.012	93.4	1.071	-0.1	0.142	0.154
WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(3)	3	11	2462	14.15	14.50	1.084	93.4	1.071	-0.1	0.229	0.266
WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(4)	3	11	2462	14.45	14.50	1.012	93.4	1.071	0.02	0.231	0.250
WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(3)	3	11	2462	14.15	14.50	1.084	93.4	1.071	0.02	0.015	0.017
WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	3	11	2462	14.45	14.50	1.012	93.4	1.071	-0.05	0.485	0.525
WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	3	11	2462	14.15	14.50	1.084	93.4	1.071	-0.05	0.204	0.237
WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	3	11	2462	14.45	14.50	1.012	93.4	1.071	-0.1	0.430	0.466
WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	3	11	2462	14.15	14.50	1.084	93.4	1.071	-0.1	0.044	0.051
WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4	4	6	2437	10.95	11.00	1.012	98.9	1.011	0.1	0.067	0.069
WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4	4	6	2437	10.95	11.00	1.012	98.9	1.011	-0.15	0.108	0.110
WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4	4	6	2437	10.95	11.00	1.012	98.9	1.011	0	0.194	0.198
WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4	4	6	2437	10.95	11.00	1.012	98.9	1.011	0.02	0.219	0.224
WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3	4	11	2462	10.95	11.00	1.012	98.9	1.011	-0.16	0.070	0.072
WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 3	4	11	2462	10.95	11.00	1.012	98.9	1.011	0.09	0.021	0.021
WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 3	4	11	2462	10.95	11.00	1.012	98.9	1.011	0.01	0.080	0.082
WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 3	4	11	2462	10.95	11.00	1.012	98.9	1.011	-0.02	0.012	0.012
WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(4)	4	11	2462	10.95	11.00	1.012	93.4	1.071	0.16	0.066	0.072
WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	Ant 4+3(3)	4	11	2462	10.75	11.00	1.059	93.4	1.071	0.16	0.055	0.062
WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(4)	4	11	2462	10.95	11.00	1.012	93.4	1.071	-0.11	0.089	0.096
WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	Ant 4+3(3)	4	11	2462	10.75	11.00	1.059	93.4	1.071	-0.11	0.012	0.014
WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(4)	4	11	2462	10.95	11.00	1.012	93.4	1.071	-0.1	0.183	0.198
WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	Ant 4+3(3)	4	11	2462	10.75	11.00	1.059	93.4	1.071	-0.1	0.073	0.083
WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(4)	4	11	2462	10.95	11.00	1.012	93.4	1.071	0.15	0.203	0.220
WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	Ant 4+3(3)	4	11	2462	10.75	11.00	1.059	93.4	1.071	0.15	0.007	0.008



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)	
31	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	50	5250	13.40	13.50	1.023	86.84	1.152	0.09	0.023	0.027	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	50	5250	13.10	13.50	1.096	86.84	1.152	0.09	0.923	1.166	
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	58	5290	13.40	13.50	1.023	87.95	1.137	-0.07	0.022	0.026	
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	58	5290	13.20	13.50	1.072	87.95	1.137	-0.07	0.962	1.172	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	50	5250	13.40	13.50	1.023	86.84	1.152	0.1	0.018	0.021	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	1/2	50	5250	13.10	13.50	1.096	86.84	1.152	0.1	0.111	0.140	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	50	5250	13.40	13.50	1.023	86.84	1.152	0.11	0.182	0.215	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	50	5250	13.10	13.50	1.096	86.84	1.152	0.11	0.155	0.196	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	50	5250	13.40	13.50	1.023	86.84	1.152	-0.07	0.072	0.085	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	1/2	50	5250	13.10	13.50	1.096	86.84	1.152	-0.07	0.040	0.051	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	50	5250	9.80	10.00	1.047	86.84	1.152	0.11	0.001	0.001	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	50	5250	9.50	10.00	1.122	86.84	1.152	0.11	0.316	0.408	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	3/4	50	5250	9.80	10.00	1.047	86.84	1.152	0.08	0.004	0.004	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	3/4	50	5250	9.50	10.00	1.122	86.84	1.152	0.08	0.055	0.071	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	50	5250	9.80	10.00	1.047	86.84	1.152	0.13	0.062	0.075	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	3/4	50	5250	9.50	10.00	1.122	86.84	1.152	0.13	0.050	0.065	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	3/4	50	5250	9.80	10.00	1.047	86.84	1.152	-0.04	0.018	0.022	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	3/4	50	5250	9.50	10.00	1.122	86.84	1.152	-0.04	0.019	0.025	
	32	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	114	5570	14.90	15.00	1.023	86.84	1.152	0.03	0.074	0.087
		WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	114	5570	14.50	15.00	1.122	86.84	1.152	0.03	0.813	1.051
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	106	5530	14.80	15.00	1.047	87.95	1.137	0.06	0.072	0.086
		WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	106	5530	14.50	15.00	1.122	87.95	1.137	0.06	0.854	1.089
		WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	114	5570	14.90	15.00	1.023	86.84	1.152	-0.17	0.031	0.037
		WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	1/2	114	5570	14.50	15.00	1.122	86.84	1.152	-0.17	0.220	0.284
WLAN5GHz		802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	114	5570	14.90	15.00	1.023	86.84	1.152	-0.09	0.396	0.467	
WLAN5GHz		802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	114	5570	14.50	15.00	1.122	86.84	1.152	-0.09	0.236	0.305	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	114	5570	14.90	15.00	1.023	86.84	1.152	-0.08	0.170	0.200	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	1/2	114	5570	14.50	15.00	1.122	86.84	1.152	-0.08	0.092	0.119	
		WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3	114	5570	10.50	11.00	1.122	86.84	1.152	-0.13	0.044	0.057
		WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3	114	5570	10.00	11.00	1.259	86.84	1.152	-0.13	0.257	0.373
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	3	114	5570	10.50	11.00	1.122	86.84	1.152	-0.16	0.004	0.005	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	3	114	5570	10.00	11.00	1.259	86.84	1.152	-0.16	0.032	0.046	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3	114	5570	10.50	11.00	1.122	86.84	1.152	0.01	0.090	0.116	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	3	114	5570	10.00	11.00	1.259	86.84	1.152	0.01	0.049	0.071	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	3	114	5570	10.50	11.00	1.122	86.84	1.152	-0.08	0.024	0.031	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	3	114	5570	10.00	11.00	1.259	86.84	1.152	-0.08	0.015	0.022	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	4	114	5570	11.20	11.50	1.072	86.84	1.152	0.01	0.031	0.038	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	4	114	5570	10.50	11.50	1.259	86.84	1.152	0.01	0.356	0.516	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	4	114	5570	11.20	11.50	1.072	86.84	1.152	-0.03	0.009	0.011	
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	4	114	5570	10.50	11.50	1.259	86.84	1.152	-0.03	0.047	0.068	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	4	114	5570	11.20	11.50	1.072	86.84	1.152	-0.12	0.064	0.079	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	4	114	5570	10.50	11.50	1.259	86.84	1.152	-0.12	0.052	0.075	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	4	114	5570	11.20	11.50	1.072	86.84	1.152	0.15	0.045	0.056	
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	4	114	5570	10.50	11.50	1.259	86.84	1.152	0.15	0.033	0.048	



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	155	5775	15.70	16.00	1.072	87.95	1.137	0.12	0.200	0.244
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	155	5775	15.20	16.00	1.202	87.95	1.137	0.12	0.612	0.837
33	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	151	5755	15.90	16.00	1.023	96.79	1.033	0.15	0.113	0.119
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	151	5755	15.30	16.00	1.175	96.79	1.033	0.15	0.860	1.044
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	155	5775	15.70	16.00	1.072	87.95	1.137	0.02	0.135	0.164
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	1/2	155	5775	15.20	16.00	1.202	87.95	1.137	0.02	0.189	0.258
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	155	5775	15.70	16.00	1.072	87.95	1.137	-0.1	0.760	0.926
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	155	5775	15.20	16.00	1.202	87.95	1.137	-0.1	0.216	0.295
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	151	5755	15.90	16.00	1.023	96.79	1.033	0.13	0.903	0.955
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	151	5755	15.30	16.00	1.175	96.79	1.033	0.13	0.236	0.286
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	155	5775	15.70	16.00	1.072	87.95	1.137	-0.02	0.407	0.496
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	1/2	155	5775	15.20	16.00	1.202	87.95	1.137	-0.02	0.161	0.220
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	155	5775	11.80	12.00	1.047	87.95	1.137	0.11	0.042	0.050
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	155	5775	11.50	12.00	1.122	87.95	1.137	0.11	0.368	0.469
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	3/4	155	5775	11.80	12.00	1.047	87.95	1.137	-0.18	0.048	0.057
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	3/4	155	5775	11.50	12.00	1.122	87.95	1.137	-0.18	0.084	0.107
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	155	5775	11.80	12.00	1.047	87.95	1.137	0.08	0.260	0.310
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	3/4	155	5775	11.50	12.00	1.122	87.95	1.137	0.08	0.049	0.063
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	3/4	155	5775	11.80	12.00	1.047	87.95	1.137	0.12	0.092	0.110
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	3/4	155	5775	11.50	12.00	1.122	87.95	1.137	0.12	0.053	0.068
34	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	163	5815	16.30	16.50	1.047	87.01	1.149	0.1	0.122	0.147
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	163	5815	16.20	16.50	1.072	87.01	1.149	0.1	0.950	1.170
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	171	5855	16.20	16.50	1.072	88.1	1.135	0.1	0.129	0.157
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	171	5855	15.60	16.50	1.230	88.1	1.135	0.1	0.715	0.998
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	163	5815	16.30	16.50	1.047	87.01	1.149	0.05	0.095	0.114
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	1/2	163	5815	16.20	16.50	1.072	87.01	1.149	0.05	0.256	0.315
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	163	5815	16.30	16.50	1.047	87.01	1.149	0.16	0.755	0.908
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	163	5815	16.20	16.50	1.072	87.01	1.149	0.16	0.189	0.233
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	171	5855	16.20	16.50	1.072	88.1	1.135	-0.01	0.414	0.503
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	171	5855	15.60	16.50	1.230	88.1	1.135	-0.01	0.255	0.356
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	163	5815	16.30	16.50	1.047	87.01	1.149	-0.05	0.175	0.211
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	1/2	163	5815	16.20	16.50	1.072	87.01	1.149	-0.05	0.118	0.145
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	163	5815	12.00	12.50	1.122	87.01	1.149	-0.03	0.051	0.066
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	163	5815	11.50	12.50	1.259	87.01	1.149	-0.03	0.311	0.450
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(4)	3/4	163	5815	12.00	12.50	1.122	87.01	1.149	0.01	0.051	0.066
	WLAN5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	Ant 4+3(3)	3/4	163	5815	11.50	12.50	1.259	87.01	1.149	0.01	0.005	0.007
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	163	5815	12.00	12.50	1.122	87.01	1.149	0.01	0.151	0.195
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	Ant 4+3(3)	3/4	163	5815	11.50	12.50	1.259	87.01	1.149	0.01	0.085	0.123
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(4)	3/4	163	5815	12.00	12.50	1.122	87.01	1.149	0.19	0.063	0.081
	WLAN5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	Ant 4+3(3)	3/4	163	5815	11.50	12.50	1.259	87.01	1.149	0.19	0.038	0.055



<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)	Measured APD (W/m ²)
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	15	6025	14.90	15.00	1.023	85.07	1.176	-0.09	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	15	6025	14.80	15.00	1.047	85.07	1.176	-0.09	0.448	0.552	2.530
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	47	6185	14.80	15.00	1.047	85.07	1.176	0.01	0.070	0.086	0.474
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	47	6185	14.50	15.00	1.122	85.07	1.176	0.01	0.460	0.607	2.520
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	111	6505	13.00	13.00	1.000	85.07	1.176	0.13	0.129	0.152	0.950
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	111	6505	12.70	13.00	1.072	85.07	1.176	0.13	0.296	0.373	2.010
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	175	6825	11.40	11.50	1.023	85.07	1.176	-0.14	0.096	0.116	0.615
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	175	6825	11.40	11.50	1.023	85.07	1.176	-0.14	0.259	0.312	1.670
35	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	207	6985	14.40	15.00	1.148	85.07	1.176	0.19	0.114	0.154	0.823
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	207	6985	14.70	15.00	1.072	85.07	1.176	0.19	0.588	0.741	3.620
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	15	6025	14.90	15.00	1.023	85.07	1.176	0.1	0.062	0.075	0.444
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(3)	1/2	15	6025	14.80	15.00	1.047	85.07	1.176	0.1	0.108	0.133	0.633
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	15	6025	14.90	15.00	1.023	85.07	1.176	0.13	0.297	0.357	2.000
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	15	6025	14.80	15.00	1.047	85.07	1.176	0.13	0.105	0.129	0.789
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	15	6025	14.90	15.00	1.023	85.07	1.176	-0.02	0.183	0.220	1.190
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(3)	1/2	15	6025	14.80	15.00	1.047	85.07	1.176	-0.02	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.19	0.093	0.112	0.598
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.19	0.317	0.381	1.750
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	47	6185	13.90	14.00	1.023	85.07	1.176	0	0.053	0.064	0.363
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	47	6185	13.70	14.00	1.072	85.07	1.176	0	0.378	0.476	2.100
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	111	6505	13.00	13.00	1.000	85.07	1.176	0.13	0.129	0.152	0.950
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	111	6505	12.70	13.00	1.072	85.07	1.176	0.13	0.296	0.373	2.010
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	175	6825	11.40	11.50	1.023	85.07	1.176	-0.14	0.096	0.116	0.615
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	175	6825	11.40	11.50	1.023	85.07	1.176	-0.14	0.259	0.312	1.670
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(4)	3/4	207	6985	13.20	13.50	1.072	85.07	1.176	0.18	0.097	0.122	0.667
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 4+3(3)	3/4	207	6985	13.40	13.50	1.023	85.07	1.176	0.18	0.257	0.309	1.680
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(4)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.1	0.023	0.028	0.119
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 4+3(3)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.1	0.101	0.122	0.534
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(4)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.12	0.204	0.245	1.400
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 4+3(3)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.12	0.108	0.130	0.799
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(4)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.05	0.124	0.149	0.844
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 4+3(3)	3/4	15	6025	13.90	14.00	1.023	85.07	1.176	-0.05	0.050	0.060	0.310



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	1	39	2441	11.91	12.00	1.021	77.22	1.079	0.06	0.071	0.078
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	1	39	2441	11.91	12.00	1.021	77.22	1.079	-0.02	0.121	0.133
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	39	2441	11.91	12.00	1.021	77.22	1.079	0.04	0.195	0.215
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	39	2441	11.91	12.00	1.021	77.22	1.079	-0.1	0.220	0.242
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	0	2402	10.79	12.00	1.321	77.22	1.079	-0.05	0.169	0.241
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	78	2480	11.50	12.00	1.122	77.22	1.079	0.04	0.192	0.232
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	11.52	12.00	1.117	77.22	1.079	-0.08	0.069	0.083
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	1	39	2441	11.52	12.00	1.117	77.22	1.079	-0.04	0.017	0.020
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	1	39	2441	11.52	12.00	1.117	77.22	1.079	-0.07	0.110	0.133
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	1	0	2402	10.62	12.00	1.374	77.22	1.079	-0.06	0.113	0.168
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	1	78	2480	10.29	12.00	1.483	77.22	1.079	-0.03	0.072	0.115
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	1	39	2441	11.52	12.00	1.117	77.22	1.079	0.02	0.009	0.011
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4+3(4)	1	39	2441	11.79	12.00	1.050	77.22	1.079	-0.11	0.084	0.095
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4+3(3)	1	39	2441	11.07	12.00	1.239	77.22	1.079	-0.11	0.065	0.087
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4+3(4)	1	39	2441	11.79	12.00	1.050	77.22	1.079	0.13	0.078	0.088
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4+3(3)	1	39	2441	11.07	12.00	1.239	77.22	1.079	0.13	0.019	0.025
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4+3(4)	1	39	2441	11.79	12.00	1.050	77.22	1.079	0.1	0.189	0.214
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4+3(3)	1	39	2441	11.07	12.00	1.239	77.22	1.079	0.1	0.085	0.114
36	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4+3(4)	1	0	2402	10.62	12.00	1.374	77.22	1.079	0.16	0.170	0.252
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4+3(3)	1	0	2402	10.51	12.00	1.409	77.22	1.079	0.16	0.104	0.158
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4+3(4)	1	78	2480	11.38	12.00	1.153	77.22	1.079	0.13	0.190	0.236
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4+3(3)	1	78	2480	10.17	12.00	1.524	77.22	1.079	0.13	0.060	0.099
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4+3(4)	1	39	2441	11.79	12.00	1.050	77.22	1.079	0.03	0.186	0.211
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4+3(3)	1	39	2441	11.07	12.00	1.239	77.22	1.079	0.03	0.020	0.027



15.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	4	128	824.2	30.35	30.50	1.035	0.02	0.684	0.708
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	128	824.2	30.35	30.50	1.035	0	0.685	0.709
37	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	189	836.4	29.80	30.50	1.175	0.09	0.659	0.774
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	251	848.8	29.77	30.50	1.183	0.05	0.632	0.748
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	128	824.2	30.35	30.50	1.035	-0.03	0.571	0.591
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	4	128	824.2	30.35	30.50	1.035	-0.01	0.190	0.197
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	4	128	824.2	30.35	30.50	1.035	0.06	0.683	0.707
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	4	128	824.2	29.38	30.50	1.294	0.02	0.267	0.346
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	4	128	824.2	29.38	30.50	1.294	0	0.363	0.470
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	4	189	836.4	29.05	30.50	1.396	0.05	0.373	0.521
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	4	251	848.8	28.90	30.50	1.445	-0.06	0.454	0.656
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	4	128	824.2	29.38	30.50	1.294	-0.03	0.146	0.189
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	4	128	824.2	29.38	30.50	1.294	0.01	0.123	0.159
	GSM850_Ant 1	GPRS (4 Tx slots)	Top Side	10mm	4	128	824.2	29.38	30.50	1.294	0.07	0.219	0.283
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	4	512	1850.2	27.09	27.40	1.074	0.02	0.495	0.532
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	4	512	1850.2	27.09	27.40	1.074	0	0.707	0.759
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Side	10mm	4	512	1850.2	27.09	27.40	1.074	0.01	0.132	0.142
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	4	512	1850.2	27.09	27.40	1.074	-0.01	0.827	0.888
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	4	661	1880	27.08	27.40	1.076	0.07	0.549	0.591
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Side	10mm	4	810	1909.8	26.86	27.40	1.132	-0.1	0.500	0.566
	GSM1900_Ant 2	GPRS (4 Tx slots)	Bottom Side	10mm	4	512	1850.2	27.09	27.40	1.074	0.06	0.197	0.212
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	4	512	1850.2	22.22	23.00	1.197	0.01	0.336	0.402
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	4	512	1850.2	22.22	23.00	1.197	-0.05	0.317	0.379
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	512	1850.2	22.22	23.00	1.197	-0.03	0.050	0.060
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	4	512	1850.2	22.22	23.00	1.197	0.05	0.001	0.001
38	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	4	512	1850.2	22.22	23.00	1.197	0.09	0.747	0.894
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	4	661	1880	22.02	23.00	1.253	0.01	0.576	0.722
	GSM1900_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	4	810	1909.8	21.37	23.00	1.455	0	0.392	0.571



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	4	9262	1852.4	21.60	22.60	1.259	0.03	0.494	0.622
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	4	9262	1852.4	21.60	22.60	1.259	-0.1	0.636	0.801
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	4	9400	1880	21.50	22.60	1.288	-0.02	0.628	0.809
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	4	9538	1907.6	21.41	22.60	1.315	0.01	0.527	0.693
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Side	10mm	4	9262	1852.4	21.60	22.60	1.259	0.02	0.072	0.091
39	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	9262	1852.4	21.60	22.60	1.259	0.13	0.711	0.895
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	9400	1880	21.50	22.60	1.288	-0.07	0.640	0.824
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	9538	1907.6	21.41	22.60	1.315	-0.06	0.576	0.758
	WCDMA II_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	4	9262	1852.4	21.60	22.60	1.259	0.03	0.169	0.213
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	4	9262	1852.4	17.62	18.00	1.091	-0.11	0.426	0.465
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	4	9262	1852.4	17.62	18.00	1.091	-0.05	0.387	0.422
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	9262	1852.4	17.62	18.00	1.091	-0.03	0.072	0.079
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Side	10mm	4	9262	1852.4	17.62	18.00	1.091	0.02	0.011	0.012
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	9262	1852.4	17.62	18.00	1.091	0.04	0.806	0.880
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	9400	1880	17.54	18.00	1.112	0.01	0.648	0.720
	WCDMA II_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	9538	1907.6	17.40	18.00	1.148	-0.06	0.557	0.640
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	4	1312	1712.4	22.57	23.00	1.104	0.02	0.370	0.409
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	4	1312	1712.4	22.57	23.00	1.104	-0.03	0.501	0.553
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Side	10mm	4	1312	1712.4	22.57	23.00	1.104	-0.09	0.072	0.079
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	1312	1712.4	22.57	23.00	1.104	-0.08	0.609	0.672
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	1413	1732.6	22.43	23.00	1.140	-0.05	0.677	0.772
40	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	1513	1752.6	22.56	23.00	1.107	0.01	0.809	0.895
	WCDMA IV_Ant 2	RMC 12.2Kbps	Bottom Side	10mm	4	1312	1712.4	22.57	23.00	1.104	0.03	0.249	0.275
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	4	1513	1752.6	17.62	18.30	1.169	0.03	0.443	0.518
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	4	1513	1752.6	17.62	18.30	1.169	-0.12	0.420	0.491
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	1513	1752.6	17.62	18.30	1.169	-0.01	0.090	0.105
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Side	10mm	4	1513	1752.6	17.62	18.30	1.169	0.06	0.010	0.012
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	1513	1752.6	17.62	18.30	1.169	-0.14	0.757	0.885
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	1312	1712.4	17.55	18.30	1.189	-0.03	0.623	0.740
	WCDMA IV_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	1413	1732.6	17.46	18.30	1.213	-0.07	0.700	0.849
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	4	4182	836.4	24.69	25.40	1.178	0.11	0.551	0.649
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	4	4182	836.4	24.69	25.40	1.178	-0.09	0.576	0.678
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	4	4132	826.4	24.67	25.40	1.183	0.14	0.603	0.713
41	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	4	4233	846.6	24.67	25.40	1.183	-0.01	0.635	0.751
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	4182	836.4	24.69	25.40	1.178	-0.08	0.397	0.468
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	4	4182	836.4	24.69	25.40	1.178	0.14	0.149	0.175
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	4	4182	836.4	24.69	25.40	1.178	-0.07	0.561	0.661
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	4	4182	836.4	24.72	25.40	1.169	0.15	0.371	0.434
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4182	836.4	24.72	25.40	1.169	0.09	0.526	0.615
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4132	826.4	24.71	25.40	1.172	0.12	0.501	0.587
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4233	846.6	24.62	25.40	1.197	-0.1	0.559	0.669
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Side	10mm	4	4182	836.4	24.72	25.40	1.169	0.04	0.205	0.240
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Side	10mm	4	4182	836.4	24.72	25.40	1.169	0.06	0.228	0.267
	WCDMA V_Ant 1	RMC 12.2Kbps	Top Side	10mm	4	4182	836.4	24.72	25.40	1.169	-0.07	0.285	0.333



<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 2_Ant 1	20M	QPSK	1	0	Front	10mm	4	18900	1880	19.16	19.90	1.186	0.01	0.384	0.455
	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	10mm	4	18900	1880	18.91	19.90	1.256	0.05	0.394	0.495
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	10mm	4	18900	1880	19.16	19.90	1.186	-0.03	0.352	0.417
	LTE Band 2_Ant 1	20M	QPSK	50	0	Back	10mm	4	18900	1880	18.91	19.90	1.256	-0.05	0.356	0.447
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Side	10mm	4	18900	1880	19.16	19.90	1.186	-0.06	0.126	0.149
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Side	10mm	4	18900	1880	18.91	19.90	1.256	0.07	0.131	0.165
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Side	10mm	4	18900	1880	19.16	19.90	1.186	0.02	0.001	0.001
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Side	10mm	4	18900	1880	18.91	19.90	1.256	-0.03	0.001	0.001
	LTE Band 2_Ant 1	20M	QPSK	1	0	Top Side	10mm	4	18900	1880	19.16	19.90	1.186	0.01	0.603	0.715
	LTE Band 2_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	18900	1880	18.91	19.90	1.256	0	0.601	0.755
	LTE Band 2_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	18700	1860	18.90	19.90	1.259	0.06	0.465	0.585
42	LTE Band 2_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	19100	1900	18.87	19.90	1.268	-0.05	0.703	0.891
	LTE Band 2_Ant 1	20M	QPSK	100	0	Top Side	10mm	4	18900	1880	18.92	19.90	1.253	-0.07	0.618	0.774
	LTE Band 2_Ant 5	20M	QPSK	1	0	Front	10mm	4	18700	1860	21.78	23.00	1.324	0.01	0.283	0.375
	LTE Band 2_Ant 5	20M	QPSK	50	0	Front	10mm	4	18700	1860	21.66	23.00	1.361	0	0.283	0.385
	LTE Band 2_Ant 5	20M	QPSK	1	0	Back	10mm	4	18700	1860	21.78	23.00	1.324	0.05	0.431	0.571
	LTE Band 2_Ant 5	20M	QPSK	50	0	Back	10mm	4	18700	1860	21.66	23.00	1.361	-0.03	0.415	0.565
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Side	10mm	4	18700	1860	21.78	23.00	1.324	-0.02	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Side	10mm	4	18700	1860	21.66	23.00	1.361	0.01	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	10mm	4	18700	1860	21.78	23.00	1.324	0.15	0.629	0.833
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	10mm	4	18900	1880	21.76	23.00	1.330	0.04	0.536	0.713
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	10mm	4	19100	1900	21.76	23.00	1.330	-0.02	0.529	0.704
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Side	10mm	4	18700	1860	21.66	23.00	1.361	0.07	0.609	0.829
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Side	10mm	4	18900	1880	21.65	23.00	1.365	-0.02	0.560	0.764
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Side	10mm	4	19100	1900	21.60	23.00	1.380	0.01	0.543	0.750
	LTE Band 2_Ant 5	20M	QPSK	100	0	Right Side	10mm	4	18700	1860	21.66	23.00	1.361	0.05	0.582	0.792
	LTE Band 2_Ant 5	20M	QPSK	1	0	Top Side	10mm	4	18700	1860	21.78	23.00	1.324	-0.02	0.063	0.083
	LTE Band 2_Ant 5	20M	QPSK	50	0	Top Side	10mm	4	18700	1860	21.66	23.00	1.361	0.1	0.067	0.091



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	4	21100	2535	21.11	22.00	1.227	0.02	0.372	0.457
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	4	21100	2535	21.05	22.00	1.245	0.05	0.381	0.474
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	4	21100	2535	21.11	22.00	1.227	-0.04	0.432	0.530
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	4	21100	2535	21.05	22.00	1.245	0.03	0.445	0.554
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	21100	2535	21.11	22.00	1.227	0	0.001	0.001
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	21100	2535	21.05	22.00	1.245	0.07	0.001	0.001
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	21100	2535	21.11	22.00	1.227	-0.1	0.614	0.754
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	20850	2510	21.05	22.00	1.245	0.08	0.624	0.777
43	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	21350	2560	21.09	22.00	1.233	-0.13	0.722	0.890
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	21100	2535	21.05	22.00	1.245	0.04	0.588	0.732
	LTE Band 7_Ant 2	20M	QPSK	100	0	Right Side	10mm	4	21100	2535	21.07	22.00	1.239	0.02	0.583	0.722
	LTE Band 7_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	21100	2535	21.11	22.00	1.227	-0.01	0.130	0.160
	LTE Band 7_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	21100	2535	21.05	22.00	1.245	0.06	0.132	0.164
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	21100+20902	2535	20.57	22.00	1.390	0.04	0.506	0.703
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	4	21100	2535	17.08	18.30	1.324	0.01	0.326	0.432
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	4	21100	2535	17.01	18.30	1.346	0.03	0.335	0.451
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	4	21100	2535	17.08	18.30	1.324	0.08	0.334	0.442
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	4	21100	2535	17.01	18.30	1.346	-0.12	0.341	0.459
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	21100	2535	17.08	18.30	1.324	-0.1	0.051	0.068
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	21100	2535	17.01	18.30	1.346	-0.02	0.052	0.070
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	21100	2535	17.08	18.30	1.324	0.13	0.001	0.001
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	21100	2535	17.01	18.30	1.346	-0.11	0.001	0.001
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	21100	2535	17.08	18.30	1.324	-0.15	0.611	0.809
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	20850	2510	16.96	18.30	1.361	0.03	0.551	0.750
	LTE Band 7_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	21350	2560	16.97	18.30	1.358	-0.02	0.614	0.834
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	21100	2535	17.01	18.30	1.346	0.04	0.595	0.801
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	20850	2510	16.97	18.30	1.358	0.03	0.562	0.763
	LTE Band 7_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	21350	2560	16.99	18.30	1.352	-0.15	0.596	0.806
	LTE Band 7_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	4	21100	2535	16.95	18.30	1.365	-0.06	0.580	0.791
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	21100+20902	2535	16.36	18.30	1.563	0.1	0.462	0.722
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	4	23095	707.5	24.61	25.40	1.199	0.02	0.325	0.390
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	4	23095	707.5	23.60	24.40	1.202	0	0.269	0.323
44	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	4	23095	707.5	24.61	25.40	1.199	-0.15	0.356	0.427
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	4	23095	707.5	23.60	24.40	1.202	-0.02	0.298	0.358
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	4	23095	707.5	24.61	25.40	1.199	-0.1	0.309	0.371
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Side	10mm	4	23095	707.5	23.60	24.40	1.202	0.01	0.233	0.280
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	4	23095	707.5	24.61	25.40	1.199	0.02	0.164	0.197
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Side	10mm	4	23095	707.5	23.60	24.40	1.202	-0.03	0.134	0.161
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	4	23095	707.5	24.61	25.40	1.199	0.05	0.331	0.397
	LTE Band 12_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	4	23095	707.5	23.60	24.40	1.202	-0.01	0.258	0.310
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	4	23095	707.5	24.77	25.40	1.156	0.01	0.237	0.274
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	4	23095	707.5	23.75	24.40	1.161	0	0.197	0.229
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	4	23095	707.5	24.77	25.40	1.156	-0.05	0.273	0.316
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	4	23095	707.5	23.75	24.40	1.161	0.04	0.225	0.261
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Side	10mm	4	23095	707.5	24.77	25.40	1.156	-0.03	0.229	0.265
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Side	10mm	4	23095	707.5	23.75	24.40	1.161	0.02	0.119	0.138
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Side	10mm	4	23095	707.5	24.77	25.40	1.156	-0.05	0.176	0.203
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Side	10mm	4	23095	707.5	23.75	24.40	1.161	0.06	0.168	0.195
	LTE Band 12_Ant 1	10M	QPSK	1	0	Top Side	10mm	4	23095	707.5	24.77	25.40	1.156	0.1	0.170	0.197
	LTE Band 12_Ant 1	10M	QPSK	25	0	Top Side	10mm	4	23095	707.5	23.75	24.40	1.161	0.05	0.100	0.116



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	Front	10mm	4	23230	782	24.47	25.40	1.239	0.02	0.470	0.582
	LTE Band 13_Ant 0	10M	QPSK	25	0	Front	10mm	4	23230	782	23.50	24.40	1.230	0	0.385	0.474
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	4	23230	782	24.47	25.40	1.239	-0.07	0.545	0.675
	LTE Band 13_Ant 0	10M	QPSK	25	0	Back	10mm	4	23230	782	23.50	24.40	1.230	0.05	0.443	0.545
45	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Side	10mm	4	23230	782	24.47	25.40	1.239	-0.08	0.665	0.824
	LTE Band 13_Ant 0	10M	QPSK	25	0	Left Side	10mm	4	23230	782	23.50	24.40	1.230	0.01	0.521	0.641
	LTE Band 13_Ant 0	10M	QPSK	50	0	Left Side	10mm	4	23230	782	23.46	24.40	1.242	0.04	0.543	0.674
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Side	10mm	4	23230	782	24.47	25.40	1.239	-0.03	0.298	0.369
	LTE Band 13_Ant 0	10M	QPSK	25	0	Right Side	10mm	4	23230	782	23.50	24.40	1.230	0.02	0.216	0.266
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	4	23230	782	24.47	25.40	1.239	0.05	0.531	0.658
	LTE Band 13_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	4	23230	782	23.50	24.40	1.230	-0.01	0.388	0.477
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	4	23230	782	24.71	25.40	1.172	0.01	0.308	0.361
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	4	23230	782	23.65	24.40	1.189	0	0.251	0.298
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	4	23230	782	24.71	25.40	1.172	-0.08	0.402	0.471
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	4	23230	782	23.65	24.40	1.189	0.05	0.311	0.370
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Side	10mm	4	23230	782	24.71	25.40	1.172	-0.02	0.297	0.348
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Side	10mm	4	23230	782	23.65	24.40	1.189	0.03	0.205	0.244
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Side	10mm	4	23230	782	24.71	25.40	1.172	-0.04	0.239	0.280
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Side	10mm	4	23230	782	23.65	24.40	1.189	-0.06	0.213	0.253
	LTE Band 13_Ant 1	10M	QPSK	1	0	Top Side	10mm	4	23230	782	24.71	25.40	1.172	0.1	0.193	0.226
	LTE Band 13_Ant 1	10M	QPSK	25	0	Top Side	10mm	4	23230	782	23.65	24.40	1.189	0.07	0.182	0.216
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	10mm	4	23330	793	24.55	25.40	1.216	0.01	0.544	0.662
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	4	23330	793	23.55	24.40	1.216	0	0.414	0.504
46	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	4	23330	793	24.55	25.40	1.216	0.07	0.607	0.738
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	4	23330	793	23.55	24.40	1.216	0.05	0.493	0.600
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Side	10mm	4	23330	793	24.55	25.40	1.216	-0.02	0.543	0.660
	LTE Band 14_Ant 0	10M	QPSK	25	0	Left Side	10mm	4	23330	793	23.55	24.40	1.216	0.03	0.447	0.544
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Side	10mm	4	23330	793	24.55	25.40	1.216	0.01	0.226	0.275
	LTE Band 14_Ant 0	10M	QPSK	25	0	Right Side	10mm	4	23330	793	23.55	24.40	1.216	-0.04	0.181	0.220
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	4	23330	793	24.55	25.40	1.216	0.01	0.566	0.688
	LTE Band 14_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	4	23330	793	23.55	24.40	1.216	0.05	0.457	0.556
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	4	23330	793	24.72	25.40	1.169	0.02	0.311	0.364
	LTE Band 14_Ant 1	10M	QPSK	25	0	Front	10mm	4	23330	793	23.75	24.40	1.161	0.01	0.251	0.292
	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	4	23330	793	24.72	25.40	1.169	0.11	0.392	0.458
	LTE Band 14_Ant 1	10M	QPSK	25	0	Back	10mm	4	23330	793	23.75	24.40	1.161	0	0.317	0.368
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Side	10mm	4	23330	793	24.72	25.40	1.169	0.05	0.281	0.329
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Side	10mm	4	23330	793	23.75	24.40	1.161	-0.03	0.238	0.276
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Side	10mm	4	23330	793	24.72	25.40	1.169	0.04	0.234	0.274
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Side	10mm	4	23330	793	23.75	24.40	1.161	-0.05	0.202	0.235
	LTE Band 14_Ant 1	10M	QPSK	1	0	Top Side	10mm	4	23330	793	24.72	25.40	1.169	0.06	0.238	0.278
	LTE Band 14_Ant 1	10M	QPSK	25	0	Top Side	10mm	4	23330	793	23.75	24.40	1.161	0.1	0.182	0.211



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 25_Ant 2	20M	QPSK	1	0	Front	10mm	4	26340	1880	22.35	23.40	1.274	0.01	0.336	0.428
	LTE Band 25_Ant 2	20M	QPSK	50	0	Front	10mm	4	26340	1880	22.22	23.40	1.312	0	0.335	0.440
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	4	26340	1880	22.35	23.40	1.274	0.05	0.595	0.758
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	4	26140	1860	22.23	23.40	1.309	-0.03	0.602	0.788
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	4	26590	1905	22.14	23.40	1.337	0.06	0.614	0.821
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	4	26340	1880	22.22	23.40	1.312	0.01	0.519	0.681
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	4	26340	1880	22.18	23.40	1.324	-0.08	0.510	0.675
	LTE Band 25_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	26340	1880	22.35	23.40	1.274	0.1	0.071	0.090
	LTE Band 25_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	26340	1880	22.22	23.40	1.312	0.04	0.069	0.091
	LTE Band 25_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	26340	1880	22.35	23.40	1.274	-0.05	0.464	0.591
	LTE Band 25_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	26340	1880	22.22	23.40	1.312	0.03	0.438	0.575
	LTE Band 25_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	26340	1880	22.35	23.40	1.274	0.02	0.125	0.159
	LTE Band 25_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	26340	1880	22.22	23.40	1.312	0.07	0.133	0.175
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	4	26340	1880	17.77	18.80	1.268	0.02	0.342	0.434
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	4	26340	1880	17.74	18.80	1.276	0	0.336	0.429
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	4	26340	1880	17.77	18.80	1.268	0.03	0.314	0.398
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	4	26340	1880	17.74	18.80	1.276	-0.05	0.314	0.401
	LTE Band 25_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	26340	1880	17.77	18.80	1.268	0.02	0.061	0.077
	LTE Band 25_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	26340	1880	17.74	18.80	1.276	0	0.062	0.079
	LTE Band 25_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	26340	1880	17.77	18.80	1.268	0.05	0.001	0.001
	LTE Band 25_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	26340	1880	17.74	18.80	1.276	-0.04	0.001	0.001
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	26340	1880	17.77	18.80	1.268	0.02	0.549	0.696
47	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	26140	1860	17.72	18.80	1.282	-0.01	0.691	0.886
	LTE Band 25_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	26590	1905	17.41	18.80	1.377	0	0.446	0.614
	LTE Band 25_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	26340	1880	17.74	18.80	1.276	0.01	0.539	0.688
	LTE Band 25_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	4	26340	1880	17.54	18.80	1.337	0.03	0.530	0.708
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	4	26865	831.5	24.46	25.40	1.242	0.07	0.434	0.539
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	4	26865	831.5	23.45	24.40	1.245	0.02	0.340	0.423
48	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	4	26865	831.5	24.46	25.40	1.242	0.06	0.493	0.612
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	4	26865	831.5	23.45	24.40	1.245	0.01	0.391	0.487
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	4	26865	831.5	24.46	25.40	1.242	0	0.380	0.472
	LTE Band 26_Ant 0	15M	QPSK	36	0	Left Side	10mm	4	26865	831.5	23.45	24.40	1.245	0.05	0.312	0.388
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	4	26865	831.5	24.46	25.40	1.242	-0.02	0.125	0.155
	LTE Band 26_Ant 0	15M	QPSK	36	0	Right Side	10mm	4	26865	831.5	23.45	24.40	1.245	0.03	0.102	0.127
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	4	26865	831.5	24.46	25.40	1.242	-0.04	0.466	0.579
	LTE Band 26_Ant 0	15M	QPSK	36	0	Bottom Side	10mm	4	26865	831.5	23.45	24.40	1.245	0.08	0.373	0.464
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	4	20525+20624	836.5	23.07	23.70	1.156	0.05	0.330	0.382
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	4	26865	831.5	24.84	25.40	1.138	0.01	0.289	0.329
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	4	26865	831.5	23.75	24.40	1.161	0	0.233	0.271
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	4	26865	831.5	24.84	25.40	1.138	0.04	0.416	0.473
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	4	26865	831.5	23.75	24.40	1.161	0.05	0.344	0.400
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Side	10mm	4	26865	831.5	24.84	25.40	1.138	-0.02	0.153	0.174
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Side	10mm	4	26865	831.5	23.75	24.40	1.161	0.04	0.122	0.142
	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Side	10mm	4	26865	831.5	24.84	25.40	1.138	-0.01	0.213	0.242
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Side	10mm	4	26865	831.5	23.75	24.40	1.161	0.05	0.177	0.206
	LTE Band 26_Ant 1	15M	QPSK	1	0	Top Side	10mm	4	26865	831.5	24.84	25.40	1.138	0.09	0.207	0.235
	LTE Band 26_Ant 1	15M	QPSK	36	0	Top Side	10mm	4	26865	831.5	23.75	24.40	1.161	-0.1	0.165	0.192
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	4	20525+20624	836.5	23.89	24.00	1.026	0.03	0.289	0.296



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 30_Ant 2	10M	QPSK	1	0	Front	10mm	4	27710	2310	21.84	22.10	1.062	0.02	0.461	0.489
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	4	27710	2310	21.88	22.10	1.052	0	0.474	0.499
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	4	27710	2310	21.84	22.10	1.062	0.06	0.519	0.551
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	4	27710	2310	21.88	22.10	1.052	0.02	0.513	0.540
	LTE Band 30_Ant 2	10M	QPSK	1	0	Left Side	10mm	4	27710	2310	21.84	22.10	1.062	-0.01	0.001	0.001
	LTE Band 30_Ant 2	10M	QPSK	25	0	Left Side	10mm	4	27710	2310	21.88	22.10	1.052	0.04	0.001	0.001
49	LTE Band 30_Ant 2	10M	QPSK	1	0	Right Side	10mm	4	27710	2310	21.84	22.10	1.062	-0.03	0.828	0.879
	LTE Band 30_Ant 2	10M	QPSK	25	0	Right Side	10mm	4	27710	2310	21.88	22.10	1.052	-0.08	0.830	0.873
	LTE Band 30_Ant 2	10M	QPSK	50	0	Right Side	10mm	4	27710	2310	21.86	22.10	1.057	0.1	0.778	0.822
	LTE Band 30_Ant 2	10M	QPSK	1	0	Bottom Side	10mm	4	27710	2310	21.84	22.10	1.062	0.07	0.219	0.233
	LTE Band 30_Ant 2	10M	QPSK	25	0	Bottom Side	10mm	4	27710	2310	21.88	22.10	1.052	-0.03	0.217	0.228
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	4	27710	2310	17.36	18.00	1.159	0.01	0.337	0.391
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	4	27710	2310	17.31	18.00	1.172	0.11	0.334	0.392
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	4	27710	2310	17.36	18.00	1.159	0.02	0.362	0.419
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	4	27710	2310	17.31	18.00	1.172	0.06	0.356	0.417
	LTE Band 30_Ant 0	10M	QPSK	1	0	Left Side	10mm	4	27710	2310	17.36	18.00	1.159	-0.11	0.040	0.046
	LTE Band 30_Ant 0	10M	QPSK	25	0	Left Side	10mm	4	27710	2310	17.31	18.00	1.172	-0.19	0.036	0.042
	LTE Band 30_Ant 0	10M	QPSK	1	0	Right Side	10mm	4	27710	2310	17.36	18.00	1.159	-0.11	0.001	0.001
	LTE Band 30_Ant 0	10M	QPSK	25	0	Right Side	10mm	4	27710	2310	17.31	18.00	1.172	-0.15	0.001	0.001
	LTE Band 30_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	4	27710	2310	17.36	18.00	1.159	0.01	0.673	0.780
	LTE Band 30_Ant 0	10M	QPSK	25	0	Bottom Side	10mm	4	27710	2310	17.31	18.00	1.172	0.06	0.659	0.772



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Ant 2	20M	QPSK	1	0	Front	10mm	4	132322	1745	22.39	23.30	1.233	0.01	0.445	0.549
	LTE Band 66_Ant 2	20M	QPSK	50	0	Front	10mm	4	132322	1745	22.42	23.30	1.225	0	0.454	0.556
	LTE Band 66_Ant 2	20M	QPSK	1	0	Back	10mm	4	132322	1745	22.39	23.30	1.233	0.05	0.526	0.649
	LTE Band 66_Ant 2	20M	QPSK	50	0	Back	10mm	4	132322	1745	22.42	23.30	1.225	0.04	0.581	0.712
	LTE Band 66_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	132322	1745	22.39	23.30	1.233	0.01	0.064	0.079
	LTE Band 66_Ant 2	20M	QPSK	50	0	Left Side	10mm	4	132322	1745	22.42	23.30	1.225	0	0.058	0.071
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	132322	1745	22.39	23.30	1.233	-0.01	0.671	0.827
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	132072	1720	22.38	23.30	1.236	0.05	0.593	0.733
	LTE Band 66_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	132572	1770	22.35	23.30	1.245	-0.02	0.639	0.795
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	132322	1745	22.42	23.30	1.225	-0.03	0.655	0.802
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	132072	1720	22.39	23.30	1.233	0.04	0.585	0.721
	LTE Band 66_Ant 2	20M	QPSK	50	0	Right Side	10mm	4	132572	1770	22.41	23.30	1.227	0.01	0.666	0.817
	LTE Band 66_Ant 2	20M	QPSK	100	0	Right Side	10mm	4	132322	1745	22.37	23.30	1.239	0.08	0.665	0.824
	LTE Band 66_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	132322	1745	22.39	23.30	1.233	-0.07	0.228	0.281
	LTE Band 66_Ant 2	20M	QPSK	50	0	Bottom Side	10mm	4	132322	1745	22.42	23.30	1.225	-0.1	0.200	0.245
	LTE Band 66B_Ant 2	15M	QPSK	1	0	Right Side	10mm	4	132322+132229	1745	22.83	23.30	1.114	0.08	0.671	0.748
	LTE Band 66C_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	132322+132124	1745	22.97	23.30	1.079	-0.06	0.699	0.754
	LTE Band 66_Ant 0	20M	QPSK	1	0	Front	10mm	4	132322	1745	16.41	17.30	1.227	0.03	0.395	0.485
	LTE Band 66_Ant 0	20M	QPSK	50	0	Front	10mm	4	132322	1745	16.52	17.30	1.197	-0.11	0.406	0.486
	LTE Band 66_Ant 0	20M	QPSK	1	0	Back	10mm	4	132322	1745	16.41	17.30	1.227	-0.19	0.361	0.443
	LTE Band 66_Ant 0	20M	QPSK	50	0	Back	10mm	4	132322	1745	16.52	17.30	1.197	0.05	0.365	0.437
	LTE Band 66_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	132322	1745	16.41	17.30	1.227	-0.11	0.073	0.090
	LTE Band 66_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	132322	1745	16.52	17.30	1.197	-0.1	0.076	0.091
	LTE Band 66_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	132322	1745	16.41	17.30	1.227	0	0.001	0.001
	LTE Band 66_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	132322	1745	16.52	17.30	1.197	0	0.001	0.001
50	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	132322	1745	16.41	17.30	1.227	-0.14	0.726	0.891
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	132072	1720	16.40	17.30	1.230	-0.15	0.627	0.771
	LTE Band 66_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	132572	1770	16.18	17.30	1.294	0.15	0.641	0.830
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	132322	1745	16.52	17.30	1.197	-0.11	0.726	0.869
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	132072	1720	16.51	17.30	1.199	0.03	0.699	0.838
	LTE Band 66_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	132572	1770	16.26	17.30	1.271	-0.04	0.691	0.878
	LTE Band 66_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	4	132322	1745	16.39	17.30	1.233	0.07	0.670	0.826
	LTE Band 66B_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	4	132322+132229	1745	15.33	17.30	1.574	0.07	0.421	0.663
	LTE Band 66C_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	132322+132124	1745	15.98	17.30	1.355	0.01	0.482	0.653



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 1	20M	QPSK	1	0	Front	10mm	4	132072	1720	22.63	23.20	1.140	0.01	0.427	0.487
	LTE Band 66_Ant 1	20M	QPSK	50	0	Front	10mm	4	132072	1720	22.39	23.20	1.205	0.05	0.401	0.483
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	4	132072	1720	22.63	23.20	1.140	-0.03	0.410	0.468
	LTE Band 66_Ant 1	20M	QPSK	50	0	Back	10mm	4	132072	1720	22.39	23.20	1.205	0.02	0.402	0.484
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	4	132072	1720	22.63	23.20	1.140	-0.04	0.119	0.136
	LTE Band 66_Ant 1	20M	QPSK	50	0	Left Side	10mm	4	132072	1720	22.39	23.20	1.205	0.01	0.128	0.154
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Side	10mm	4	132072	1720	22.63	23.20	1.140	0.05	0.001	0.001
	LTE Band 66_Ant 1	20M	QPSK	50	0	Right Side	10mm	4	132072	1720	22.39	23.20	1.205	0	0.001	0.001
	LTE Band 66_Ant 1	20M	QPSK	1	0	Top Side	10mm	4	132072	1720	22.63	23.20	1.140	0.06	0.532	0.607
	LTE Band 66_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	132072	1720	22.39	23.20	1.205	-0.04	0.568	0.684
	LTE Band 66_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	132322	1745	22.31	23.20	1.227	0.02	0.718	0.881
	LTE Band 66_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	132572	1770	22.30	23.20	1.230	0.04	0.696	0.856
	LTE Band 66_Ant 1	20M	QPSK	100	0	Top Side	10mm	4	132072	1720	22.25	23.20	1.245	-0.03	0.606	0.754
	LTE Band 66_Ant 5	20M	QPSK	1	0	Front	10mm	4	132072	1720	24.60	25.20	1.148	-0.16	0.183	0.210
	LTE Band 66_Ant 5	20M	QPSK	50	0	Front	10mm	4	132072	1720	23.45	24.20	1.189	-0.15	0.151	0.179
	LTE Band 66_Ant 5	20M	QPSK	1	0	Back	10mm	4	132072	1720	24.60	25.20	1.148	-0.11	0.401	0.460
	LTE Band 66_Ant 5	20M	QPSK	50	0	Back	10mm	4	132072	1720	23.45	24.20	1.189	0.06	0.195	0.232
	LTE Band 66_Ant 5	20M	QPSK	1	0	Left Side	10mm	4	132072	1720	24.60	25.20	1.148	0	0.001	0.001
	LTE Band 66_Ant 5	20M	QPSK	50	0	Left Side	10mm	4	132072	1720	23.45	24.20	1.189	0	0.001	0.001
	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	10mm	4	132072	1720	24.60	25.20	1.148	0.11	0.363	0.417
	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	10mm	4	132322	1745	24.48	25.20	1.180	-0.11	0.459	0.542
	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	10mm	4	132572	1770	24.19	25.20	1.262	-0.15	0.480	0.606
	LTE Band 66_Ant 5	20M	QPSK	50	0	Right Side	10mm	4	132072	1720	23.45	24.20	1.189	-0.12	0.298	0.354
	LTE Band 66_Ant 5	20M	QPSK	1	0	Top Side	10mm	4	132072	1720	24.60	25.20	1.148	-0.05	0.040	0.046
	LTE Band 66_Ant 5	20M	QPSK	50	0	Top Side	10mm	4	132072	1720	23.45	24.20	1.189	-0.09	0.030	0.036
	LTE Band 71_Ant 0	20M	QPSK	1	0	Front	10mm	4	133297	680.5	24.79	25.40	1.151	0.01	0.292	0.336
	LTE Band 71_Ant 0	20M	QPSK	50	0	Front	10mm	4	133297	680.5	23.78	24.40	1.153	0.04	0.222	0.256
	LTE Band 71_Ant 0	20M	QPSK	1	0	Back	10mm	4	133297	680.5	24.79	25.40	1.151	0.03	0.293	0.337
	LTE Band 71_Ant 0	20M	QPSK	50	0	Back	10mm	4	133297	680.5	23.78	24.40	1.153	-0.03	0.229	0.264
51	LTE Band 71_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	133297	680.5	24.79	25.40	1.151	-0.06	0.381	0.438
	LTE Band 71_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	133297	680.5	23.78	24.40	1.153	0.02	0.316	0.364
	LTE Band 71_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	133297	680.5	24.79	25.40	1.151	0.01	0.159	0.183
	LTE Band 71_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	133297	680.5	23.78	24.40	1.153	-0.03	0.150	0.173
	LTE Band 71_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	133297	680.5	24.79	25.40	1.151	0.05	0.240	0.276
	LTE Band 71_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	133297	680.5	23.78	24.40	1.153	0	0.194	0.224
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	4	133297	680.5	24.92	25.40	1.117	0.02	0.221	0.247
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	4	133297	680.5	23.96	24.40	1.107	0	0.182	0.201
	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	4	133297	680.5	24.92	25.40	1.117	-0.13	0.223	0.249
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	4	133297	680.5	23.96	24.40	1.107	0.05	0.184	0.204
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Side	10mm	4	133297	680.5	24.92	25.40	1.117	-0.03	0.210	0.235
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Side	10mm	4	133297	680.5	23.96	24.40	1.107	0.01	0.167	0.185
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Side	10mm	4	133297	680.5	24.92	25.40	1.117	0.04	0.169	0.189
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Side	10mm	4	133297	680.5	23.96	24.40	1.107	-0.02	0.140	0.155
	LTE Band 71_Ant 1	20M	QPSK	1	0	Top Side	10mm	4	133297	680.5	24.92	25.40	1.117	0.05	0.119	0.133
	LTE Band 71_Ant 1	20M	QPSK	50	0	Top Side	10mm	4	133297	680.5	23.96	24.40	1.107	-0.07	0.080	0.089



<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	0	Front	10mm	4	40185	2549.5	24.80	25.40	1.148	62.9	1.006	0.02	0.455	0.526
	LTE Band 41_Ant 2	20M	QPSK	50	50	Front	10mm	4	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0	0.290	0.330
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	40185	2549.5	24.80	25.40	1.148	62.9	1.006	0.05	0.527	0.609
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	39750	2506	24.29	25.40	1.291	62.9	1.006	-0.01	0.557	0.724
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	40620	2593	24.59	25.40	1.205	62.9	1.006	0.07	0.617	0.748
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	41055	2636.5	24.54	25.40	1.219	62.9	1.006	0	0.639	0.784
	LTE Band 41_Ant 2	20M	QPSK	1	0	Back	10mm	4	41490	2680	24.58	25.40	1.208	62.9	1.006	0.1	0.500	0.608
	LTE Band 41_Ant 2	20M	QPSK	50	50	Back	10mm	4	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0.05	0.332	0.378
	LTE Band 41_Ant 2	20M	QPSK	1	0	Left Side	10mm	4	40185	2549.5	24.80	25.40	1.148	62.9	1.006	0.01	0.028	0.032
	LTE Band 41_Ant 2	20M	QPSK	50	50	Left Side	10mm	4	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0	0.023	0.026
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40185	2549.5	24.80	25.40	1.148	62.9	1.006	0.07	0.550	0.635
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	39750	2506	24.29	25.40	1.291	62.9	1.006	-0.03	0.644	0.837
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40620	2593	24.59	25.40	1.205	62.9	1.006	-0.02	0.693	0.840
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41055	2636.5	24.54	25.40	1.219	62.9	1.006	0.05	0.613	0.752
	LTE Band 41_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41490	2680	24.58	25.40	1.208	62.9	1.006	-0.07	0.400	0.486
	LTE Band 41_Ant 2	20M	QPSK	50	50	Right Side	10mm	4	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0.05	0.368	0.419
	LTE Band 41_Ant 2	20M	QPSK	100	0	Right Side	10mm	4	40185	2549.5	22.84	23.40	1.138	62.9	1.006	0.08	0.379	0.434
	LTE Band 41_Ant 2	20M	QPSK	1	0	Bottom Side	10mm	4	40185	2549.5	24.80	25.40	1.148	62.9	1.006	-0.1	0.149	0.172
	LTE Band 41_Ant 2	20M	QPSK	50	50	Bottom Side	10mm	4	40185	2549.5	22.86	23.40	1.132	62.9	1.006	0.09	0.086	0.098
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40620	2593	26.13	26.90	1.194	42.9	1.009	-0.05	0.666	0.802
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	39750	2506	25.84	26.90	1.276	42.9	1.009	0.03	0.618	0.796
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40185	2549.5	26.38	26.90	1.127	42.9	1.009	-0.02	0.528	0.601
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41055	2636.5	25.99	26.90	1.233	42.9	1.009	0.01	0.578	0.719
	LTE Band 41 HPUE_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	41490	2680	26.08	26.90	1.208	42.9	1.009	-0.07	0.386	0.470
	LTE Band 41C_Ant 2	20M	QPSK	1	0	Right Side	10mm	4	40620+40422	2593	23.58	23.90	1.076	62.9	1.006	0.07	0.539	0.584
	LTE Band 41_Ant 0	20M	QPSK	1	0	Front	10mm	4	40185	2549.5	20.58	20.70	1.028	62.9	1.006	0.02	0.367	0.380
	LTE Band 41_Ant 0	20M	QPSK	50	0	Front	10mm	4	40185	2549.5	20.55	20.70	1.035	62.9	1.006	0	0.364	0.379
	LTE Band 41_Ant 0	20M	QPSK	1	0	Back	10mm	4	40185	2549.5	20.58	20.70	1.028	62.9	1.006	0.05	0.412	0.426
	LTE Band 41_Ant 0	20M	QPSK	50	0	Back	10mm	4	40185	2549.5	20.55	20.70	1.035	62.9	1.006	-0.03	0.405	0.422
	LTE Band 41_Ant 0	20M	QPSK	1	0	Left Side	10mm	4	40185	2549.5	20.58	20.70	1.028	62.9	1.006	0.02	0.058	0.060
	LTE Band 41_Ant 0	20M	QPSK	50	0	Left Side	10mm	4	40185	2549.5	20.55	20.70	1.035	62.9	1.006	0	0.054	0.056
	LTE Band 41_Ant 0	20M	QPSK	1	0	Right Side	10mm	4	40185	2549.5	20.58	20.70	1.028	62.9	1.006	0.01	0.001	0.001
	LTE Band 41_Ant 0	20M	QPSK	50	0	Right Side	10mm	4	40185	2549.5	20.55	20.70	1.035	62.9	1.006	0.07	0.001	0.001
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	40185	2549.5	20.58	20.70	1.028	62.9	1.006	-0.05	0.668	0.691
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	39750	2506	19.92	20.70	1.197	62.9	1.006	0.01	0.640	0.771
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	40620	2593	20.10	20.70	1.148	62.9	1.006	0.1	0.707	0.817
52	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	41055	2636.5	19.83	20.70	1.222	62.9	1.006	0.11	0.725	0.891
	LTE Band 41_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	41490	2680	20.27	20.70	1.104	62.9	1.006	0.09	0.688	0.764
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	40185	2549.5	20.55	20.70	1.035	62.9	1.006	-0.08	0.673	0.701
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	39750	2506	19.93	20.70	1.194	62.9	1.006	0.06	0.616	0.740
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	40620	2593	20.13	20.70	1.140	62.9	1.006	-0.04	0.681	0.781
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	41055	2636.5	19.81	20.70	1.227	62.9	1.006	0.02	0.697	0.861
	LTE Band 41_Ant 0	20M	QPSK	50	0	Bottom Side	10mm	4	41490	2680	20.19	20.70	1.125	62.9	1.006	0.01	0.666	0.753
	LTE Band 41_Ant 0	20M	QPSK	100	0	Bottom Side	10mm	4	40185	2549.5	20.55	20.70	1.035	62.9	1.006	-0.03	0.656	0.683
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	41055	2636.5	20.95	22.30	1.365	42.9	1.009	-0.18	0.579	0.797
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	39750	2506	21.06	22.30	1.330	42.9	1.009	-0.02	0.516	0.693
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	40185	2549.5	21.70	22.30	1.148	42.9	1.009	0.07	0.544	0.630
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	40620	2593	21.24	22.30	1.276	42.9	1.009	-0.03	0.574	0.739
	LTE Band 41 HPUE_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	41490	2680	21.48	22.30	1.208	42.9	1.009	0.02	0.551	0.671
	LTE Band 41C_Ant 0	20M	QPSK	1	0	Bottom Side	10mm	4	40620+40422	2593	19.10	20.70	1.445	62.9	1.006	0.06	0.534	0.776



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	4	56640	3690	23.69	24.30	1.151	62.9	1.006	0.01	0.523	0.605
53	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	4	55340	3560	23.68	24.30	1.153	62.9	1.006	0.03	0.709	0.823
	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	4	55830	3609	23.56	24.30	1.186	62.9	1.006	0	0.639	0.762
	LTE Band 48_Ant 6	20M	QPSK	1	0	Front	10mm	4	56150	3641	23.41	24.30	1.227	62.9	1.006	-0.02	0.604	0.746
	LTE Band 48_Ant 6	20M	QPSK	50	0	Front	10mm	4	56640	3690	23.61	24.30	1.172	62.9	1.006	0.05	0.501	0.591
	LTE Band 48_Ant 6	20M	QPSK	100	0	Front	10mm	4	56640	3690	23.56	24.30	1.186	62.9	1.006	0.01	0.491	0.586
	LTE Band 48_Ant 6	20M	QPSK	1	0	Back	10mm	4	55830	3609	23.56	24.30	1.186	62.9	1.006	-0.03	0.352	0.420
	LTE Band 48_Ant 6	20M	QPSK	50	0	Back	10mm	4	55830	3609	23.55	24.30	1.189	62.9	1.006	-0.04	0.351	0.420
	LTE Band 48_Ant 6	20M	QPSK	1	0	Left Side	10mm	4	56640	3690	23.69	24.30	1.151	62.9	1.006	-0.01	0.459	0.531
	LTE Band 48_Ant 6	20M	QPSK	50	0	Left Side	10mm	4	56640	3690	23.61	24.30	1.172	62.9	1.006	0.05	0.460	0.542
	LTE Band 48_Ant 6	20M	QPSK	1	0	Right Side	10mm	4	56640	3690	23.69	24.30	1.151	62.9	1.006	0.01	0.001	0.001
	LTE Band 48_Ant 6	20M	QPSK	50	0	Right Side	10mm	4	56640	3690	23.61	24.30	1.172	62.9	1.006	0.1	0.001	0.001
	LTE Band 48_Ant 6	20M	QPSK	1	0	Bottom Side	10mm	4	56640	3690	23.69	24.30	1.151	62.9	1.006	0.08	0.166	0.192
	LTE Band 48_Ant 6	20M	QPSK	50	0	Bottom Side	10mm	4	56640	3690	23.61	24.30	1.172	62.9	1.006	-0.09	0.164	0.193
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	4	56640	3690	23.88	24.80	1.236	62.9	1.006	0.02	0.406	0.505
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	4	55340	3560	23.15	24.80	1.462	62.9	1.006	-0.03	0.366	0.538
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	4	55830	3609	23.41	24.80	1.377	62.9	1.006	0.01	0.282	0.391
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	4	56150	3641	23.59	24.80	1.321	62.9	1.006	-0.03	0.347	0.461
	LTE Band 48_Ant 7	20M	QPSK	50	0	Front	10mm	4	56640	3690	22.82	23.80	1.253	62.9	1.006	0.05	0.316	0.398
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	4	56640	3690	23.88	24.80	1.236	62.9	1.006	-0.04	0.264	0.328
	LTE Band 48_Ant 7	20M	QPSK	50	0	Back	10mm	4	56640	3690	22.82	23.80	1.253	62.9	1.006	0.1	0.223	0.281
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	4	56640	3690	23.88	24.80	1.236	62.9	1.006	0.08	0.083	0.103
	LTE Band 48_Ant 7	20M	QPSK	50	0	Left Side	10mm	4	56640	3690	22.82	23.80	1.253	62.9	1.006	-0.01	0.068	0.086
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Side	10mm	4	56640	3690	23.88	24.80	1.236	62.9	1.006	0.05	0.182	0.226
	LTE Band 48_Ant 7	20M	QPSK	50	0	Right Side	10mm	4	56640	3690	22.82	23.80	1.253	62.9	1.006	0.07	0.133	0.168
	LTE Band 48_Ant 7	20M	QPSK	1	0	Bottom Side	10mm	4	56640	3690	23.88	24.80	1.236	62.9	1.006	-0.1	0.303	0.377
	LTE Band 48_Ant 7	20M	QPSK	50	0	Bottom Side	10mm	4	56640	3690	22.82	23.80	1.253	62.9	1.006	0.05	0.260	0.328



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n2_Ant 1	20M	BPSK	1	53	Front	10mm	4	376000	1880	20.07	20.40	1.079	0.01	0.483	0.521
	FR1 n2_Ant 1	20M	BPSK	50	28	Front	10mm	4	376000	1880	19.85	20.40	1.135	0	0.479	0.544
	FR1 n2_Ant 1	20M	BPSK	1	53	Back	10mm	4	376000	1880	20.07	20.40	1.079	-0.07	0.401	0.433
	FR1 n2_Ant 1	20M	BPSK	50	28	Back	10mm	4	376000	1880	19.85	20.40	1.135	0.1	0.411	0.466
	FR1 n2_Ant 1	20M	BPSK	1	53	Left Side	10mm	4	376000	1880	20.07	20.40	1.079	0.02	0.138	0.149
	FR1 n2_Ant 1	20M	BPSK	50	28	Left Side	10mm	4	376000	1880	19.85	20.40	1.135	0.06	0.137	0.155
	FR1 n2_Ant 1	20M	BPSK	1	53	Right Side	10mm	4	376000	1880	20.07	20.40	1.079	-0.07	0.001	0.001
	FR1 n2_Ant 1	20M	BPSK	50	28	Right Side	10mm	4	376000	1880	19.85	20.40	1.135	0.08	0.001	0.001
	FR1 n2_Ant 1	20M	BPSK	1	53	Top Side	10mm	4	376000	1880	20.07	20.40	1.079	-0.05	0.723	0.780
	FR1 n2_Ant 1	20M	BPSK	1	53	Top Side	10mm	4	372000	1860	20.06	20.40	1.081	0.02	0.584	0.632
54	FR1 n2_Ant 1	20M	BPSK	1	53	Top Side	10mm	4	380000	1900	20.05	20.40	1.084	0	0.803	0.870
	FR1 n2_Ant 1	20M	BPSK	50	28	Top Side	10mm	4	376000	1880	19.85	20.40	1.135	0.03	0.655	0.743
	FR1 n2_Ant 1	20M	BPSK	100	0	Top Side	10mm	4	376000	1880	19.84	20.40	1.138	-0.04	0.679	0.772
	FR1 n2_Ant 5	20M	BPSK	1	53	Front	10mm	4	376000	1880	22.80	23.80	1.259	0.03	0.251	0.316
	FR1 n2_Ant 5	20M	BPSK	50	28	Front	10mm	4	376000	1880	22.58	23.80	1.324	-0.05	0.254	0.336
	FR1 n2_Ant 5	20M	BPSK	1	53	Back	10mm	4	376000	1880	22.80	23.80	1.259	0	0.364	0.458
	FR1 n2_Ant 5	20M	BPSK	50	28	Back	10mm	4	376000	1880	22.58	23.80	1.324	0.01	0.363	0.481
	FR1 n2_Ant 5	20M	BPSK	1	53	Left Side	10mm	4	376000	1880	22.80	23.80	1.259	0	0.001	0.001
	FR1 n2_Ant 5	20M	BPSK	50	28	Left Side	10mm	4	376000	1880	22.58	23.80	1.324	0	0.001	0.001
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Side	10mm	4	376000	1880	22.80	23.80	1.259	-0.1	0.469	0.590
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Side	10mm	4	372000	1860	22.78	23.80	1.265	-0.06	0.562	0.711
	FR1 n2_Ant 5	20M	BPSK	1	53	Right Side	10mm	4	380000	1900	22.76	23.80	1.271	-0.07	0.428	0.544
	FR1 n2_Ant 5	20M	BPSK	50	28	Right Side	10mm	4	376000	1880	22.58	23.80	1.324	0.01	0.437	0.579
	FR1 n2_Ant 5	20M	BPSK	1	53	Top Side	10mm	4	376000	1880	22.80	23.80	1.259	0.04	0.057	0.072
	FR1 n2_Ant 5	20M	BPSK	50	28	Top Side	10mm	4	376000	1880	22.58	23.80	1.324	0.09	0.064	0.085
	FR1 n5_Ant 0	20M	BPSK	1	53	Front	10mm	4	167300	836.5	24.66	25.40	1.186	-0.03	0.279	0.331
	FR1 n5_Ant 0	20M	BPSK	50	28	Front	10mm	4	167300	836.5	24.55	25.40	1.216	-0.1	0.270	0.328
	FR1 n5_Ant 0	20M	BPSK	1	53	Back	10mm	4	167300	836.5	24.66	25.40	1.186	-0.1	0.309	0.366
	FR1 n5_Ant 0	20M	BPSK	50	28	Back	10mm	4	167300	836.5	24.55	25.40	1.216	-0.04	0.299	0.364
	FR1 n5_Ant 0	20M	BPSK	1	53	Left Side	10mm	4	167300	836.5	24.66	25.40	1.186	0.03	0.218	0.258
	FR1 n5_Ant 0	20M	BPSK	50	28	Left Side	10mm	4	167300	836.5	24.55	25.40	1.216	-0.02	0.215	0.261
	FR1 n5_Ant 0	20M	BPSK	1	53	Right Side	10mm	4	167300	836.5	24.66	25.40	1.186	0.06	0.081	0.096
	FR1 n5_Ant 0	20M	BPSK	50	28	Right Side	10mm	4	167300	836.5	24.55	25.40	1.216	0.04	0.082	0.100
	FR1 n5_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	4	167300	836.5	24.66	25.40	1.186	-0.1	0.305	0.362
	FR1 n5_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	4	167300	836.5	24.55	25.40	1.216	-0.05	0.299	0.364
	FR1 n5_Ant 1	20M	BPSK	1	53	Front	10mm	4	167300	836.5	24.68	25.40	1.180	-0.04	0.320	0.378
	FR1 n5_Ant 1	20M	BPSK	50	28	Front	10mm	4	167300	836.5	24.59	25.40	1.205	0.06	0.312	0.376
	FR1 n5_Ant 1	20M	BPSK	1	53	Back	10mm	4	167300	836.5	24.68	25.40	1.180	0.03	0.449	0.530
55	FR1 n5_Ant 1	20M	BPSK	50	28	Back	10mm	4	167300	836.5	24.59	25.40	1.205	-0.14	0.454	0.547
	FR1 n5_Ant 1	20M	BPSK	1	53	Left Side	10mm	4	167300	836.5	24.68	25.40	1.180	0.04	0.176	0.208
	FR1 n5_Ant 1	20M	BPSK	50	28	Left Side	10mm	4	167300	836.5	24.59	25.40	1.205	-0.1	0.172	0.207
	FR1 n5_Ant 1	20M	BPSK	1	53	Right Side	10mm	4	167300	836.5	24.68	25.40	1.180	-0.04	0.232	0.274
	FR1 n5_Ant 1	20M	BPSK	50	28	Right Side	10mm	4	167300	836.5	24.59	25.40	1.205	0.07	0.233	0.281
	FR1 n5_Ant 1	20M	BPSK	1	53	Top Side	10mm	4	167300	836.5	24.68	25.40	1.180	-0.06	0.211	0.249
	FR1 n5_Ant 1	20M	BPSK	50	28	Top Side	10mm	4	167300	836.5	24.59	25.40	1.205	-0.09	0.243	0.293



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	50M	BPSK	1	1	Front	10mm	4	507000	2535	20.50	21.60	1.288	0.02	0.360	0.464
	FR1 n7_Ant 2	50M	BPSK	135	68	Front	10mm	4	507000	2535	20.38	21.60	1.324	0	0.320	0.424
	FR1 n7_Ant 2	50M	BPSK	1	1	Back	10mm	4	507000	2535	20.50	21.60	1.288	0.05	0.402	0.518
	FR1 n7_Ant 2	50M	BPSK	135	68	Back	10mm	4	507000	2535	20.38	21.60	1.324	-0.01	0.363	0.481
	FR1 n7_Ant 2	50M	BPSK	1	1	Left Side	10mm	4	507000	2535	20.50	21.60	1.288	0.06	0.062	0.080
	FR1 n7_Ant 2	50M	BPSK	135	68	Left Side	10mm	4	507000	2535	20.38	21.60	1.324	-0.03	0.026	0.034
	FR1 n7_Ant 2	50M	BPSK	1	1	Right Side	10mm	4	507000	2535	20.50	21.60	1.288	-0.04	0.644	0.830
	FR1 n7_Ant 2	50M	BPSK	135	68	Right Side	10mm	4	507000	2535	20.38	21.60	1.324	-0.02	0.565	0.748
	FR1 n7_Ant 2	50M	BPSK	270	0	Right Side	10mm	4	507000	2535	20.35	21.60	1.334	0.1	0.527	0.703
	FR1 n7_Ant 2	50M	BPSK	1	1	Bottom Side	10mm	4	507000	2535	20.50	21.60	1.288	0.07	0.124	0.160
	FR1 n7_Ant 2	50M	BPSK	135	68	Bottom Side	10mm	4	507000	2535	20.38	21.60	1.324	0.06	0.114	0.151
	FR1 n7_Ant 0	50M	BPSK	1	1	Front	10mm	4	507000	2535	17.31	17.70	1.094	0.01	0.467	0.511
	FR1 n7_Ant 0	50M	BPSK	135	68	Front	10mm	4	507000	2535	17.27	17.70	1.104	-0.02	0.418	0.462
	FR1 n7_Ant 0	50M	BPSK	1	1	Back	10mm	4	507000	2535	17.31	17.70	1.094	-0.06	0.482	0.527
	FR1 n7_Ant 0	50M	BPSK	135	68	Back	10mm	4	507000	2535	17.27	17.70	1.104	-0.1	0.471	0.520
	FR1 n7_Ant 0	50M	BPSK	1	1	Left Side	10mm	4	507000	2535	17.31	17.70	1.094	0.03	0.068	0.074
	FR1 n7_Ant 0	50M	BPSK	135	68	Left Side	10mm	4	507000	2535	17.27	17.70	1.104	0.05	0.107	0.118
	FR1 n7_Ant 0	50M	BPSK	1	1	Right Side	10mm	4	507000	2535	17.31	17.70	1.094	-0.15	0.045	0.049
	FR1 n7_Ant 0	50M	BPSK	135	68	Right Side	10mm	4	507000	2535	17.27	17.70	1.104	-0.16	0.072	0.079
	FR1 n7_Ant 0	50M	BPSK	1	1	Bottom Side	10mm	4	507000	2535	17.31	17.70	1.094	-0.17	0.802	0.877
56	FR1 n7_Ant 0	50M	BPSK	135	68	Bottom Side	10mm	4	507000	2535	17.27	17.70	1.104	-0.19	0.802	0.885
	FR1 n7_Ant 0	50M	BPSK	270	0	Bottom Side	10mm	4	507000	2535	17.23	17.70	1.114	0.11	0.774	0.862
	FR1 n12_Ant 0	15M	BPSK	1	77	Front	10mm	4	141500	707.5	24.75	25.40	1.161	0.01	0.333	0.387
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	4	141500	707.5	24.72	25.40	1.169	0.03	0.319	0.373
57	FR1 n12_Ant 0	15M	BPSK	1	77	Back	10mm	4	141500	707.5	24.75	25.40	1.161	-0.08	0.380	0.441
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	4	141500	707.5	24.72	25.40	1.169	-0.15	0.354	0.414
	FR1 n12_Ant 0	15M	BPSK	1	77	Left Side	10mm	4	141500	707.5	24.75	25.40	1.161	0.1	0.333	0.387
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	4	141500	707.5	24.72	25.40	1.169	0.04	0.309	0.361
	FR1 n12_Ant 0	15M	BPSK	1	77	Right Side	10mm	4	141500	707.5	24.75	25.40	1.161	-0.18	0.144	0.167
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	4	141500	707.5	24.72	25.40	1.169	0.16	0.128	0.150
	FR1 n12_Ant 0	15M	BPSK	1	77	Bottom Side	10mm	4	141500	707.5	24.75	25.40	1.161	0.01	0.329	0.382
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	4	141500	707.5	24.72	25.40	1.169	0.1	0.302	0.353
	FR1 n12_Ant 1	15M	BPSK	1	1	Front	10mm	4	141500	707.5	24.74	25.40	1.164	0.03	0.255	0.297
	FR1 n12_Ant 1	15M	BPSK	36	22	Front	10mm	4	141500	707.5	24.73	25.40	1.167	0.08	0.254	0.296
	FR1 n12_Ant 1	15M	BPSK	1	1	Back	10mm	4	141500	707.5	24.74	25.40	1.164	-0.16	0.301	0.350
	FR1 n12_Ant 1	15M	BPSK	36	22	Back	10mm	4	141500	707.5	24.73	25.40	1.167	-0.14	0.304	0.355
	FR1 n12_Ant 1	15M	BPSK	1	1	Left Side	10mm	4	141500	707.5	24.74	25.40	1.164	-0.18	0.228	0.265
	FR1 n12_Ant 1	15M	BPSK	36	22	Left Side	10mm	4	141500	707.5	24.73	25.40	1.167	-0.05	0.246	0.287
	FR1 n12_Ant 1	15M	BPSK	1	1	Right Side	10mm	4	141500	707.5	24.74	25.40	1.164	-0.13	0.195	0.227
	FR1 n12_Ant 1	15M	BPSK	36	22	Right Side	10mm	4	141500	707.5	24.73	25.40	1.167	0.17	0.210	0.245
	FR1 n12_Ant 1	15M	BPSK	1	1	Top Side	10mm	4	141500	707.5	24.74	25.40	1.164	0.07	0.132	0.154
	FR1 n12_Ant 1	15M	BPSK	36	22	Top Side	10mm	4	141500	707.5	24.73	25.40	1.167	0.08	0.187	0.218



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 n14_Ant 0	10M	BPSK	1	26	Front	10mm	4	158600	793	24.92	25.40	1.117	-0.1	0.487	0.544
	FR1 n14_Ant 0	10M	BPSK	25	14	Front	10mm	4	158600	793	24.79	25.40	1.151	-0.12	0.370	0.426
58	FR1 n14_Ant 0	10M	BPSK	1	26	Back	10mm	4	158600	793	24.92	25.40	1.117	0.08	0.544	0.608
	FR1 n14_Ant 0	10M	BPSK	25	14	Back	10mm	4	158600	793	24.79	25.40	1.151	-0.1	0.441	0.508
	FR1 n14_Ant 0	10M	BPSK	1	26	Left Side	10mm	4	158600	793	24.92	25.40	1.117	-0.08	0.486	0.543
	FR1 n14_Ant 0	10M	BPSK	25	14	Left Side	10mm	4	158600	793	24.79	25.40	1.151	-0.01	0.400	0.460
	FR1 n14_Ant 0	10M	BPSK	1	26	Right Side	10mm	4	158600	793	24.92	25.40	1.117	-0.06	0.202	0.226
	FR1 n14_Ant 0	10M	BPSK	25	14	Right Side	10mm	4	158600	793	24.79	25.40	1.151	-0.04	0.162	0.186
	FR1 n14_Ant 0	10M	BPSK	1	26	Bottom Side	10mm	4	158600	793	24.92	25.40	1.117	-0.16	0.507	0.566
	FR1 n14_Ant 0	10M	BPSK	25	14	Bottom Side	10mm	4	158600	793	24.79	25.40	1.151	-0.07	0.409	0.471
	FR1 n14_Ant 1	10M	BPSK	1	26	Front	10mm	4	158600	793	24.96	25.40	1.107	-0.01	0.224	0.248
	FR1 n14_Ant 1	10M	BPSK	25	14	Front	10mm	4	158600	793	24.83	25.40	1.140	-0.06	0.180	0.205
	FR1 n14_Ant 1	10M	BPSK	1	26	Back	10mm	4	158600	793	24.96	25.40	1.107	-0.08	0.283	0.313
	FR1 n14_Ant 1	10M	BPSK	25	14	Back	10mm	4	158600	793	24.83	25.40	1.140	-0.1	0.228	0.260
	FR1 n14_Ant 1	10M	BPSK	1	26	Left Side	10mm	4	158600	793	24.96	25.40	1.107	-0.04	0.202	0.224
	FR1 n14_Ant 1	10M	BPSK	25	14	Left Side	10mm	4	158600	793	24.83	25.40	1.140	-0.16	0.171	0.195
	FR1 n14_Ant 1	10M	BPSK	1	26	Right Side	10mm	4	158600	793	24.96	25.40	1.107	-0.16	0.168	0.186
	FR1 n14_Ant 1	10M	BPSK	25	14	Right Side	10mm	4	158600	793	24.83	25.40	1.140	-0.13	0.145	0.165
	FR1 n14_Ant 1	10M	BPSK	1	26	Top Side	10mm	4	158600	793	24.96	25.40	1.107	-0.03	0.171	0.189
	FR1 n14_Ant 1	10M	BPSK	25	14	Top Side	10mm	4	158600	793	24.83	25.40	1.140	-0.05	0.131	0.149
	FR1 n25_Ant 2	40M	BPSK	1	108	Front	10mm	4	376500	1882.5	22.27	23.30	1.268	0.02	0.379	0.480
	FR1 n25_Ant 2	40M	BPSK	108	54	Front	10mm	4	376500	1882.5	22.23	23.30	1.279	0	0.387	0.495
	FR1 n25_Ant 2	40M	BPSK	1	108	Back	10mm	4	376500	1882.5	22.27	23.30	1.268	-0.15	0.641	0.813
	FR1 n25_Ant 2	40M	BPSK	108	54	Back	10mm	4	376500	1882.5	22.23	23.30	1.279	-0.01	0.575	0.736
	FR1 n25_Ant 2	40M	BPSK	216	0	Back	10mm	4	376500	1882.5	22.26	23.30	1.271	0.02	0.542	0.689
	FR1 n25_Ant 2	40M	BPSK	1	108	Left Side	10mm	4	376500	1882.5	22.27	23.30	1.268	0.06	0.084	0.106
	FR1 n25_Ant 2	40M	BPSK	108	54	Left Side	10mm	4	376500	1882.5	22.23	23.30	1.279	-0.03	0.059	0.075
	FR1 n25_Ant 2	40M	BPSK	1	108	Right Side	10mm	4	376500	1882.5	22.27	23.30	1.268	0.08	0.551	0.698
	FR1 n25_Ant 2	40M	BPSK	108	54	Right Side	10mm	4	376500	1882.5	22.23	23.30	1.279	0.02	0.593	0.759
	FR1 n25_Ant 2	40M	BPSK	1	108	Bottom Side	10mm	4	376500	1882.5	22.27	23.30	1.268	0.02	0.169	0.214
	FR1 n25_Ant 2	40M	BPSK	108	54	Bottom Side	10mm	4	376500	1882.5	22.23	23.30	1.279	0.1	0.127	0.162
	FR1 n25_Ant 0	40M	BPSK	1	108	Front	10mm	4	376500	1882.5	18.58	18.90	1.076	0	0.422	0.454
	FR1 n25_Ant 0	40M	BPSK	108	54	Front	10mm	4	376500	1882.5	18.43	18.90	1.114	0.15	0.422	0.470
	FR1 n25_Ant 0	40M	BPSK	1	108	Back	10mm	4	376500	1882.5	18.58	18.90	1.076	-0.05	0.384	0.413
	FR1 n25_Ant 0	40M	BPSK	108	54	Back	10mm	4	376500	1882.5	18.43	18.90	1.114	0.01	0.368	0.410
	FR1 n25_Ant 0	40M	BPSK	1	108	Left Side	10mm	4	376500	1882.5	18.58	18.90	1.076	0.02	0.084	0.090
	FR1 n25_Ant 0	40M	BPSK	108	54	Left Side	10mm	4	376500	1882.5	18.43	18.90	1.114	-0.03	0.076	0.085
	FR1 n25_Ant 0	40M	BPSK	1	108	Right Side	10mm	4	376500	1882.5	18.58	18.90	1.076	0	0.046	0.050
	FR1 n25_Ant 0	40M	BPSK	108	54	Right Side	10mm	4	376500	1882.5	18.43	18.90	1.114	0.05	0.056	0.062
59	FR1 n25_Ant 0	40M	BPSK	1	108	Bottom Side	10mm	4	376500	1882.5	18.58	18.90	1.076	-0.06	0.799	0.860
	FR1 n25_Ant 0	40M	BPSK	108	54	Bottom Side	10mm	4	376500	1882.5	18.43	18.90	1.114	-0.01	0.771	0.859
	FR1 n25_Ant 0	40M	BPSK	216	0	Bottom Side	10mm	4	376500	1882.5	18.37	18.90	1.130	0.1	0.758	0.856



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	1	Front	10mm	4	462000	2310	21.28	22.00	1.180	0.01	0.466	0.550
	FR1 n30_Ant 2	10M	BPSK	25	14	Front	10mm	4	462000	2310	21.26	22.00	1.186	0.03	0.442	0.524
	FR1 n30_Ant 2	10M	BPSK	1	1	Back	10mm	4	462000	2310	21.28	22.00	1.180	0.07	0.491	0.580
	FR1 n30_Ant 2	10M	BPSK	25	14	Back	10mm	4	462000	2310	21.26	22.00	1.186	-0.1	0.477	0.566
	FR1 n30_Ant 2	10M	BPSK	1	1	Left Side	10mm	4	462000	2310	21.28	22.00	1.180	-0.03	0.054	0.064
	FR1 n30_Ant 2	10M	BPSK	25	14	Left Side	10mm	4	462000	2310	21.26	22.00	1.186	0.03	0.043	0.051
60	FR1 n30_Ant 2	10M	BPSK	1	1	Right Side	10mm	4	462000	2310	21.28	22.00	1.180	0.01	0.707	0.834
	FR1 n30_Ant 2	10M	BPSK	25	14	Right Side	10mm	4	462000	2310	21.26	22.00	1.186	0	0.691	0.819
	FR1 n30_Ant 2	10M	BPSK	50	0	Right Side	10mm	4	462000	2310	21.27	22.00	1.183	0.01	0.698	0.826
	FR1 n30_Ant 2	10M	BPSK	1	1	Bottom Side	10mm	4	462000	2310	21.28	22.00	1.180	0.1	0.176	0.208
	FR1 n30_Ant 2	10M	BPSK	25	14	Bottom Side	10mm	4	462000	2310	21.26	22.00	1.186	0.03	0.176	0.209
	FR1 n30_Ant 0	10M	BPSK	1	26	Front	10mm	4	462000	2310	17.14	17.80	1.164	0.02	0.362	0.421
	FR1 n30_Ant 0	10M	BPSK	25	14	Front	10mm	4	462000	2310	17.06	17.80	1.186	0.09	0.350	0.415
	FR1 n30_Ant 0	10M	BPSK	1	26	Back	10mm	4	462000	2310	17.14	17.80	1.164	0.11	0.422	0.491
	FR1 n30_Ant 0	10M	BPSK	25	14	Back	10mm	4	462000	2310	17.06	17.80	1.186	0.13	0.375	0.445
	FR1 n30_Ant 0	10M	BPSK	1	26	Left Side	10mm	4	462000	2310	17.14	17.80	1.164	0.03	0.047	0.055
	FR1 n30_Ant 0	10M	BPSK	25	14	Left Side	10mm	4	462000	2310	17.06	17.80	1.186	-0.15	0.052	0.062
	FR1 n30_Ant 0	10M	BPSK	1	26	Right Side	10mm	4	462000	2310	17.14	17.80	1.164	-0.11	0.045	0.052
	FR1 n30_Ant 0	10M	BPSK	25	14	Right Side	10mm	4	462000	2310	17.06	17.80	1.186	-0.05	0.053	0.063
	FR1 n30_Ant 0	10M	BPSK	1	26	Bottom Side	10mm	4	462000	2310	17.14	17.80	1.164	-0.11	0.715	0.832
	FR1 n30_Ant 0	10M	BPSK	25	14	Bottom Side	10mm	4	462000	2310	17.06	17.80	1.186	-0.19	0.645	0.765
	FR1 n30_Ant 0	10M	BPSK	50	0	Bottom Side	10mm	4	462000	2310	17.07	17.80	1.183	-0.03	0.655	0.775
	FR1 n66_Ant 2	40M	BPSK	1	108	Front	10mm	4	349000	1745	22.28	23.30	1.265	0.01	0.362	0.458
	FR1 n66_Ant 2	40M	BPSK	108	54	Front	10mm	4	349000	1745	22.18	23.30	1.294	0	0.378	0.489
	FR1 n66_Ant 2	40M	BPSK	1	108	Back	10mm	4	349000	1745	22.28	23.30	1.265	-0.02	0.530	0.670
	FR1 n66_Ant 2	40M	BPSK	108	54	Back	10mm	4	349000	1745	22.18	23.30	1.294	-0.06	0.477	0.617
	FR1 n66_Ant 2	40M	BPSK	1	108	Left Side	10mm	4	349000	1745	22.28	23.30	1.265	0.01	0.072	0.091
	FR1 n66_Ant 2	40M	BPSK	108	54	Left Side	10mm	4	349000	1745	22.18	23.30	1.294	0.02	0.081	0.105
	FR1 n66_Ant 2	40M	BPSK	1	108	Right Side	10mm	4	349000	1745	22.28	23.30	1.265	-0.04	0.627	0.793
	FR1 n66_Ant 2	40M	BPSK	108	54	Right Side	10mm	4	349000	1745	22.18	23.30	1.294	-0.04	0.643	0.832
	FR1 n66_Ant 2	40M	BPSK	216	0	Right Side	10mm	4	349000	1745	22.17	23.30	1.297	-0.03	0.640	0.830
	FR1 n66_Ant 2	40M	BPSK	1	108	Bottom Side	10mm	4	349000	1745	22.28	23.30	1.265	-0.01	0.241	0.305
	FR1 n66_Ant 2	40M	BPSK	108	54	Bottom Side	10mm	4	349000	1745	22.18	23.30	1.294	0.09	0.245	0.317
	FR1 n66_Ant 0	40M	BPSK	1	108	Front	10mm	4	349000	1745	17.14	18.00	1.219	0.01	0.409	0.499
	FR1 n66_Ant 0	40M	BPSK	108	54	Front	10mm	4	349000	1745	17.13	18.00	1.222	0.05	0.407	0.497
	FR1 n66_Ant 0	40M	BPSK	1	108	Back	10mm	4	349000	1745	17.14	18.00	1.219	-0.03	0.384	0.468
	FR1 n66_Ant 0	40M	BPSK	108	54	Back	10mm	4	349000	1745	17.13	18.00	1.222	0.02	0.377	0.461
	FR1 n66_Ant 0	40M	BPSK	1	108	Left Side	10mm	4	349000	1745	17.14	18.00	1.219	0	0.070	0.085
	FR1 n66_Ant 0	40M	BPSK	108	54	Left Side	10mm	4	349000	1745	17.13	18.00	1.222	0.05	0.071	0.087
	FR1 n66_Ant 0	40M	BPSK	1	108	Right Side	10mm	4	349000	1745	17.14	18.00	1.219	-0.04	0.001	0.001
	FR1 n66_Ant 0	40M	BPSK	108	54	Right Side	10mm	4	349000	1745	17.13	18.00	1.222	-0.07	0.001	0.001
61	FR1 n66_Ant 0	40M	BPSK	1	108	Bottom Side	10mm	4	349000	1745	17.14	18.00	1.219	-0.02	0.717	0.874
	FR1 n66_Ant 0	40M	BPSK	108	54	Bottom Side	10mm	4	349000	1745	17.13	18.00	1.222	0.1	0.666	0.814
	FR1 n66_Ant 0	40M	BPSK	216	0	Bottom Side	10mm	4	349000	1745	17.04	18.00	1.247	0.02	0.678	0.846



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 1	40M	BPSK	1	108	Front	10mm	4	349000	1745	22.31	23.60	1.346	0.02	0.420	0.565
	FR1 n66_Ant 1	40M	BPSK	108	54	Front	10mm	4	349000	1745	22.23	23.60	1.371	-0.01	0.392	0.537
	FR1 n66_Ant 1	40M	BPSK	1	108	Back	10mm	4	349000	1745	22.31	23.60	1.346	0.05	0.380	0.511
	FR1 n66_Ant 1	40M	BPSK	108	54	Back	10mm	4	349000	1745	22.23	23.60	1.371	0	0.364	0.499
	FR1 n66_Ant 1	40M	BPSK	1	108	Left Side	10mm	4	349000	1745	22.31	23.60	1.346	0.06	0.118	0.159
	FR1 n66_Ant 1	40M	BPSK	108	54	Left Side	10mm	4	349000	1745	22.23	23.60	1.371	-0.03	0.116	0.159
	FR1 n66_Ant 1	40M	BPSK	1	108	Right Side	10mm	4	349000	1745	22.31	23.60	1.346	0.08	0.001	0.001
	FR1 n66_Ant 1	40M	BPSK	108	54	Right Side	10mm	4	349000	1745	22.23	23.60	1.371	-0.04	0.001	0.001
	FR1 n66_Ant 1	40M	BPSK	1	108	Top Side	10mm	4	349000	1745	22.31	23.60	1.346	0.14	0.586	0.789
	FR1 n66_Ant 1	40M	BPSK	108	54	Top Side	10mm	4	349000	1745	22.23	23.60	1.371	0.02	0.547	0.750
	FR1 n66_Ant 5	40M	BPSK	1	108	Front	10mm	4	349000	1745	24.28	25.20	1.236	0.04	0.427	0.528
	FR1 n66_Ant 5	40M	BPSK	108	54	Front	10mm	4	349000	1745	24.13	25.20	1.279	0.01	0.410	0.525
	FR1 n66_Ant 5	40M	BPSK	1	108	Back	10mm	4	349000	1745	24.28	25.20	1.236	0.05	0.493	0.609
	FR1 n66_Ant 5	40M	BPSK	108	54	Back	10mm	4	349000	1745	24.13	25.20	1.279	-0.13	0.479	0.613
	FR1 n66_Ant 5	40M	BPSK	1	108	Left Side	10mm	4	349000	1745	24.28	25.20	1.236	-0.01	0.001	0.001
	FR1 n66_Ant 5	40M	BPSK	108	54	Left Side	10mm	4	349000	1745	24.13	25.20	1.279	0	0.001	0.001
	FR1 n66_Ant 5	40M	BPSK	1	108	Right Side	10mm	4	349000	1745	24.28	25.20	1.236	0.02	0.617	0.763
	FR1 n66_Ant 5	40M	BPSK	108	54	Right Side	10mm	4	349000	1745	24.13	25.20	1.279	-0.06	0.604	0.773
	FR1 n66_Ant 5	40M	BPSK	1	108	Top Side	10mm	4	349000	1745	24.28	25.20	1.236	0.01	0.059	0.073
	FR1 n66_Ant 5	40M	BPSK	108	54	Top Side	10mm	4	349000	1745	24.13	25.20	1.279	-0.03	0.054	0.069
	FR1 n71_Ant 0	20M	BPSK	1	53	Front	10mm	4	136100	680.5	24.88	25.40	1.127	0.05	0.281	0.317
	FR1 n71_Ant 0	20M	BPSK	50	28	Front	10mm	4	136100	680.5	24.76	25.40	1.159	0.06	0.265	0.307
	FR1 n71_Ant 0	20M	BPSK	1	53	Back	10mm	4	136100	680.5	24.88	25.40	1.127	-0.16	0.297	0.335
	FR1 n71_Ant 0	20M	BPSK	50	28	Back	10mm	4	136100	680.5	24.76	25.40	1.159	-0.05	0.287	0.333
62	FR1 n71_Ant 0	20M	BPSK	1	53	Left Side	10mm	4	136100	680.5	24.88	25.40	1.127	-0.02	0.363	0.409
	FR1 n71_Ant 0	20M	BPSK	50	28	Left Side	10mm	4	136100	680.5	24.76	25.40	1.159	0.03	0.348	0.403
	FR1 n71_Ant 0	20M	BPSK	1	53	Right Side	10mm	4	136100	680.5	24.88	25.40	1.127	0.05	0.159	0.179
	FR1 n71_Ant 0	20M	BPSK	50	28	Right Side	10mm	4	136100	680.5	24.76	25.40	1.159	0.08	0.154	0.178
	FR1 n71_Ant 0	20M	BPSK	1	53	Bottom Side	10mm	4	136100	680.5	24.88	25.40	1.127	-0.16	0.254	0.286
	FR1 n71_Ant 0	20M	BPSK	50	28	Bottom Side	10mm	4	136100	680.5	24.76	25.40	1.159	-0.19	0.237	0.275
	FR1 n71_Ant 1	20M	BPSK	1	53	Front	10mm	4	136100	680.5	24.85	25.40	1.135	0.02	0.225	0.255
	FR1 n71_Ant 1	20M	BPSK	50	28	Front	10mm	4	136100	680.5	24.72	25.40	1.169	-0.01	0.217	0.254
	FR1 n71_Ant 1	20M	BPSK	1	53	Back	10mm	4	136100	680.5	24.85	25.40	1.135	-0.12	0.243	0.276
	FR1 n71_Ant 1	20M	BPSK	50	28	Back	10mm	4	136100	680.5	24.72	25.40	1.169	0.08	0.235	0.275
	FR1 n71_Ant 1	20M	BPSK	1	53	Left Side	10mm	4	136100	680.5	24.85	25.40	1.135	-0.04	0.234	0.266
	FR1 n71_Ant 1	20M	BPSK	50	28	Left Side	10mm	4	136100	680.5	24.72	25.40	1.169	0.06	0.223	0.261
	FR1 n71_Ant 1	20M	BPSK	1	53	Right Side	10mm	4	136100	680.5	24.85	25.40	1.135	-0.18	0.153	0.174
	FR1 n71_Ant 1	20M	BPSK	50	28	Right Side	10mm	4	136100	680.5	24.72	25.40	1.169	0.01	0.147	0.172
	FR1 n71_Ant 1	20M	BPSK	1	53	Top Side	10mm	4	136100	680.5	24.85	25.40	1.135	0.03	0.132	0.150
	FR1 n71_Ant 1	20M	BPSK	50	28	Top Side	10mm	4	136100	680.5	24.72	25.40	1.169	0.09	0.115	0.134



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-Up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 2	100M	BPSK	1	1	Front	10mm	TX0	4	518598	2592.99	22.30	22.70	1.096	0.02	0.529	0.580
	FR1 n41_Ant 2	100M	BPSK	135	69	Front	10mm	TX0	4	518598	2592.99	21.55	22.70	1.303	0	0.396	0.516
	FR1 n41_Ant 2	100M	BPSK	1	1	Back	10mm	TX0	4	518598	2592.99	22.30	22.70	1.096	-0.09	0.622	0.682
	FR1 n41_Ant 2	100M	BPSK	135	69	Back	10mm	TX0	4	518598	2592.99	21.55	22.70	1.303	0.05	0.496	0.646
	FR1 n41_Ant 2	100M	BPSK	1	1	Left Side	10mm	TX0	4	518598	2592.99	22.30	22.70	1.096	-0.01	0.001	0.001
	FR1 n41_Ant 2	100M	BPSK	135	69	Left Side	10mm	TX0	4	518598	2592.99	21.55	22.70	1.303	0.1	0.001	0.001
	FR1 n41_Ant 2	100M	BPSK	1	1	Right Side	10mm	TX0	4	518598	2592.99	22.30	22.70	1.096	0.08	0.690	0.757
	FR1 n41_Ant 2	100M	BPSK	135	69	Right Side	10mm	TX0	4	518598	2592.99	21.55	22.70	1.303	-0.06	0.613	0.799
	FR1 n41_Ant 2	100M	BPSK	1	1	Bottom Side	10mm	TX0	4	518598	2592.99	22.30	22.70	1.096	-0.02	0.198	0.217
	FR1 n41_Ant 2	100M	BPSK	135	69	Bottom Side	10mm	TX0	4	518598	2592.99	21.55	22.70	1.303	0.07	0.142	0.185
	FR1 n41_Ant 0	100M	BPSK	1	1	Front	10mm	TX1	4	518598	2592.99	18.49	19.00	1.125	0.03	0.422	0.475
	FR1 n41_Ant 0	100M	BPSK	135	69	Front	10mm	TX1	4	518598	2592.99	17.30	19.00	1.479	0.08	0.310	0.459
	FR1 n41_Ant 0	100M	BPSK	1	1	Back	10mm	TX1	4	518598	2592.99	18.49	19.00	1.125	-0.11	0.410	0.461
	FR1 n41_Ant 0	100M	BPSK	135	69	Back	10mm	TX1	4	518598	2592.99	17.30	19.00	1.479	-0.15	0.314	0.464
	FR1 n41_Ant 0	100M	BPSK	1	1	Left Side	10mm	TX1	4	518598	2592.99	18.49	19.00	1.125	-0.1	0.055	0.062
	FR1 n41_Ant 0	100M	BPSK	135	69	Left Side	10mm	TX1	4	518598	2592.99	17.30	19.00	1.479	-0.13	0.038	0.056
	FR1 n41_Ant 0	100M	BPSK	1	1	Right Side	10mm	TX1	4	518598	2592.99	18.49	19.00	1.125	0.05	0.048	0.054
	FR1 n41_Ant 0	100M	BPSK	135	69	Right Side	10mm	TX1	4	518598	2592.99	17.30	19.00	1.479	0.1	0.036	0.053
	FR1 n41_Ant 0	100M	BPSK	1	1	Bottom Side	10mm	TX1	4	518598	2592.99	18.49	19.00	1.125	-0.03	0.722	0.812
	FR1 n41_Ant 0	100M	BPSK	135	69	Bottom Side	10mm	TX1	4	518598	2592.99	17.30	19.00	1.479	0.11	0.543	0.803
	FR1 n41_Ant 0	100M	BPSK	270	0	Bottom Side	10mm	TX1	4	518598	2592.99	17.42	19.00	1.439	0.02	0.563	0.810
	FR1 n41_Ant 1	100M	BPSK	1	1	Front	10mm	Sub TX0	4	518598	2592.99	22.51	23	1.119	-0.18	0.470	0.526
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Sub TX0	4	518598	2592.99	22.89	23	1.026	0.05	0.428	0.439
	FR1 n41_Ant 1	100M	BPSK	1	1	Back	10mm	Sub TX0	4	518598	2592.99	22.51	23	1.119	0.02	0.451	0.505
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Sub TX0	4	518598	2592.99	22.89	23	1.026	-0.01	0.390	0.400
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Side	10mm	Sub TX0	4	518598	2592.99	22.51	23	1.119	0.03	0.717	0.803
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Side	10mm	Sub TX0	4	518598	2592.99	22.89	23	1.026	0.04	0.765	0.785
	FR1 n41_Ant 1	100M	BPSK	270	0	Left Side	10mm	Sub TX0	4	518598	2592.99	22.88	23	1.028	-0.06	0.705	0.725
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Side	10mm	Sub TX0	4	518598	2592.99	22.51	23	1.119	0.08	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Side	10mm	Sub TX0	4	518598	2592.99	22.89	23	1.026	0.07	0.001	0.001
63	FR1 n41_Ant 1	100M	BPSK	1	1	Top Side	10mm	Sub TX0	4	518598	2592.99	22.51	23	1.119	-0.06	0.798	0.893
	FR1 n41_Ant 1	100M	BPSK	135	69	Top Side	10mm	Sub TX0	4	518598	2592.99	22.89	23	1.026	0.1	0.682	0.699
	FR1 n41_Ant 1	100M	BPSK	270	0	Top Side	10mm	Sub TX0	4	518598	2592.99	22.88	23	1.028	0.03	0.646	0.664
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	10mm	Sub TX1	4	518598	2592.99	21.57	22.3	1.183	0.02	0.437	0.517
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	Sub TX1	4	518598	2592.99	21.26	22.3	1.271	0	0.324	0.412
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	10mm	Sub TX1	4	518598	2592.99	21.57	22.3	1.183	0.05	0.423	0.500
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	Sub TX1	4	518598	2592.99	21.26	22.3	1.271	-0.01	0.303	0.385
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	Sub TX1	4	518598	2592.99	21.57	22.3	1.183	0.03	0.052	0.062
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Side	10mm	Sub TX1	4	518598	2592.99	21.26	22.3	1.271	-0.06	0.034	0.043
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Side	10mm	Sub TX1	4	518598	2592.99	21.57	22.3	1.183	-0.13	0.750	0.887
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Side	10mm	Sub TX1	4	518598	2592.99	21.26	22.3	1.271	0.1	0.604	0.767
	FR1 n41_Ant 5	100M	BPSK	270	0	Right Side	10mm	Sub TX1	4	518598	2592.99	21.26	22.3	1.271	-0.02	0.548	0.696
	FR1 n41_Ant 5	100M	BPSK	1	1	Top Side	10mm	Sub TX1	4	518598	2592.99	21.57	22.3	1.183	0.07	0.100	0.118
	FR1 n41_Ant 5	100M	BPSK	135	69	Top Side	10mm	Sub TX1	4	518598	2592.99	21.26	22.3	1.271	0.03	0.088	0.112



FCC SAR TEST REPORT

Report No. : FA102843-05E

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)
	FR1 n48_Ant 6	10M	BPSK	1	1	Front	10mm	4	641666	3624.99	22.28	22.70	1.102	100	1.000	0.01	0.745	0.821
	FR1 n48_Ant 6	10M	BPSK	1	1	Front	10mm	4	637000	3555	22.06	22.70	1.159	100	1.000	0.13	0.731	0.847
	FR1 n48_Ant 6	10M	BPSK	1	1	Front	10mm	4	646332	3694.98	22.23	22.70	1.114	100	1.000	0.15	0.733	0.817
64	FR1 n48_Ant 6	10M	BPSK	12	6	Front	10mm	4	641666	3624.99	22.27	22.70	1.104	100	1.000	-0.12	0.811	0.895
	FR1 n48_Ant 6	10M	BPSK	12	6	Front	10mm	4	637000	3555	22.22	22.70	1.117	100	1.000	-0.08	0.785	0.877
	FR1 n48_Ant 6	10M	BPSK	12	6	Front	10mm	4	646332	3694.98	22.20	22.70	1.122	100	1.000	-0.17	0.792	0.889
	FR1 n48_Ant 6	10M	BPSK	24	0	Front	10mm	4	641666	3624.99	22.26	22.70	1.107	100	1.000	0.02	0.793	0.878
	FR1 n48_Ant 6	10M	BPSK	1	1	Back	10mm	4	641666	3624.99	22.28	22.70	1.102	100	1.000	-0.03	0.605	0.666
	FR1 n48_Ant 6	10M	BPSK	1	1	Back	10mm	4	637000	3555	22.06	22.70	1.159	100	1.000	0.15	0.592	0.686
	FR1 n48_Ant 6	10M	BPSK	1	1	Back	10mm	4	646332	3694.98	22.23	22.70	1.114	100	1.000	0.13	0.593	0.661
	FR1 n48_Ant 6	10M	BPSK	12	6	Back	10mm	4	641666	3624.99	22.27	22.70	1.104	100	1.000	0.1	0.533	0.588
	FR1 n48_Ant 6	10M	BPSK	1	1	Left Side	10mm	4	641666	3624.99	22.28	22.70	1.102	100	1.000	-0.02	0.667	0.735
	FR1 n48_Ant 6	10M	BPSK	1	1	Left Side	10mm	4	637000	3555	22.06	22.70	1.159	100	1.000	0.13	0.647	0.750
	FR1 n48_Ant 6	10M	BPSK	1	1	Left Side	10mm	4	646332	3694.98	22.23	22.70	1.114	100	1.000	-0.08	0.646	0.720
	FR1 n48_Ant 6	10M	BPSK	12	6	Left Side	10mm	4	641666	3624.99	22.27	22.70	1.104	100	1.000	0.04	0.666	0.735
	FR1 n48_Ant 6	10M	BPSK	12	6	Left Side	10mm	4	637000	3555	22.22	22.70	1.117	100	1.000	0.19	0.658	0.735
	FR1 n48_Ant 6	10M	BPSK	12	6	Left Side	10mm	4	646332	3694.98	22.20	22.70	1.122	100	1.000	0.11	0.646	0.725
	FR1 n48_Ant 6	10M	BPSK	1	1	Right Side	10mm	4	641666	3624.99	22.28	22.70	1.102	100	1.000	0.05	0.001	0.001
	FR1 n48_Ant 6	10M	BPSK	12	6	Right Side	10mm	4	641666	3624.99	22.27	22.70	1.104	100	1.000	-0.04	0.001	0.001
	FR1 n48_Ant 6	10M	BPSK	1	1	Bottom Side	10mm	4	641666	3624.99	22.28	22.70	1.102	100	1.000	0.07	0.227	0.250
	FR1 n48_Ant 6	10M	BPSK	12	6	Bottom Side	10mm	4	641666	3624.99	22.27	22.70	1.104	100	1.000	0.03	0.226	0.250
	FR1 n48_Ant 6	40M	BPSK	50	25	Front	10mm	4	641666	3624.99	22.27	22.70	1.104	100	1.000	0.01	0.801	0.884
	FR1 n48_Ant 7	10M	BPSK	1	1	Front	10mm	4	637000	3555	21.00	21.00	1.000	100	1.000	0.02	0.491	0.491
	FR1 n48_Ant 7	10M	BPSK	12	6	Front	10mm	4	637000	3555	20.98	21.00	1.005	100	1.000	-0.09	0.548	0.551
	FR1 n48_Ant 7	10M	BPSK	1	1	Back	10mm	4	637000	3555	21.00	21.00	1.000	100	1.000	0	0.336	0.336
	FR1 n48_Ant 7	10M	BPSK	12	6	Back	10mm	4	637000	3555	20.98	21.00	1.005	100	1.000	0.05	0.298	0.299
	FR1 n48_Ant 7	10M	BPSK	1	1	Left Side	10mm	4	637000	3555	21.00	21.00	1.000	100	1.000	-0.01	0.030	0.030
	FR1 n48_Ant 7	10M	BPSK	12	6	Left Side	10mm	4	637000	3555	20.98	21.00	1.005	100	1.000	0.02	0.043	0.043
	FR1 n48_Ant 7	10M	BPSK	1	1	Right Side	10mm	4	637000	3555	21.00	21.00	1.000	100	1.000	-0.03	0.167	0.167
	FR1 n48_Ant 7	10M	BPSK	12	6	Right Side	10mm	4	637000	3555	20.98	21.00	1.005	100	1.000	0.04	0.180	0.181
	FR1 n48_Ant 7	10M	BPSK	1	1	Bottom Side	10mm	4	637000	3555	21.00	21.00	1.000	100	1.000	0.05	0.308	0.308
	FR1 n48_Ant 7	10M	BPSK	12	6	Bottom Side	10mm	4	637000	3555	20.98	21.00	1.005	100	1.000	-0.07	0.272	0.273
	FR1 n48_Ant 7	40M	BPSK	1	1	Front	10mm	4	641666	3624.99	20.96	21.00	1.009	100	1.000	0.1	0.402	0.406
	FR1 n48_Ant 1	10M	QPSK	1	1	Front	10mm	4	641666	3624.99	20.09	20.50	1.099	100	1.000	0.01	0.166	0.182
	FR1 n48_Ant 1	10M	QPSK	12	6	Front	10mm	4	641666	3624.99	19.92	20.50	1.143	100	1.000	0	0.148	0.169
	FR1 n48_Ant 1	10M	QPSK	1	1	Back	10mm	4	641666	3624.99	20.09	20.50	1.099	100	1.000	-0.02	0.065	0.071
	FR1 n48_Ant 1	10M	QPSK	12	6	Back	10mm	4	641666	3624.99	19.92	20.50	1.143	100	1.000	-0.07	0.058	0.066
	FR1 n48_Ant 1	10M	QPSK	1	1	Left Side	10mm	4	641666	3624.99	20.09	20.50	1.099	100	1.000	-0.04	0.087	0.096
	FR1 n48_Ant 1	10M	QPSK	12	6	Left Side	10mm	4	641666	3624.99	19.92	20.50	1.143	100	1.000	-0.1	0.085	0.097
	FR1 n48_Ant 1	10M	QPSK	1	1	Right Side	10mm	4	641666	3624.99	20.09	20.50	1.099	100	1.000	0	0.001	0.001
	FR1 n48_Ant 1	10M	QPSK	12	6	Right Side	10mm	4	641666	3624.99	19.92	20.50	1.143	100	1.000	0	0.001	0.001
	FR1 n48_Ant 1	10M	QPSK	1	1	Top Side	10mm	4	641666	3624.99	20.09	20.50	1.099	100	1.000	-0.03	0.090	0.099
	FR1 n48_Ant 1	10M	QPSK	12	6	Top Side	10mm	4	641666	3624.99	19.92	20.50	1.143	100	1.000	0.03	0.084	0.096
	FR1 n48_Ant 1	40M	QPSK	53	26	Front	10mm	4	641666	3624.99	19.87	20.00	1.030	100	1.000	0.01	0.151	0.156
	FR1 n48_Ant 5	10M	QPSK	1	1	Front	10mm	4	641666	3624.99	18.96	19.20	1.057	100	1.000	-0.12	0.141	0.149
	FR1 n48_Ant 5	10M	QPSK	12	6	Front	10mm	4	641666	3624.99	18.87	19.20	1.080	100	1.000	0.05	0.140	0.151
	FR1 n48_Ant 5	10M	QPSK	1	1	Back	10mm	4	641666	3624.99	18.96	19.20	1.057	100	1.000	-0.05	0.126	0.133
	FR1 n48_Ant 5	10M	QPSK	12	6	Back	10mm	4	641666	3624.99	18.87	19.20	1.080	100	1.000	-0.11	0.111	0.120
	FR1 n48_Ant 5	10M	QPSK	1	1	Left Side	10mm	4	641666	3624.99	18.96	19.20	1.057	100	1.000	0	0.001	0.001
	FR1 n48_Ant 5	10M	QPSK	12	6	Left Side	10mm	4	641666	3624.99	18.87	19.20	1.080	100	1.000	0	0.001	0.001
	FR1 n48_Ant 5	10M	QPSK	1	1	Right Side	10mm	4	641666	3624.99	18.96	19.20	1.057	100	1.000	-0.11	0.240	0.254
	FR1 n48_Ant 5	10M	QPSK	12	6	Right Side	10mm	4	641666	3624.99	18.87	19.20	1.080	100	1.000	0.12	0.250	0.270
	FR1 n48_Ant 5	10M	QPSK	1	1	Top Side	10mm	4	641666	3624.99	18.96	19.20	1.057	100	1.000	0	0.001	0.001
	FR1 n48_Ant 5	10M	QPSK	12	6	Top Side	10mm	4	641666	3624.99	18.87	19.20	1.080	100	1.000	0	0.001	0.001
	FR1 n48_Ant 5	40M	QPSK	53	26	Right Side	10mm	4	641666	3624.99	19.17	19.20	1.007	100	1.000	0.19	0.245	0.247



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n77_Ant 6	100M	BPSK	1	1	Front	10mm	4	656000	3840	22.44	22.90	1.112	0.14	0.488	0.543
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	4	656000	3840	22.08	22.90	1.208	0.05	0.413	0.499
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	4	656000	3840	22.44	22.90	1.112	-0.06	0.306	0.340
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	4	656000	3840	22.08	22.90	1.208	0.03	0.292	0.353
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	22.44	22.90	1.112	0.07	0.661	0.735
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	22.08	22.90	1.208	0.1	0.554	0.669
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	22.44	22.90	1.112	-0.02	0.001	0.001
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	22.08	22.90	1.208	0.03	0.001	0.001
	FR1 n77_Ant 6	100M	BPSK	1	1	Bottom Side	10mm	4	656000	3840	22.44	22.90	1.112	-0.01	0.164	0.182
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	4	656000	3840	22.08	22.90	1.208	0.02	0.149	0.180
	FR1 n77_Ant 6	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	22.24	22.90	1.164	0.01	0.560	0.652
	FR1 n77_Ant 6	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	21.79	22.90	1.291	-0.01	0.558	0.721
	FR1 n77_Ant 6	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	22.24	22.90	1.164	0.05	0.446	0.519
	FR1 n77_Ant 6	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	21.79	22.90	1.291	-0.03	0.373	0.482
	FR1 n77_Ant 6	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	22.24	22.90	1.164	-0.04	0.348	0.405
	FR1 n77_Ant 6	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	21.79	22.90	1.291	0.01	0.302	0.390
	FR1 n77_Ant 6	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	22.24	22.90	1.164	0.06	0.001	0.001
	FR1 n77_Ant 6	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	21.79	22.90	1.291	-0.08	0.001	0.001
	FR1 n77_Ant 6	100M	BPSK	1	1	Bottom Side	10mm	4	633332	3499.98	22.24	22.90	1.164	0.07	0.159	0.185
	FR1 n77_Ant 6	100M	BPSK	135	69	Bottom Side	10mm	4	633332	3499.98	21.79	22.90	1.291	0.1	0.143	0.185
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	10mm	4	656000	3840	22.80	23.50	1.175	-0.02	0.705	0.828
	FR1 n77_Ant 7	100M	BPSK	135	69	Front	10mm	4	656000	3840	22.24	23.50	1.337	0.01	0.521	0.696
	FR1 n77_Ant 7	100M	BPSK	270	0	Front	10mm	4	656000	3840	21.85	23.00	1.303	0	0.492	0.641
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	4	656000	3840	22.80	23.50	1.175	0.05	0.440	0.517
	FR1 n77_Ant 7	100M	BPSK	135	69	Back	10mm	4	656000	3840	22.24	23.50	1.337	-0.03	0.344	0.460
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	22.80	23.50	1.175	0.04	0.078	0.092
	FR1 n77_Ant 7	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	22.24	23.50	1.337	0.06	0.071	0.095
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	22.80	23.50	1.175	-0.05	0.276	0.324
	FR1 n77_Ant 7	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	22.24	23.50	1.337	0.07	0.257	0.344
	FR1 n77_Ant 7	100M	BPSK	1	1	Bottom Side	10mm	4	656000	3840	22.80	23.50	1.175	0.1	0.355	0.417
	FR1 n77_Ant 7	100M	BPSK	135	69	Bottom Side	10mm	4	656000	3840	22.24	23.50	1.337	-0.08	0.270	0.361
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	22.00	23.50	1.413	-0.1	0.395	0.558
	FR1 n77_Ant 7	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	21.72	23.50	1.507	-0.15	0.520	0.783
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	22.00	23.50	1.413	0.03	0.309	0.436
	FR1 n77_Ant 7	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	21.72	23.50	1.507	-0.04	0.372	0.560
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	22.00	23.50	1.413	0.06	0.034	0.048
	FR1 n77_Ant 7	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	21.72	23.50	1.507	-0.03	0.022	0.033
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	22.00	23.50	1.413	-0.05	0.183	0.258
	FR1 n77_Ant 7	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	21.72	23.50	1.507	0	0.192	0.289
	FR1 n77_Ant 7	100M	BPSK	1	1	Bottom Side	10mm	4	633332	3499.98	22.00	23.50	1.413	-0.04	0.329	0.465
	FR1 n77_Ant 7	100M	BPSK	135	69	Bottom Side	10mm	4	633332	3499.98	21.72	23.50	1.507	-0.06	0.274	0.413



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 1	100M	BPSK	1	1	Front	10mm	4	656000	3840	24.57	25.4	1.211	-0.12	0.615	0.745
	FR1 n77_Ant 1	100M	BPSK	135	69	Front	10mm	4	656000	3840	23.65	25.4	1.496	-0.03	0.546	0.817
	FR1 n77_Ant 1	100M	BPSK	270	0	Front	10mm	4	656000	3840	23.73	24.9	1.309	0.05	0.543	0.711
	FR1 n77_Ant 1	100M	BPSK	1	1	Back	10mm	4	656000	3840	24.57	25.4	1.211	0.01	0.121	0.146
	FR1 n77_Ant 1	100M	BPSK	135	69	Back	10mm	4	656000	3840	23.65	25.4	1.496	0	0.095	0.142
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	24.57	25.4	1.211	0.02	0.169	0.205
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	23.65	25.4	1.496	-0.03	0.150	0.224
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	24.57	25.4	1.211	-0.05	0.100	0.121
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	23.65	25.4	1.496	0.04	0.086	0.129
	FR1 n77_Ant 1	100M	BPSK	1	1	Top Side	10mm	4	656000	3840	24.57	25.4	1.211	0.08	0.221	0.268
	FR1 n77_Ant 1	100M	BPSK	135	69	Top Side	10mm	4	656000	3840	23.65	25.4	1.496	0.1	0.155	0.232
	FR1 n77_Ant 1	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	24.44	25.4	1.247	-0.05	0.347	0.433
	FR1 n77_Ant 1	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	23.59	25.4	1.517	0.01	0.264	0.401
	FR1 n77_Ant 1	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	24.44	25.4	1.247	0	0.249	0.311
	FR1 n77_Ant 1	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	23.59	25.4	1.517	0.05	0.157	0.238
	FR1 n77_Ant 1	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	24.44	25.4	1.247	-0.02	0.272	0.339
	FR1 n77_Ant 1	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	23.59	25.4	1.517	-0.04	0.188	0.285
	FR1 n77_Ant 1	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	24.44	25.4	1.247	0.03	0.060	0.075
	FR1 n77_Ant 1	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	23.59	25.4	1.517	0.06	0.057	0.086
	FR1 n77_Ant 1	100M	BPSK	1	1	Top Side	10mm	4	633332	3499.98	24.44	25.4	1.247	-0.1	0.153	0.191
	FR1 n77_Ant 1	100M	BPSK	135	69	Top Side	10mm	4	633332	3499.98	23.59	25.4	1.517	0.08	0.128	0.194
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	10mm	4	656000	3840	22.54	23.4	1.219	0.05	0.380	0.463
	FR1 n77_Ant 5	100M	BPSK	135	69	Front	10mm	4	656000	3840	22.24	23.4	1.306	0.01	0.319	0.417
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	10mm	4	656000	3840	22.54	23.4	1.219	-0.02	0.353	0.430
	FR1 n77_Ant 5	100M	BPSK	135	69	Back	10mm	4	656000	3840	22.24	23.4	1.306	0.01	0.275	0.359
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Side	10mm	4	656000	3840	22.54	23.4	1.219	0.06	0.001	0.001
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Side	10mm	4	656000	3840	22.24	23.4	1.306	-0.07	0.001	0.001
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	4	656000	3840	22.54	23.4	1.219	0.06	0.681	0.830
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	656000	3840	22.24	23.4	1.306	0.08	0.608	0.794
	FR1 n77_Ant 5	100M	BPSK	270	0	Right Side	10mm	4	656000	3840	22.15	23.4	1.334	-0.1	0.540	0.720
	FR1 n77_Ant 5	100M	BPSK	1	1	Top Side	10mm	4	656000	3840	22.54	23.4	1.219	-0.06	0.001	0.001
	FR1 n77_Ant 5	100M	BPSK	135	69	Top Side	10mm	4	656000	3840	22.24	23.4	1.306	0.04	0.001	0.001
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	10mm	4	633332	3499.98	22.32	23.4	1.282	0.03	0.422	0.541
	FR1 n77_Ant 5	100M	BPSK	135	69	Front	10mm	4	633332	3499.98	22	23.4	1.380	0.05	0.343	0.473
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	10mm	4	633332	3499.98	22.32	23.4	1.282	-0.04	0.310	0.398
	FR1 n77_Ant 5	100M	BPSK	135	69	Back	10mm	4	633332	3499.98	22	23.4	1.380	0.02	0.268	0.370
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Side	10mm	4	633332	3499.98	22.32	23.4	1.282	-0.07	0.001	0.001
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Side	10mm	4	633332	3499.98	22	23.4	1.380	0.08	0.001	0.001
65	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	4	633332	3499.98	22.32	23.4	1.282	0.1	0.653	0.837
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	633332	3499.98	22	23.4	1.380	0.1	0.553	0.763
	FR1 n77_Ant 5	100M	BPSK	270	0	Right Side	10mm	4	633332	3499.98	21.79	23.4	1.449	0.09	0.519	0.752
	FR1 n77_Ant 5	100M	BPSK	1	1	Top Side	10mm	4	633332	3499.98	22.32	23.4	1.282	-0.06	0.001	0.001
	FR1 n77_Ant 5	100M	BPSK	135	69	Top Side	10mm	4	633332	3499.98	22	23.4	1.380	0.03	0.001	0.001



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	7	11	2462	20.95	21.00	1.012	98.9	1.011	0.1	0.348	0.356
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	7	11	2462	20.95	21.00	1.012	98.9	1.011	-0.13	0.435	0.445
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	7	11	2462	20.95	21.00	1.012	98.9	1.011	-0.13	0.019	0.019
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	7	11	2462	20.95	21.00	1.012	98.9	1.011	0.06	0.484	0.495
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	7	11	2462	20.95	21.00	1.012	98.9	1.011	0.1	0.514	0.526
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	7	1	2412	20.75	21.00	1.059	98.9	1.011	-0.04	0.569	0.609
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	7	6	2437	20.85	21.00	1.035	98.9	1.011	-0.08	0.558	0.584
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	7	12	2467	20.75	21.00	1.059	98.9	1.011	-0.01	0.534	0.572
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	7	13	2472	20.75	21.00	1.059	98.9	1.011	-0.05	0.575	0.616
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	7	1	2412	20.95	21.00	1.012	98.9	1.011	-0.09	0.262	0.268
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	7	1	2412	20.95	21.00	1.012	98.9	1.011	-0.14	0.303	0.310
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7	1	2412	20.95	21.00	1.012	98.9	1.011	-0.08	0.455	0.465
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	7	1	2412	20.95	21.00	1.012	98.9	1.011	-0.03	0.017	0.017
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	7	1	2412	20.95	21.00	1.012	98.9	1.011	-0.08	0.047	0.048
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7	6	2437	20.75	21.00	1.059	98.9	1.011	-0.04	0.475	0.509
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7	11	2462	20.75	21.00	1.059	98.9	1.011	-0.05	0.531	0.569
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7	12	2467	20.55	21.00	1.109	98.9	1.011	-0.06	0.576	0.646
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	7	13	2472	20.55	21.00	1.109	98.9	1.011	-0.04	0.533	0.598
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3(4)	7	1	2437	20.75	21.00	1.059	93.4	1.071	-0.03	0.354	0.402
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3(3)	7	1	2437	19.75	21.00	1.334	93.4	1.071	-0.03	0.211	0.301
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3(4)	7	6	2437	20.75	21.00	1.059	93.4	1.071	0.07	0.375	0.425
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3(3)	7	6	2437	19.75	21.00	1.334	93.4	1.071	0.07	0.231	0.330
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3(3)	7	6	2437	19.75	21.00	1.334	93.4	1.071	-0.03	0.395	0.564
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	Ant 4+3(4)	7	6	2437	20.75	21.00	1.059	93.4	1.071	0.09	0.442	0.501
66	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3(4)	7	6	2437	20.75	21.00	1.059	93.4	1.071	-0.01	0.616	0.699
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3(4)	7	1	2412	20.00	20.00	1.000	93.4	1.071	-0.06	0.449	0.481
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3(4)	7	11	2462	19.95	20.00	1.012	93.4	1.071	-0.04	0.436	0.472
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3(4)	7	12	2467	18.25	18.50	1.059	93.4	1.071	-0.02	0.265	0.301
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3(4)	7	13	2472	16.25	17.00	1.189	93.4	1.071	-0.05	0.167	0.213
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4	8	6	2437	17.35	17.50	1.035	98.9	1.011	0.01	0.166	0.174
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4	8	6	2437	17.35	17.50	1.035	98.9	1.011	0.04	0.170	0.178
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4	8	6	2437	17.35	17.50	1.035	98.9	1.011	-0.07	0.010	0.010
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4	8	6	2437	17.35	17.50	1.035	98.9	1.011	0.17	0.230	0.241
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4	8	6	2437	17.35	17.50	1.035	98.9	1.011	0.06	0.256	0.268
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 3	8	11	2462	17.45	17.50	1.012	98.9	1.011	0	0.133	0.136
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 3	8	11	2462	17.45	17.50	1.012	98.9	1.011	-0.11	0.141	0.144
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 3	8	11	2462	17.45	17.50	1.012	98.9	1.011	-0.04	0.222	0.227
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 3	8	11	2462	17.45	17.50	1.012	98.9	1.011	-0.01	0.006	0.006
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 3	8	11	2462	17.45	17.50	1.012	98.9	1.011	-0.02	0.012	0.012
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3(4)	8	11	2462	17.45	17.50	1.012	93.4	1.071	-0.03	0.138	0.150
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	Ant 4+3(3)	8	11	2462	17.15	17.50	1.084	93.4	1.071	-0.03	0.124	0.144
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3(4)	8	11	2462	17.45	17.50	1.012	93.4	1.071	-0.13	0.174	0.189
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	Ant 4+3(3)	8	11	2462	17.15	17.50	1.084	93.4	1.071	-0.13	0.125	0.145
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	Ant 4+3(3)	8	11	2462	17.15	17.50	1.084	93.4	1.071	-0.07	0.229	0.266
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	Ant 4+3(4)	8	11	2462	17.45	17.50	1.012	93.4	1.071	0.07	0.187	0.203
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	Ant 4+3(4)	8	11	2462	17.45	17.50	1.012	93.4	1.071	0.01	0.214	0.232



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(4)	7	42	5210	14.40	15.00	1.148	87.95	1.137	-0.01	0.048	0.063
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(3)	7	42	5210	13.30	15.00	1.479	87.95	1.137	-0.01	0.128	0.215
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(4)	7	42	5210	14.40	15.00	1.148	87.95	1.137	0.13	0.005	0.007
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(3)	7	42	5210	13.30	15.00	1.479	87.95	1.137	0.13	0.085	0.143
67	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3(3)	7	42	5210	13.30	15.00	1.479	87.95	1.137	-0.12	0.363	0.610
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3(4)	7	42	5210	14.40	15.00	1.148	87.95	1.137	-0.15	0.040	0.052
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(4)	7	42	5210	14.40	15.00	1.148	87.95	1.137	0.14	0.019	0.025
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(3)	7	42	5210	13.30	15.00	1.479	87.95	1.137	0.14	0.019	0.032
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(4)	8/9	42	5210	12.90	13.00	1.023	87.95	1.137	-0.06	0.017	0.020
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(3)	8/9	42	5210	11.60	13.00	1.380	87.95	1.137	-0.06	0.088	0.138
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(4)	8/9	42	5210	12.90	13.00	1.023	87.95	1.137	-0.04	0.007	0.009
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(3)	8/9	42	5210	11.60	13.00	1.380	87.95	1.137	-0.04	0.038	0.060
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3(3)	8/9	42	5210	11.60	13.00	1.380	87.95	1.137	-0.14	0.216	0.339
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3(4)	8/9	42	5210	12.90	13.00	1.023	87.95	1.137	-0.04	0.019	0.022
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(3)	8/9	42	5210	11.60	13.00	1.380	87.95	1.137	0.01	0.027	0.042
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(4)	7	155	5775	18.20	18.50	1.072	87.95	1.137	0.11	0.162	0.197
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(3)	7	155	5775	17.70	18.50	1.202	87.95	1.137	0.11	0.306	0.418
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(4)	7	155	5775	18.20	18.50	1.072	87.95	1.137	-0.13	0.113	0.138
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(3)	7	155	5775	17.70	18.50	1.202	87.95	1.137	-0.13	0.089	0.122
68	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3(3)	7	155	5775	17.70	18.50	1.202	87.95	1.137	-0.09	0.452	0.618
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3(4)	7	155	5775	18.20	18.50	1.072	87.95	1.137	-0.06	0.091	0.111
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(4)	7	155	5775	18.20	18.50	1.072	87.95	1.137	-0.03	0.138	0.168
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(3)	7	155	5775	17.70	18.50	1.202	87.95	1.137	-0.03	0.084	0.115
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(4)	8	155	5775	16.20	16.50	1.072	87.95	1.137	-0.19	0.061	0.074
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(3)	8	155	5775	16.00	16.50	1.122	87.95	1.137	-0.19	0.182	0.232
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(4)	8	155	5775	16.20	16.50	1.072	87.95	1.137	0	0.077	0.094
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(3)	8	155	5775	16.00	16.50	1.122	87.95	1.137	0	0.058	0.074
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3(3)	8	155	5775	16.00	16.50	1.122	87.95	1.137	0.19	0.275	0.351
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3(4)	8	155	5775	16.20	16.50	1.072	87.95	1.137	-0.12	0.047	0.057
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(4)	8	155	5775	16.20	16.50	1.072	87.95	1.137	-0.07	0.067	0.082
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(3)	8	155	5775	16.00	16.50	1.122	87.95	1.137	-0.07	0.057	0.073
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(4)	9	155	5775	16.20	17.50	1.349	87.95	1.137	-0.19	0.061	0.094
	WLAN5GHz	802.11ac-VHT80 MCS0	Front	10mm	Ant 4+3(3)	9	155	5775	16.00	17.50	1.413	87.95	1.137	-0.19	0.182	0.292
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(4)	9	155	5775	16.20	17.50	1.349	87.95	1.137	0	0.077	0.118
	WLAN5GHz	802.11ac-VHT80 MCS0	Back	10mm	Ant 4+3(3)	9	155	5775	16.00	17.50	1.413	87.95	1.137	0	0.058	0.093
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	Ant 4+3(3)	9	155	5775	16.00	17.50	1.413	87.95	1.137	0.19	0.275	0.442
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	Ant 4+3(4)	9	155	5775	16.20	17.50	1.349	87.95	1.137	-0.12	0.047	0.072
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(4)	9	155	5775	16.20	17.50	1.349	87.95	1.137	-0.07	0.067	0.103
	WLAN5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	Ant 4+3(3)	9	155	5775	16.00	17.50	1.413	87.95	1.137	-0.07	0.057	0.092



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	3	0	2402	19.64	20.00	1.087	77.22	1.079	-0.07	0.253	0.297
	Bluetooth	1Mbps	Back	10mm	Ant 4	3	0	2402	19.64	20.00	1.087	77.22	1.079	-0.13	0.335	0.393
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	3	0	2402	19.64	20.00	1.087	77.22	1.079	0	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	3	0	2402	19.64	20.00	1.087	77.22	1.079	-0.11	0.261	0.306
69	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	0	2402	19.64	20.00	1.087	77.22	1.079	-0.06	0.383	0.449
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	39	2441	19.57	20.00	1.104	77.22	1.079	-0.02	0.273	0.325
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	3	78	2480	19.55	20.00	1.110	77.22	1.079	-0.09	0.226	0.271
	Bluetooth	1Mbps	Front	10mm	Ant 3	3	0	2402	19.60	20.00	1.097	77.22	1.079	-0.08	0.154	0.182
	Bluetooth	1Mbps	Back	10mm	Ant 3	3	0	2402	19.60	20.00	1.097	77.22	1.079	-0.07	0.178	0.211
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	3	0	2402	19.60	20.00	1.097	77.22	1.079	-0.11	0.193	0.228
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	3	39	2441	19.55	20.00	1.110	77.22	1.079	0.01	0.221	0.265
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	3	78	2480	19.52	20.00	1.117	77.22	1.079	-0.15	0.201	0.242
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	3	0	2402	19.60	20.00	1.097	77.22	1.079	-0.06	0.012	0.014
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	3	0	2402	19.60	20.00	1.097	77.22	1.079	0	0.001	0.001
	Bluetooth	1Mbps	Front	10mm	Ant 4+3(4)	3	0	2402	17.33	18.50	1.310	77.22	1.079	0.01	0.210	0.297
	Bluetooth	1Mbps	Front	10mm	Ant 4+3(3)	3	0	2402	17.45	18.50	1.274	77.22	1.079	0.01	0.114	0.157
	Bluetooth	1Mbps	Back	10mm	Ant 4+3(4)	3	0	2402	17.33	18.50	1.310	77.22	1.079	-0.05	0.196	0.277
	Bluetooth	1Mbps	Back	10mm	Ant 4+3(3)	3	0	2402	17.45	18.50	1.274	77.22	1.079	-0.05	0.111	0.153
	Bluetooth	1Mbps	Left Side	10mm	Ant 4+3(4)	3	0	2402	17.33	18.50	1.310	77.22	1.079	0.01	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	Ant 4+3(3)	3	0	2402	17.45	18.50	1.274	77.22	1.079	0.01	0.145	0.199
	Bluetooth	1Mbps	Right Side	10mm	Ant 4+3(4)	3	0	2402	17.33	18.50	1.310	77.22	1.079	-0.15	0.151	0.213
	Bluetooth	1Mbps	Right Side	10mm	Ant 4+3(3)	3	0	2402	17.45	18.50	1.274	77.22	1.079	-0.15	0.011	0.015
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(4)	3	0	2402	17.33	18.50	1.310	77.22	1.079	-0.19	0.225	0.318
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(3)	3	0	2402	17.45	18.50	1.274	77.22	1.079	-0.19	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(4)	3	39	2441	17.10	18.50	1.381	77.22	1.079	0.05	0.170	0.253
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(3)	3	39	2441	17.18	18.50	1.356	77.22	1.079	0.05	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(4)	3	78	2480	17.05	18.50	1.397	77.22	1.079	-0.15	0.147	0.222
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(3)	3	78	2480	17.15	18.50	1.365	77.22	1.079	-0.15	0.001	0.001



Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	0	2402	16.51	17.00	1.119	77.22	1.079	-0.07	0.130	0.157
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	0	2402	16.51	17.00	1.119	77.22	1.079	-0.03	0.148	0.179
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	4	0	2402	16.51	17.00	1.119	77.22	1.079	-0.06	0.002	0.003
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	4	0	2402	16.51	17.00	1.119	77.22	1.079	-0.06	0.146	0.176
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	0	2402	16.51	17.00	1.119	77.22	1.079	-0.1	0.209	0.252
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	39	2441	16.21	17.00	1.199	77.22	1.079	-0.02	0.171	0.221
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	78	2480	16.00	17.00	1.259	77.22	1.079	-0.04	0.128	0.174
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	0	2402	16.29	17.00	1.178	77.22	1.079	0.1	0.073	0.093
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	0	2402	16.29	17.00	1.178	77.22	1.079	-0.09	0.121	0.154
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	0	2402	16.29	17.00	1.178	77.22	1.079	0.04	0.119	0.151
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	4	0	2402	16.29	17.00	1.178	77.22	1.079	0.06	0.002	0.003
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	4	0	2402	16.29	17.00	1.178	77.22	1.079	-0.02	0.017	0.022
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	16.02	17.00	1.253	77.22	1.079	0.11	0.117	0.158
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	78	2480	15.91	17.00	1.285	77.22	1.079	-0.03	0.121	0.168
	Bluetooth	1Mbps	Front	10mm	Ant 4+3(4)	4	0	2402	16.50	17.00	1.122	77.22	1.079	-0.04	0.096	0.116
	Bluetooth	1Mbps	Front	10mm	Ant 4+3(3)	4	0	2402	16.17	17.00	1.211	77.22	1.079	-0.04	0.094	0.123
	Bluetooth	1Mbps	Back	10mm	Ant 4+3(4)	4	0	2402	16.50	17.00	1.122	77.22	1.079	-0.09	0.130	0.157
	Bluetooth	1Mbps	Back	10mm	Ant 4+3(3)	4	0	2402	16.17	17.00	1.211	77.22	1.079	-0.09	0.098	0.128
	Bluetooth	1Mbps	Left Side	10mm	Ant 4+3(4)	4	0	2402	16.50	17.00	1.122	77.22	1.079	0.06	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	Ant 4+3(3)	4	0	2402	16.17	17.00	1.211	77.22	1.079	0.06	0.063	0.082
	Bluetooth	1Mbps	Right Side	10mm	Ant 4+3(4)	4	0	2402	16.50	17.00	1.122	77.22	1.079	0.12	0.149	0.180
	Bluetooth	1Mbps	Right Side	10mm	Ant 4+3(3)	4	0	2402	16.17	17.00	1.211	77.22	1.079	0.12	0.121	0.158
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(4)	4	0	2402	16.50	17.00	1.122	77.22	1.079	-0.06	0.239	0.289
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(3)	4	0	2402	16.17	17.00	1.211	77.22	1.079	-0.06	0.012	0.016
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(4)	4	39	2441	16.17	17.00	1.211	77.22	1.079	-0.02	0.116	0.152
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(3)	4	39	2441	16.00	17.00	1.259	77.22	1.079	-0.02	0.097	0.132
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(4)	4	78	2480	15.87	17.00	1.297	77.22	1.079	0.12	0.121	0.169
	Bluetooth	1Mbps	Top Side	10mm	Ant 4+3(3)	4	78	2480	15.67	17.00	1.358	77.22	1.079	0.12	0.038	0.056



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	5/6	128	824.2	30.35	30.50	1.035	0.02	0.684	0.708
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	5/6	128	824.2	30.35	30.50	1.035	0	0.685	0.709
70	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	5/6	189	836.4	29.80	30.50	1.175	0.09	0.659	0.774
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	5/6	251	848.8	29.77	30.50	1.183	0.05	0.632	0.748
	GSM850_Ant 1	GPRS (4 Tx slots)	Front	10mm	5/6	128	824.2	29.38	30.50	1.294	0.02	0.267	0.346
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	5/6	128	824.2	29.38	30.50	1.294	0	0.363	0.470
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	5/6	189	836.4	29.05	30.50	1.396	0.05	0.373	0.521
	GSM850_Ant 1	GPRS (4 Tx slots)	Back	10mm	5/6	251	848.8	28.90	30.50	1.445	-0.06	0.454	0.656
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	5	512	1850.2	27.09	28.00	1.233	0.02	0.551	0.679
71	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5	512	1850.2	27.09	28.00	1.233	-0.1	0.787	0.970
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5	661	1880	27.08	28.00	1.236	-0.03	0.559	0.691
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5	810	1909.8	26.86	28.00	1.300	-0.05	0.497	0.646
	GSM1900_Ant 2	GPRS (4 Tx slots)	Front	10mm	6	512	1850.2	27.09	27.60	1.125	0.02	0.551	0.620
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	6	512	1850.2	27.09	27.60	1.125	-0.1	0.787	0.885
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	6	661	1880	27.08	27.60	1.127	-0.03	0.559	0.630
	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	6	810	1909.8	26.86	27.60	1.186	-0.05	0.497	0.589
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	5	512	1850.2	22.71	24.20	1.409	0.1	0.462	0.651
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	5	661	1880	22.37	24.20	1.524	0.05	0.383	0.584
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	5	810	1909.8	22.20	24.20	1.585	0	0.255	0.404
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	512	1850.2	22.71	24.20	1.409	0.02	0.415	0.585
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	6	512	1850.2	22.71	23.00	1.069	0.1	0.462	0.494
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	6	661	1880	22.37	23.00	1.156	0.05	0.383	0.443
	GSM1900_Ant 0	GPRS (4 Tx slots)	Front	10mm	6	810	1909.8	22.20	23.00	1.202	0	0.255	0.307
	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	512	1850.2	22.71	23.00	1.069	0.02	0.415	0.444



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	5	9262	1852.4	22.95	24.20	1.334	0.05	0.570	0.760
72	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	5	9262	1852.4	22.95	24.20	1.334	-0.14	0.858	1.144
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	5	9400	1880	22.84	24.20	1.368	-0.07	0.791	1.082
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	5	9538	1907.6	22.78	24.20	1.387	0.03	0.712	0.987
	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	6	9262	1852.4	22.95	23.00	1.012	0.05	0.570	0.577
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	6	9262	1852.4	22.95	23.00	1.012	-0.14	0.858	0.868
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	6	9400	1880	22.84	23.00	1.038	-0.07	0.791	0.821
	WCDMA II_Ant 2	RMC 12.2Kbps	Back	10mm	6	9538	1907.6	22.78	23.00	1.052	0.03	0.712	0.749
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	5	9262	1852.4	18.60	20.00	1.380	0.05	0.483	0.667
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	5	9400	1880	18.51	20.00	1.409	0.01	0.445	0.627
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	5	9538	1907.6	18.45	20.00	1.429	0.05	0.362	0.517
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	5	9262	1852.4	18.60	20.00	1.380	0.02	0.464	0.640
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	6	9262	1852.4	18.60	18.80	1.047	0.05	0.483	0.506
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	6	9400	1880	18.51	18.80	1.069	0.01	0.445	0.476
	WCDMA II_Ant 0	RMC 12.2Kbps	Front	10mm	6	9538	1907.6	18.45	18.80	1.084	0.05	0.362	0.392
	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	6	9262	1852.4	18.60	18.80	1.047	0.02	0.464	0.486
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	5	1312	1712.4	22.85	24.20	1.365	0.05	0.370	0.505
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	5	1312	1712.4	22.85	24.20	1.365	0.03	0.533	0.727
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	5	1413	1732.6	22.68	24.20	1.419	0	0.558	0.792
73	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	5	1513	1752.6	22.76	24.20	1.393	0.02	0.603	0.840
	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	6	1312	1712.4	22.85	23.00	1.035	0.05	0.370	0.383
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	6	1312	1712.4	22.85	23.00	1.035	0.03	0.533	0.552
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	6	1413	1732.6	22.68	23.00	1.076	0	0.558	0.601
	WCDMA IV_Ant 2	RMC 12.2Kbps	Back	10mm	6	1513	1752.6	22.76	23.00	1.057	0.02	0.603	0.637
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	5	1513	1752.6	18.55	20.40	1.531	-0.01	0.527	0.807
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	5	1312	1712.4	18.54	20.40	1.535	-0.05	0.498	0.764
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	5	1413	1732.6	18.41	20.40	1.581	-0.02	0.530	0.838
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	5	1513	1752.6	18.55	20.40	1.531	0.04	0.494	0.756
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	6	1513	1752.6	18.55	19.20	1.161	-0.01	0.527	0.612
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	6	1312	1712.4	18.54	19.20	1.164	-0.05	0.498	0.580
	WCDMA IV_Ant 0	RMC 12.2Kbps	Front	10mm	6	1413	1732.6	18.41	19.20	1.199	-0.02	0.530	0.636
	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	6	1513	1752.6	18.55	19.20	1.161	0.04	0.494	0.574
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	5/6	4182	836.4	24.69	25.40	1.178	0.11	0.551	0.649
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	4182	836.4	24.69	25.40	1.178	-0.09	0.576	0.678
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	4132	826.4	24.67	25.40	1.183	0.14	0.603	0.713
74	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	4233	846.6	24.67	25.40	1.183	-0.01	0.635	0.751
	WCDMA V_Ant 1	RMC 12.2Kbps	Front	10mm	5/6	4182	836.4	24.72	25.40	1.169	0.15	0.371	0.434
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5/6	4182	836.4	24.72	25.40	1.169	0.09	0.526	0.615
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5/6	4132	826.4	24.71	25.40	1.172	0.12	0.501	0.587
	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5/6	4233	846.6	24.62	25.40	1.197	-0.1	0.559	0.669



<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 2_Ant 1	20M	QPSK	1	0	Front	10mm	5	18900	1880	22.33	22.40	1.016	0.01	0.784	0.797
	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	10mm	5	18900	1880	21.82	22.40	1.143	0.02	0.824	0.942
	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	10mm	5	18700	1860	21.77	22.40	1.156	0.07	0.666	0.770
75	LTE Band 2_Ant 1	20M	QPSK	50	0	Fornt	10mm	5	19100	1900	21.75	22.40	1.161	-0.04	0.960	1.115
	LTE Band 2_Ant 1	20M	QPSK	100	0	Front	10mm	5	18900	1880	22.05	22.40	1.084	0.02	0.816	0.884
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	10mm	5	18900	1880	22.33	22.40	1.016	0.01	0.694	0.705
	LTE Band 2_Ant 1	20M	QPSK	50	0	Back	10mm	5	18900	1880	21.82	22.40	1.143	0.06	0.708	0.809
	LTE Band 2_Ant 1	20M	QPSK	50	0	Back	10mm	5	18700	1860	21.77	22.40	1.156	-0.05	0.585	0.676
	LTE Band 2_Ant 1	20M	QPSK	50	0	Back	10mm	5	19100	1900	21.75	22.40	1.161	-0.03	0.851	0.988
	LTE Band 2_Ant 1	20M	QPSK	100	0	Back	10mm	5	18900	1880	22.05	22.40	1.084	0.01	0.709	0.769
	LTE Band 2_Ant 1	20M	QPSK	1	0	Front	10mm	6	18900	1880	20.20	21.20	1.259	0.03	0.615	0.774
	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	10mm	6	18900	1880	21.03	21.20	1.040	0.02	0.750	0.780
	LTE Band 2_Ant 1	20M	QPSK	50	0	Front	10mm	6	18700	1860	20.94	21.20	1.062	0.03	0.516	0.548
	LTE Band 2_Ant 1	20M	QPSK	50	0	Fornt	10mm	6	19100	1900	20.99	21.20	1.050	-0.06	0.744	0.781
	LTE Band 2_Ant 1	20M	QPSK	100	0	Front	10mm	6	18900	1880	20.92	21.20	1.067	-0.05	0.632	0.674
	LTE Band 2_Ant 1	20M	QPSK	1	0	Back	10mm	6	18900	1880	20.20	21.20	1.259	0	0.538	0.677
	LTE Band 2_Ant 1	20M	QPSK	50	0	Back	10mm	6	18900	1880	21.03	21.20	1.040	0.08	0.548	0.570
	LTE Band 2_Ant 5	20M	QPSK	1	0	Front	10mm	5/6	18700	1860	24.23	25.20	1.250	0.02	0.391	0.489
	LTE Band 2_Ant 5	20M	QPSK	50	0	Front	10mm	5/6	18700	1860	23.14	24.20	1.276	0	0.312	0.398
	LTE Band 2_Ant 5	20M	QPSK	1	0	Back	10mm	5/6	18700	1860	24.23	25.20	1.250	0.05	0.522	0.653
	LTE Band 2_Ant 5	20M	QPSK	1	0	Back	10mm	5/6	18900	1880	23.93	25.20	1.340	-0.04	0.462	0.619
	LTE Band 2_Ant 5	20M	QPSK	1	0	Back	10mm	5/6	19100	1900	23.71	25.20	1.409	-0.05	0.483	0.681
	LTE Band 2_Ant 5	20M	QPSK	50	0	Back	10mm	5/6	18700	1860	23.14	24.20	1.276	-0.01	0.411	0.525



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	0	Front	10mm	5	21100	2535	22.53	23.40	1.222	0	0.587	0.717
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	5	21100	2535	22.69	23.40	1.178	0.05	0.575	0.677
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	5	21100	2535	22.53	23.40	1.222	-0.01	0.730	0.892
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	5	20850	2510	22.49	23.40	1.233	0.02	0.678	0.836
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	5	21350	2560	22.52	23.40	1.225	-0.06	0.750	0.918
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	5	21100	2535	22.69	23.40	1.178	-0.07	0.715	0.842
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	5	20850	2510	22.63	23.40	1.194	0.1	0.674	0.805
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	5	21350	2560	22.57	23.40	1.211	0.03	0.742	0.898
	LTE Band 7_Ant 2	20M	QPSK	100	0	Back	10mm	5	21100	2535	22.61	23.40	1.199	0.06	0.705	0.846
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	5	21100+20920	2535	23.01	23.40	1.094	0.02	0.666	0.729
	LTE Band 7_Ant 2	20M	QPSK	1	0	Front	10mm	6	21100	2535	21.11	22.20	1.285	0.02	0.372	0.478
	LTE Band 7_Ant 2	20M	QPSK	50	0	Front	10mm	6	21100	2535	21.05	22.20	1.303	0.05	0.381	0.497
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	6	21100	2535	21.11	22.20	1.285	-0.04	0.452	0.581
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	6	20850	2510	21.05	22.20	1.303	0.02	0.418	0.545
	LTE Band 7_Ant 2	20M	QPSK	1	0	Back	10mm	6	21350	2560	21.09	22.20	1.291	-0.01	0.465	0.600
	LTE Band 7_Ant 2	20M	QPSK	50	0	Back	10mm	6	21100	2535	21.05	22.20	1.303	0.03	0.445	0.580
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Back	10mm	6	21100+20920	2535	20.57	22.20	1.455	0.07	0.302	0.440
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	5	21100	2535	21.44	21.80	1.086	-0.1	0.956	1.039
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	5	20850	2510	21.38	21.80	1.102	-0.16	0.880	0.969
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	5	21350	2560	21.34	21.80	1.112	0.01	0.955	1.062
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	5	21100	2535	21.40	21.80	1.096	-0.06	0.937	1.027
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	5	20850	2510	21.37	21.80	1.104	-0.06	0.879	0.970
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	5	21350	2560	21.34	21.80	1.112	-0.1	0.941	1.046
	LTE Band 7_Ant 0	20M	QPSK	100	0	Front	10mm	5	21100	2535	21.40	21.80	1.096	0.09	0.931	1.021
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	5	21100	2535	21.44	21.80	1.086	0.11	1.020	1.108
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	5	20850	2510	21.38	21.80	1.102	0.12	0.955	1.052
76	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	5	21350	2560	21.34	21.80	1.112	-0.06	1.050	1.167
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	5	21100	2535	21.40	21.80	1.096	-0.01	1.010	1.107
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	5	20850	2510	21.37	21.80	1.104	-0.16	0.966	1.067
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	5	21350	2560	21.34	21.80	1.112	0.03	1.040	1.156
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	5	21100	2535	21.40	21.80	1.096	-0.06	1.010	1.107
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	5	21100+20920	2535	21.12	21.80	1.169	-0.02	0.705	0.824
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	6	21100	2535	19.90	20.60	1.175	-0.11	0.704	0.827
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	6	20850	2510	19.79	20.60	1.205	-0.16	0.648	0.781
	LTE Band 7_Ant 0	20M	QPSK	1	0	Front	10mm	6	21350	2560	19.89	20.60	1.178	0.03	0.695	0.818
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	6	21100	2535	19.90	20.60	1.175	-0.11	0.690	0.811
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	6	20850	2510	19.80	20.60	1.202	-0.15	0.647	0.778
	LTE Band 7_Ant 0	20M	QPSK	50	0	Front	10mm	6	21350	2560	19.89	20.60	1.178	0.03	0.693	0.816
	LTE Band 7_Ant 0	20M	QPSK	100	0	Front	10mm	6	21100	2535	19.91	20.60	1.172	0.08	0.686	0.804
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	6	21100	2535	19.90	20.60	1.175	-0.15	0.719	0.845
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	6	20850	2510	19.79	20.60	1.205	0.02	0.670	0.807
	LTE Band 7_Ant 0	20M	QPSK	1	0	Back	10mm	6	21350	2560	19.89	20.60	1.178	-0.19	0.737	0.868
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	6	21100	2535	19.90	20.60	1.175	-0.15	0.715	0.840
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	6	20850	2510	19.80	20.60	1.202	-0.05	0.678	0.815
	LTE Band 7_Ant 0	20M	QPSK	50	0	Back	10mm	6	21350	2560	19.89	20.60	1.178	0.03	0.736	0.867
	LTE Band 7_Ant 0	20M	QPSK	100	0	Back	10mm	6	21100	2535	19.91	20.60	1.172	0.09	0.709	0.831
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Back	10mm	6	21100+20920	2535	19.49	20.60	1.291	-0.04	0.498	0.643



FCC SAR TEST REPORT

Report No. : FA102843-05E

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	5/6	23095	707.5	24.61	25.40	1.199	0.02	0.325	0.390
	LTE Band 12_Ant 0	10M	QPSK	25	0	Front	10mm	5/6	23095	707.5	23.60	24.40	1.202	0	0.269	0.323
77	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	5/6	23095	707.5	24.61	25.40	1.199	-0.15	0.356	0.427
	LTE Band 12_Ant 0	10M	QPSK	25	0	Back	10mm	5/6	23095	707.5	23.60	24.40	1.202	-0.02	0.298	0.358
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	5/6	23095	707.5	24.77	25.40	1.156	0.01	0.237	0.274
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	5/6	23095	707.5	23.75	24.40	1.161	0	0.197	0.229
	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	23095	707.5	24.77	25.40	1.156	-0.05	0.273	0.316
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	5/6	23095	707.5	23.75	24.40	1.161	0.04	0.225	0.261
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	5/6	23230	782	24.47	25.40	1.239	0.02	0.470	0.582
	LTE Band 13_Ant 0	10M	QPSK	25	0	Front	10mm	5/6	23230	782	23.50	24.40	1.230	0	0.385	0.474
78	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	5/6	23230	782	24.47	25.40	1.239	-0.07	0.545	0.675
	LTE Band 13_Ant 0	10M	QPSK	25	0	Back	10mm	5/6	23230	782	23.50	24.40	1.230	0.05	0.443	0.545
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	5/6	23230	782	24.71	25.40	1.172	0.01	0.308	0.361
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	5/6	23230	782	23.65	24.40	1.189	0	0.251	0.298
	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	23230	782	24.71	25.40	1.172	-0.08	0.402	0.471
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	5/6	23230	782	23.65	24.40	1.189	0.05	0.311	0.370
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	10mm	5/6	23330	793	24.55	25.40	1.216	0.01	0.544	0.662
	LTE Band 14_Ant 0	10M	QPSK	25	0	Front	10mm	5/6	23330	793	23.55	24.40	1.216	0	0.414	0.504
79	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	5/6	23330	793	24.55	25.40	1.216	0.07	0.607	0.738
	LTE Band 14_Ant 0	10M	QPSK	25	0	Back	10mm	5/6	23330	793	23.55	24.40	1.216	0.05	0.493	0.600
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	5/6	23330	793	24.72	25.40	1.169	0.02	0.311	0.364
	LTE Band 14_Ant 1	10M	QPSK	25	0	Front	10mm	5/6	23330	793	23.75	24.40	1.161	0.01	0.251	0.292
	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	23330	793	24.72	25.40	1.169	0.11	0.392	0.458
	LTE Band 14_Ant 1	10M	QPSK	25	0	Back	10mm	5/6	23330	793	23.75	24.40	1.161	0	0.317	0.368
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	5	26340	1880	23.32	24.60	1.343	0	0.427	0.573
	LTE Band 25_Ant 2	20M	QPSK	50	0	Front	10mm	5	26340	1880	23.21	24.10	1.227	0.01	0.425	0.522
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	5	26340	1880	23.32	24.60	1.343	-0.02	0.664	0.892
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	5	26140	1860	23.19	24.60	1.384	-0.03	0.765	1.058
80	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	5	26590	1905	23.10	24.60	1.413	0.13	0.780	1.102
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	5	26340	1880	23.21	24.10	1.227	0.05	0.659	0.809
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	5	26140	1860	23.10	24.10	1.259	-0.06	0.754	0.949
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	5	26590	1905	22.95	24.10	1.303	-0.01	0.709	0.924
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	5	26340	1880	23.16	24.10	1.242	0.07	0.647	0.803
	LTE Band 25_Ant 2	20M	QPSK	1	0	Front	10mm	6	26340	1880	22.35	23.40	1.274	0.01	0.336	0.428
	LTE Band 25_Ant 2	20M	QPSK	50	0	Front	10mm	6	26340	1880	22.22	23.40	1.312	0	0.335	0.440
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	6	26340	1880	22.35	23.40	1.274	0.05	0.540	0.688
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	6	26140	1860	22.23	23.40	1.309	-0.03	0.602	0.788
	LTE Band 25_Ant 2	20M	QPSK	1	0	Back	10mm	6	26590	1905	22.14	23.40	1.337	0.06	0.614	0.821
	LTE Band 25_Ant 2	20M	QPSK	50	0	Back	10mm	6	26340	1880	22.22	23.40	1.312	0.01	0.519	0.681
	LTE Band 25_Ant 2	20M	QPSK	100	0	Back	10mm	6	26340	1880	22.18	23.40	1.324	-0.08	0.510	0.675
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	5	26340	1880	20.05	20.20	1.035	0	0.573	0.593
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	5	26140	1860	20.04	20.20	1.038	0.03	0.699	0.725
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	5	26590	1905	19.99	20.20	1.050	0.05	0.452	0.474
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	5	26340	1880	20.06	20.20	1.033	-0.01	0.571	0.590
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	5	26340	1880	20.05	20.20	1.035	0.02	0.527	0.546
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	5	26340	1880	20.06	20.20	1.033	-0.03	0.511	0.528
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	6	26340	1880	17.77	19.00	1.327	0.02	0.342	0.454
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	6	26140	1860	17.72	19.00	1.343	-0.07	0.405	0.544
	LTE Band 25_Ant 0	20M	QPSK	1	0	Front	10mm	6	26590	1905	17.41	19.00	1.442	0.01	0.278	0.401
	LTE Band 25_Ant 0	20M	QPSK	50	0	Front	10mm	6	26340	1880	17.74	19.00	1.337	0	0.336	0.449
	LTE Band 25_Ant 0	20M	QPSK	1	0	Back	10mm	6	26340	1880	17.77	19.00	1.327	0.03	0.314	0.417
	LTE Band 25_Ant 0	20M	QPSK	50	0	Back	10mm	6	26340	1880	17.74	19.00	1.337	-0.05	0.314	0.420



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	5/6	26865	831.5	24.46	25.40	1.242	0.07	0.434	0.539
	LTE Band 26_Ant 0	15M	QPSK	36	0	Front	10mm	5/6	26865	831.5	23.45	24.40	1.245	0.02	0.340	0.423
81	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	5/6	26865	831.5	24.46	25.40	1.242	0.06	0.493	0.612
	LTE Band 26_Ant 0	15M	QPSK	36	0	Back	10mm	5/6	26865	831.5	23.45	24.40	1.245	0.01	0.391	0.487
	LTE Band 5B_Ant 0	10M	QPSK	1	0	Back	10mm	5/6	20525+20624	836.5	23.07	23.70	1.156	0.05	0.330	0.382
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	5/6	26865	831.5	24.84	25.40	1.138	0.01	0.289	0.329
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	5/6	26865	831.5	23.75	24.40	1.161	0	0.233	0.271
	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	5/6	26865	831.5	24.84	25.40	1.138	0.04	0.416	0.473
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	5/6	26865	831.5	23.75	24.40	1.161	0.05	0.344	0.400
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	20525+20624	836.5	23.89	24.00	1.026	0.03	0.289	0.296
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	5	27710	2310	22.52	23.40	1.225	0.01	0.545	0.667
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	5	27710	2310	22.36	23.40	1.271	0	0.586	0.745
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	5	27710	2310	22.52	23.40	1.225	-0.01	0.589	0.721
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	5	27710	2310	22.36	23.40	1.271	0.02	0.572	0.727
	LTE Band 30_Ant 2	10M	QPSK	1	0	Front	10mm	6	27710	2310	21.84	22.20	1.086	0.02	0.461	0.501
	LTE Band 30_Ant 2	10M	QPSK	25	0	Front	10mm	6	27710	2310	21.88	22.20	1.076	0	0.474	0.510
	LTE Band 30_Ant 2	10M	QPSK	1	0	Back	10mm	6	27710	2310	21.84	22.20	1.086	0.06	0.519	0.564
	LTE Band 30_Ant 2	10M	QPSK	25	0	Back	10mm	6	27710	2310	21.88	22.20	1.076	0.02	0.513	0.552
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	5	27710	2310	20.92	21.20	1.067	0.06	0.896	0.956
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	5	27710	2310	21.01	21.20	1.045	0.09	0.876	0.915
	LTE Band 30_Ant 0	10M	QPSK	50	0	Front	10mm	5	27710	2310	20.99	21.20	1.050	0.15	0.866	0.909
82	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	5	27710	2310	20.92	21.20	1.067	-0.09	0.970	1.035
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	5	27710	2310	21.01	21.20	1.045	-0.12	0.950	0.992
	LTE Band 30_Ant 0	10M	QPSK	50	0	Back	10mm	5	27710	2310	20.99	21.20	1.050	-0.09	0.946	0.993
	LTE Band 30_Ant 0	10M	QPSK	1	0	Front	10mm	6	27710	2310	19.57	20.00	1.104	0.01	0.550	0.607
	LTE Band 30_Ant 0	10M	QPSK	25	0	Front	10mm	6	27710	2310	19.57	20.00	1.104	0.15	0.541	0.597
	LTE Band 30_Ant 0	10M	QPSK	1	0	Back	10mm	6	27710	2310	19.57	20.00	1.104	-0.12	0.631	0.697
	LTE Band 30_Ant 0	10M	QPSK	25	0	Back	10mm	6	27710	2310	19.57	20.00	1.104	-0.15	0.598	0.660