

FCC SAR TEST REPORT

FCC ID : A4RGX7AS
Equipment : Phone
Model Name : GX7AS, GB17L
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Oct. 16, 2021 and testing was started from Nov. 28, 2021 and completed on Jan. 09, 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. Wensan Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager



Sporton International Inc. Wensan Laboratory

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History of this test report

Report No.	Version	Description	Issued Date
FA161608-05C	01	Initial issue of report	Jan. 26, 2022



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Google LLC, Phone, GX7AS, GB17L, 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	1.17	0.71	0.87		1.59	2.98	
	GSM1900	0.56	1.16	0.99	1.95			
	WCDMA II	0.97	1.09	0.95	1.64			
	WCDMA IV	0.72	1.18	0.99	2.93			
	WCDMA V	1.13	0.43	0.52				
	LTE B7	0.99	0.73	0.90				
	LTE B12/17	1.16	0.43	0.51				
	LTE B13	1.11	0.48	0.67				
	LTE B14	1.18	0.57	0.79				
	LTE B25/2	0.74	1.17	0.99	2.08			
	LTE B26/5	0.98	0.44	0.60				
	LTE B30	0.79	1.13	0.94				
	LTE B41/B38	0.69	0.79	0.99				
	LTE B48	0.22	0.89	0.89				
	LTE B66/4	0.68	1.14	0.94	2.91			
	LTE B71	0.84	0.48	0.48				
	FR1 n5	0.96	0.43	0.53				
	FR1 n7	0.90	0.76	0.93				
	FR1 n12	0.98	0.46	0.47				
	FR1 n25/2	0.83	1.19	0.98	1.88			
FR1 n30	0.68	1.19	0.99					
FR1 n38/41	1.17	0.65	1.00					
FR1 n66	0.62	1.13	1.00	2.98				
FR1 n71	0.70	0.45	0.50					
FR1 n77	0.75	1.19	0.99					
DTS	2.4GHz WLAN	1.12	0.63	0.56		1.57		
NII	5GHz WLAN	1.16	1.13	0.49	2.57	1.59	2.98	
DSS	Bluetooth	0.24	0.35	0.16		1.59		
Equipment Class	Frequency Band	Head		Body		Product Specific		Highest Reported PD (W/m ²)
6XD	6GHz WLAN	Reported 1g SAR (W/kg)	APD (W/m ²)	Reported 1g SAR (W/kg)	APD (W/m ²)	Reported 1g SAR (W/kg)	APD (W/m ²)	7.48
Date of Testing:		2021/11/28 ~ 2021/1/9						

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3786) 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
Model Name	GX7AS, GB17L
FCC ID	A4RGX7AS
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 5.8G 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
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
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:	<ol style="list-style-type: none"> Dynamic antenna tuning mechanism is available at Ant. 0/1 and for its <1GHz band, details are illustrated in the operational description This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot/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. For antenna 0/1/2/6, SAR data is reused from FCC ID A4RGB62Z, and spot check verification is provided in the spot check report FA161608-05E. Spot check procedures and data follow the FCC guidance in the lab KDB inquiry. 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. 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. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
2. The device implements the power management 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.
3. The following table shows maximum output power configurations for various exposure conditions (output power index) with tune-up tolerance accounted. For TAS enabled bands, the values associate with Plimit plus the total uncertainty, or Pmax plus total uncertainty when the derived Plimit is higher than Pmax. In some frequency bands, for some power indexes which associate with the same power level, conducted power measurement for those only need to perform at once.
4. The index 1 is for the mobile exposure condition, the compliance is demonstrated in Sporton's test report FA161608-05A.
5. SAR compliance for the scenario, when device in next-to-ear voice call with hotspot enabled, is justified via head SAR test at Power Index 3.

Table with 2 columns: Config* and Support transmit antenna and band. Rows include TX0 and TX1 configurations with antenna details like ANT 0, 2, 5, 6 and supported standards like GSM, UMTS, LTE, NR.



Maximum Transmit Burst Average Power (dBm)										
Band	Config	Antenna	Duty cycle	Mobile Condition	Head	Head	Hotspot	Body-worn/Extremity	Body-worn/Extremity	Head-Hotspot
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	Simultaneous
					Index 1	Index 2	Index 3	Index 4	Index 5	Index 6
GSM850 GSM/GPRS 1TX	TX0	0	12.50%	33.50	33.50	33.50	33.50	33.50	33.50	33.50
GSM850 GPRS 2TX	TX0	0	25.00%	32.50	32.50	32.50	32.50	32.50	32.50	32.50
GSM850 GPRS 3TX	TX0	0	37.50%	31.50	31.50	31.50	31.50	31.50	31.50	31.50
GSM850 GPRS 4TX	TX0	0	50.00%	30.50	30.50	30.50	30.50	30.50	30.50	30.50
GSM850 EDGE 1TX	TX0	0	12.50%	28.00	28.00	28.00	28.00	28.00	28.00	28.00
GSM850 EDGE 2TX	TX0	0	25.00%	27.50	27.50	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 3TX	TX0	0	37.50%	27.50	27.50	27.50	27.50	27.50	27.50	27.50
GSM850 EDGE 4TX	TX0	0	50.00%	25.50	25.50	25.50	25.50	25.50	25.50	25.50
GSM1900 GSM/GPRS 1TX	TX0	2	12.50%	30.85	30.85	30.85	29.80	30.85	30.70	30.85
GSM1900 GPRS 2TX	TX0	2	25.00%	29.35	29.35	29.35	26.80	28.50	27.70	29.35
GSM1900 GPRS 3TX	TX0	2	37.50%	28.85	28.85	28.85	25.05	26.75	25.95	28.85
GSM1900 GPRS 4TX	TX0	2	50.00%	27.85	27.85	27.85	23.80	25.50	24.70	27.85
GSM1900 EDGE 1TX	TX0	2	12.50%	26.35	26.35	26.35	26.35	26.35	26.35	26.35
GSM1900 EDGE 2TX	TX0	2	25.00%	24.85	24.85	24.85	24.85	24.85	24.85	24.85
GSM1900 EDGE 3TX	TX0	2	37.50%	24.85	24.85	24.85	24.85	24.85	24.85	24.85
GSM1900 EDGE 4TX	TX0	2	50.00%	23.85	23.85	23.85	23.80	23.85	23.85	23.85
WCDMA B2	TX0	2	100.00%	25.25	25.25	25.25	20.90	22.10	21.30	25.25
WCDMA B4	TX0	2	100.00%	25.25	25.25	25.25	22.00	23.30	22.50	25.25
WCDMA B5	TX0	0	100.00%	25.30	25.30	25.30	25.30	25.30	25.30	25.30
LTE B7	TX0	2	100.00%	25.20	25.20	25.20	20.20	21.00	21.00	25.20
LTE B12/17	TX0	0	100.00%	25.30	25.30	25.30	25.30	25.30	25.30	25.30
LTE B13	TX0	0	100.00%	25.30	25.30	25.30	25.30	25.30	25.30	25.30
LTE B14	TX0	0	100.00%	25.50	25.50	25.50	25.50	25.50	25.50	25.50
LTE B25/2	TX0	2	100.00%	25.50	25.50	25.50	20.90	22.10	21.30	25.50
LTE B26/5	TX0	0	100.00%	25.50	25.50	25.50	25.50	25.50	25.50	25.50
LTE B30	TX0	2	100.00%	24.60	24.60	24.60	22.60	23.40	22.60	24.60
LTE B41/B38 PC3	TX0	2	63.30%	25.40	25.40	25.40	22.60	23.40	23.40	25.40
LTE B38 PC2	TX0	2	43.30%	27.20	27.20	27.20	24.20	25.00	25.00	27.20
LTE B41 PC2	TX0	2	43.30%	27.70	27.70	27.70	24.20	25.00	25.00	27.70
LTE B48	TX0	6	63.30%	24.00	24.00	24.00	24.00	24.00	24.00	24.00
LTE B66/4	TX0	2	100.00%	25.25	25.25	25.25	21.90	23.20	22.40	25.25
LTE B71	TX0	0	100.00%	25.30	25.30	25.30	25.30	25.30	25.30	25.30
FR1 n5	TX0	0	100.00%	25.50	25.50	25.50	25.50	25.50	25.50	25.50
FR1 n7	TX0	2	100.00%	25.20	25.20	25.20	20.50	21.30	21.30	25.20
FR1 n12	TX0	0	100.00%	25.30	25.30	25.30	25.30	25.30	25.30	25.30
FR1 n25/2	TX0	2	100.00%	25.70	25.70	25.70	21.20	22.50	21.70	25.70
FR1 n30	TX0	2	100.00%	24.60	24.60	24.60	23.10	23.90	23.10	24.60
FR1 n38	TX0	5	100.00%	25.50	18.40	17.60	20.70	21.50	20.70	17.60
FR1 n41 PC3	TX0	5	100.00%	25.70	18.60	17.80	20.90	21.70	20.90	17.80
FR1 n41 PC2	TX0	5	50.00%	27.00	21.60	20.80	23.90	24.70	23.90	20.80
FR1 n66	TX0	2	100.00%	25.25	25.25	25.25	22.70	23.70	22.90	25.25
FR1 n71	TX0	0	100.00%	25.30	25.30	25.30	25.30	25.30	25.30	25.30
FR1 n77 PC3	TX0	6	100.00%	25.00	25.00	25.00	21.60	22.40	21.60	25.00
FR1 n77 PC2	TX0	6	50.00%	27.20	27.20	27.20	24.60	25.40	24.60	27.20



Maximum Transmit Burst Average Power (dBm)											
Band	Config	Antenna	Duty cycle	Mobile Condition	Head	Head	Hotspot	Body-worn/Extremity	Body-worn/Extremity	Head-Hotspot	
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	Simultaneous	
					Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7
GSM850 GSM/GPRS 1TX	TX1	1	12.50%	33.50	33.50	33.50	33.50	33.50	33.50	33.50	
GSM850 GPRS 2TX	TX1	1	25.00%	32.50	32.00	31.20	32.50	32.50	32.50	31.20	
GSM850 GPRS 3TX	TX1	1	37.50%	31.50	30.25	29.45	31.50	31.50	31.50	29.45	
GSM850 GPRS 4TX	TX1	1	50.00%	30.50	29.00	28.20	30.50	30.50	30.50	28.20	
GSM850 EDGE 1TX	TX1	1	12.50%	28.00	28.00	28.00	28.00	28.00	28.00	28.00	
GSM850 EDGE 2TX	TX1	1	25.00%	27.50	27.50	27.50	27.50	27.50	27.50	27.50	
GSM850 EDGE 3TX	TX1	1	37.50%	27.50	27.50	27.50	27.50	27.50	27.50	27.50	
GSM850 EDGE 4TX	TX1	1	50.00%	25.50	25.50	25.50	25.50	25.50	25.50	25.50	
GSM1900 GSM/GPRS 1TX	TX1	0	12.50%	31.00	31.00	31.00	31.00	31.00	31.00	31.00	
GSM1900 GPRS 2TX	TX1	0	25.00%	29.50	29.50	29.50	29.50	29.50	29.50	29.50	
GSM1900 GPRS 3TX	TX1	0	37.50%	29.00	29.00	29.00	29.00	29.00	29.00	29.00	
GSM1900 GPRS 4TX	TX1	0	50.00%	28.00	28.00	28.00	28.00	28.00	28.00	28.00	
GSM1900 EDGE 1TX	TX1	0	12.50%	26.50	26.50	26.50	26.50	26.50	26.50	26.50	
GSM1900 EDGE 2TX	TX1	0	25.00%	25.00	25.00	25.00	25.00	25.00	25.00	25.00	
GSM1900 EDGE 3TX	TX1	0	37.50%	25.00	25.00	25.00	25.00	25.00	25.00	25.00	
GSM1900 EDGE 4TX	TX1	0	50.00%	24.00	24.00	24.00	24.00	24.00	24.00	24.00	
WCDMA B2	TX1	0	100.00%	25.70	25.70	25.70	23.10	23.90	23.90	25.70	
WCDMA B4	TX1	0	100.00%	25.70	25.70	25.70	23.80	24.70	23.90	25.70	
WCDMA B5	TX1	1	100.00%	25.70	25.70	25.10	25.70	25.70	25.70	25.10	
LTE B7	TX1	0	100.00%	25.20	25.20	25.20	24.10	24.90	24.90	25.20	
LTE B12/17	TX1	1	100.00%	25.20	25.20	24.50	25.20	25.20	25.20	23.20	
LTE B13	TX1	1	100.00%	25.20	25.20	24.40	25.20	25.20	25.20	23.10	
LTE B14	TX1	1	100.00%	25.20	25.20	24.40	25.20	25.20	25.20	24.40	
LTE B25/2	TX1	0	100.00%	25.20	25.20	25.20	22.60	23.40	23.40	25.20	
LTE B26/5	TX1	1	100.00%	25.20	25.20	25.20	25.20	25.20	25.20	25.20	
LTE B30	TX1	0	100.00%	25.00	25.00	25.00	22.90	23.70	23.70	25.00	
LTE B41/B38 PC3	TX1	0	63.30%	25.20	25.20	25.20	25.20	25.20	25.20	25.20	
LTE B41/B38 PC2	TX1	0	43.30%	27.20	27.20	27.20	27.20	27.20	27.20	27.20	
LTE B48	TX1	2	63.30%	23.20	23.20	23.20	23.20	23.20	23.20	23.20	
LTE B66/4	TX1	0	100.00%	25.20	25.20	25.20	23.50	24.70	23.90	25.20	
LTE B71	TX1	1	100.00%	25.20	25.20	25.20	25.20	25.20	25.20	24.20	
FR1 n5	TX1	1	100.00%	25.20	25.20	25.20	25.20	25.20	25.20	25.20	
FR1 n7	TX1	0	100.00%	25.20	25.20	25.20	24.20	25.00	25.00	25.20	
FR1 n12	TX1	1	100.00%	25.20	25.20	25.20	25.20	25.20	25.20	25.00	
FR1 n25/2	TX1	0	100.00%	25.70	25.70	25.70	23.20	24.00	24.00	25.70	
FR1 n30	TX1	0	100.00%	25.00	25.00	25.00	23.50	24.30	24.30	25.00	
FR1 n38	TX1	1	100.00%	25.50	19.50	18.70	23.40	24.20	23.40	18.70	
FR1 n41 PC3	TX1	1	100.00%	25.70	19.50	18.70	23.40	24.20	23.40	18.70	
FR1 n41 PC2	TX1	1	50.00%	27.20	22.50	21.70	26.40	27.20	26.40	21.70	
FR1 n66	TX1	0	100.00%	25.70	25.70	25.70	23.90	25.00	24.20	25.70	
FR1 n71	TX1	1	100.00%	25.20	25.20	25.20	25.20	25.20	25.20	25.00	
FR1 n77 PC3	TX1	2	100.00%	23.75	23.75	23.75	22.80	23.60	22.80	23.75	
FR1 n77 PC2	TX1	2	50.00%	25.90	25.90	25.90	25.80	25.90	25.80	25.90	



<WLAN Maximum Power>

General Note:

1. The device implements the power management for WLAN SAR compliance for different exposure conditions and user cases. When the device is operated against the user's head, power index 1-4 are used; when the device is operated in the body-worn or extremity condition, power index 5-9 are used. In each exposure condition, the power selection is 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	22.00
		6	2437	22.00
		11	2462	22.00
		12	2467	22.00
		13	2472	22.00

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	22.00
		11	2462	22.00
		12	2467	22.00
		13	2472	22.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11g 6Mbps	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
	802.11ax-HE20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
12		2467	19.00	19.00	22.0	
		13	2472	17.50	17.50	20.5



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11a 6Mbps	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
	802.11n-HT20 MCS0	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
	802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT80 MCS0	42	5210	16.50	16.50	19.5
	802.11ax-HE20 MCS0	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
802.11ax-HE40 MCS0	38	5190	16.00	16.00	19.0	
	46	5230	19.00	19.00	22.0	
802.11ax-HE80 MCS0	42	5210	16.50	16.50	19.5	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	19.00	19.00	22.0
		64	5320	19.50	19.50	22.5
802.11n-HT20 MCS0		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	20.00	20.00	23.0
		64	5320	20.00	20.00	23.0
802.11n-HT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	20.00	20.00	23.0
		64	5320	20.00	20.00	23.0
802.11ac-VHT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	15.50	15.50	18.5
802.11ac-VHT160 MCS0		50	5250	14.00	14.00	17.0
802.11ax-HE20 MCS0		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	20.00	20.00	23.0
		64	5320	20.00	20.00	23.0
802.11ax-HE40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ax-HE80 MCS0		58	5290	15.50	15.50	18.5
802.11ax-HE160 MCS0		50	5250	14.00	14.00	17.0



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		100	5500	20.00	20.00	23.0
		116	5580	20.00	20.00	23.0
		124	5620	20.00	20.00	23.0
		132	5660	20.00	20.00	23.0
		144	5720	20.00	20.00	23.0
802.11n-HT20 MCS0		100	5500	19.50	19.50	22.5
		116	5580	20.00	20.00	23.0
		124	5620	20.00	20.00	23.0
		132	5660	20.00	20.00	23.0
802.11n-HT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
802.11ac-VHT20 MCS0		100	5500	19.50	19.50	22.5
		116	5580	20.00	20.00	23.0
		124	5620	20.00	20.00	23.0
		132	5660	20.00	20.00	23.0
802.11ac-VHT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
802.11ac-VHT80 MCS0		106	5530	16.00	16.00	19.0
		122	5610	19.00	19.00	22.0
		138	5690	19.00	19.00	22.0
802.11ac-VHT160 MCS0		114	5570	15.00	15.00	18.0
802.11ax-HE20 MCS0		100	5500	19.50	19.50	22.5
		116	5580	20.00	20.00	23.0
		124	5620	20.00	20.00	23.0
		132	5660	20.00	20.00	23.0
		144	5720	20.00	20.00	23.0
802.11ax-HE40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
		142	5710	19.00	19.00	22.0
802.11ax-HE80 MCS0		106	5530	16.00	16.00	19.0
		122	5610	19.00	19.00	22.0
		138	5690	19.00	19.00	22.0
802.11ax-HE160 MCS0		114	5570	15.00	15.00	18.0



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	20.00	20.00	23.0
		157	5785	20.00	20.00	23.0
		165	5825	20.00	20.00	23.0
802.11n-HT20 MCS0		149	5745	20.00	20.00	23.0
		157	5785	20.00	20.00	23.0
		165	5825	20.00	20.00	23.0
802.11n-HT40 MCS0		151	5755	19.00	19.00	22.0
		159	5795	19.00	19.00	22.0
802.11ac-VHT20 MCS0		149	5745	20.00	20.00	23.0
		157	5785	20.00	20.00	23.0
		165	5825	20.00	20.00	23.0
802.11ac-VHT40 MCS0		151	5755	19.00	19.00	22.0
		159	5795	19.00	19.00	22.0
802.11ac-VHT80 MCS0		155	5775	19.00	19.00	22.0
802.11ax-HE20 MCS0		149	5745	20.00	20.00	23.0
		157	5785	20.00	20.00	23.0
		165	5825	20.00	20.00	23.0
802.11ax-HE40 MCS0		151	5755	19.00	19.00	22.0
		159	5795	19.00	19.00	22.0
802.11ax-HE80 MCS0		155	5775	19.00	19.00	22.0

Burst Average Power (dBm)						
5.8GHz UnII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	20.00	20.00	23.0
		173	5865	20.00	20.00	23.0
		177	5885	20.00	20.00	23.0
802.11n-HT20 MCS0		169	5845	20.00	20.00	23.0
		173	5865	20.00	20.00	23.0
		177	5885	20.00	20.00	23.0
802.11n-HT40 MCS0		167	5835	19.00	19.00	22.0
		175	5875	19.00	19.00	22.0
802.11ac-VHT20 MCS0		169	5845	20.00	20.00	23.0
		173	5865	20.00	20.00	23.0
		177	5885	20.00	20.00	23.0
802.11ac-VHT40 MCS0		167	5835	19.00	19.00	22.0
		175	5875	19.00	19.00	22.0
802.11ac-VHT80 MCS0		171	5855	19.00	19.00	22.0
802.11ac-VHT160 MCS0		163	5815	19.00	19.00	22.0
802.11ax-HE20 MCS0		169	5845	20.00	20.00	23.0
		173	5865	20.00	20.00	23.0
		177	5885	20.00	20.00	23.0
802.11ax-HE40 MCS0		167	5835	19.00	19.00	22.0
		175	5875	19.00	19.00	22.0
802.11ax-HE80 MCS0		171	5855	19.00	19.00	22.0
802.11ax-HE160 MCS0		163	5815	19.00	19.00	22.0



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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	18.50
		6	2437	18.50
		11	2462	18.50
		12	2467	18.50
		13	2472	18.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	18.50
		6	2437	18.50
		11	2462	18.50
		12	2467	18.50
		13	2472	18.50

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



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.00	13.50	17.3
		40	5200	15.00	13.50	17.3
		44	5220	15.00	13.50	17.3
		48	5240	15.00	13.50	17.3
	802.11n-HT20 MCS0	36	5180	15.00	13.50	17.3
		40	5200	15.00	13.50	17.3
		44	5220	15.00	13.50	17.3
	802.11n-HT40 MCS0	38	5190	15.00	13.50	17.3
		46	5230	15.00	13.50	17.3
	802.11ac-VHT20 MCS0	36	5180	15.00	13.50	17.3
		40	5200	15.00	13.50	17.3
		44	5220	15.00	13.50	17.3
	802.11ac-VHT40 MCS0	38	5190	15.00	13.50	17.3
		46	5230	15.00	13.50	17.3
	802.11ac-VHT80 MCS0	42	5210	15.00	13.50	17.3
	802.11ax-HE20 MCS0	36	5180	15.00	13.50	17.3
40		5200	15.00	13.50	17.3	
44		5220	15.00	13.50	17.3	
48		5240	15.00	13.50	17.3	
802.11ax-HE40 MCS0	38	5190	15.00	13.50	17.3	
	46	5230	15.00	13.50	17.3	
802.11ax-HE80 MCS0	42	5210	15.00	13.50	17.3	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	15.00	13.50	17.3
		56	5280	15.00	13.50	17.3
		60	5300	15.00	13.50	17.3
		64	5320	15.00	13.50	17.3
802.11n-HT20 MCS0		52	5260	15.00	13.50	17.3
		56	5280	15.00	13.50	17.3
		60	5300	15.00	13.50	17.3
		64	5320	15.00	13.50	17.3
802.11n-HT40 MCS0		54	5270	15.00	13.50	17.3
		62	5310	15.00	13.50	17.3
802.11ac-VHT20 MCS0		52	5260	15.00	13.50	17.3
		56	5280	15.00	13.50	17.3
		60	5300	15.00	13.50	17.3
		64	5320	15.00	13.50	17.3
802.11ac-VHT40 MCS0		54	5270	15.00	13.50	17.3
		62	5310	15.00	13.50	17.3
802.11ac-VHT80 MCS0		58	5290	15.00	13.50	17.3
802.11ac-VHT160 MCS0		50	5250	14.00	13.50	16.8
802.11ax-HE20 MCS0		52	5260	15.00	13.50	17.3
		56	5280	15.00	13.50	17.3
		60	5300	15.00	13.50	17.3
		64	5320	15.00	13.50	17.3
802.11ax-HE40 MCS0		54	5270	15.00	13.50	17.3
		62	5310	15.00	13.50	17.3
802.11ax-HE80 MCS0		58	5290	15.00	13.50	17.3
802.11ax-HE160 MCS0		50	5250	14.00	13.50	16.8



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.00	14.00	17.5
		116	5580	15.00	14.00	17.5
		124	5620	15.00	14.00	17.5
		132	5660	15.00	14.00	17.5
		144	5720	15.00	14.00	17.5
	802.11n-HT20 MCS0	100	5500	15.00	14.00	17.5
		116	5580	15.00	14.00	17.5
		124	5620	15.00	14.00	17.5
		132	5660	15.00	14.00	17.5
	802.11n-HT40 MCS0	102	5510	15.00	14.00	17.5
		110	5550	15.00	14.00	17.5
		126	5630	15.00	14.00	17.5
		134	5670	15.00	14.00	17.5
	802.11ac-VHT20 MCS0	100	5500	15.00	14.00	17.5
		116	5580	15.00	14.00	17.5
		124	5620	15.00	14.00	17.5
		132	5660	15.00	14.00	17.5
	802.11ac-VHT40 MCS0	102	5510	15.00	14.00	17.5
		110	5550	15.00	14.00	17.5
		126	5630	15.00	14.00	17.5
		134	5670	15.00	14.00	17.5
	802.11ac-VHT80 MCS0	106	5530	15.00	14.00	17.5
		122	5610	15.00	14.00	17.5
		138	5690	15.00	14.00	17.5
	802.11ac-VHT160 MCS0	114	5570	15.00	14.00	17.5
	802.11ax-HE20 MCS0	100	5500	15.00	14.00	17.5
		116	5580	15.00	14.00	17.5
		124	5620	15.00	14.00	17.5
		132	5660	15.00	14.00	17.5
	802.11ax-HE40 MCS0	102	5510	15.00	14.00	17.5
		110	5550	15.00	14.00	17.5
		126	5630	15.00	14.00	17.5
		134	5670	15.00	14.00	17.5
	802.11ax-HE80 MCS0	106	5530	15.00	14.00	17.5
		122	5610	15.00	14.00	17.5
		138	5690	15.00	14.00	17.5
	802.11ax-HE160 MCS0	114	5570	15.00	14.00	17.5



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	15.50	13.50	17.6
		157	5785	15.50	13.50	17.6
		165	5825	15.50	13.50	17.6
802.11n-HT20 MCS0		149	5745	15.50	13.50	17.6
		157	5785	15.50	13.50	17.6
		165	5825	15.50	13.50	17.6
802.11n-HT40 MCS0		151	5755	15.50	13.50	17.6
		159	5795	15.50	13.50	17.6
802.11ac-VHT20 MCS0		149	5745	15.50	13.50	17.6
		157	5785	15.50	13.50	17.6
		165	5825	15.50	13.50	17.6
802.11ac-VHT40 MCS0		151	5755	15.50	13.50	17.6
		159	5795	15.50	13.50	17.6
802.11ac-VHT80 MCS0		155	5775	15.50	13.50	17.6
802.11ax-HE20 MCS0		149	5745	15.50	13.50	17.6
		157	5785	15.50	13.50	17.6
		165	5825	15.50	13.50	17.6
802.11ax-HE40 MCS0		151	5755	15.50	13.50	17.6
		159	5795	15.50	13.50	17.6
802.11ax-HE80 MCS0		155	5775	15.50	13.50	17.6

Burst Average Power (dBm)						
5.8GHz UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	16.00	13.50	17.9
		173	5865	16.00	13.50	17.9
		177	5885	16.00	13.50	17.9
802.11n-HT20 MCS0		169	5845	16.00	13.50	17.9
		173	5865	16.00	13.50	17.9
		177	5885	16.00	13.50	17.9
802.11n-HT40 MCS0		167	5835	16.00	13.50	17.9
		175	5875	16.00	13.50	17.9
802.11ac-VHT20 MCS0		169	5845	16.00	13.50	17.9
		173	5865	16.00	13.50	17.9
		177	5885	16.00	13.50	17.9
802.11ac-VHT40 MCS0		167	5835	16.00	13.50	17.9
		175	5875	16.00	13.50	17.9
802.11ac-VHT80 MCS0		171	5855	16.00	13.50	17.9
802.11ac-VHT160 MCS0		163	5815	16.00	13.50	17.9
802.11ax-HE20 MCS0		169	5845	16.00	13.50	17.9
		173	5865	16.00	13.50	17.9
		177	5885	16.00	13.50	17.9
802.11ax-HE40 MCS0		167	5835	16.00	13.50	17.9
		175	5875	16.00	13.50	17.9
802.11ax-HE80 MCS0		171	5855	16.00	13.50	17.9
802.11ax-HE160 MCS0		163	5815	16.00	13.50	17.9



<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	16.50
		6	2437	16.50
		11	2462	16.50
		12	2467	16.50
		13	2472	16.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	16.00
		6	2437	16.00
		11	2462	16.00
		12	2467	16.00
		13	2472	16.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11g 6Mbps	1	2412	16.50	16.00	19.3
		6	2437	16.50	16.00	19.3
		11	2462	16.50	16.00	19.3
		12	2467	16.50	16.00	19.3
		13	2472	16.50	16.00	19.3
	802.11n-HT20 MCS0	1	2412	16.50	16.00	19.3
		6	2437	16.50	16.00	19.3
		11	2462	16.50	16.00	19.3
		12	2467	16.50	16.00	19.3
	802.11ac-VHT20 MCS0	1	2412	16.50	16.00	19.3
		6	2437	16.50	16.00	19.3
		11	2462	16.50	16.00	19.3
		12	2467	16.50	16.00	19.3
	802.11ax-HE20 MCS0	1	2412	16.50	16.00	19.3
		6	2437	16.50	16.00	19.3
		11	2462	16.50	16.00	19.3
		12	2467	16.50	16.00	19.3
		13	2472	16.50	16.00	19.3



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		36	5180	14.50	12.50	16.6
		40	5200	14.50	12.50	16.6
		44	5220	14.50	12.50	16.6
		48	5240	14.50	12.50	16.6
802.11n-HT20 MCS0		36	5180	14.50	12.50	16.6
		40	5200	14.50	12.50	16.6
		44	5220	14.50	12.50	16.6
		48	5240	14.50	12.50	16.6
802.11n-HT40 MCS0		38	5190	14.50	12.50	16.6
		46	5230	14.50	12.50	16.6
802.11ac-VHT20 MCS0		36	5180	14.50	12.50	16.6
		40	5200	14.50	12.50	16.6
		44	5220	14.50	12.50	16.6
		48	5240	14.50	12.50	16.6
802.11ac-VHT40 MCS0		38	5190	14.50	12.50	16.6
		46	5230	14.50	12.50	16.6
802.11ac-VHT80 MCS0		42	5210	14.50	12.50	16.6
802.11ax-HE20 MCS0		36	5180	14.50	12.50	16.6
		40	5200	14.50	12.50	16.6
		44	5220	14.50	12.50	16.6
		48	5240	14.50	12.50	16.6
802.11ax-HE40 MCS0		38	5190	14.50	12.50	16.6
		46	5230	14.50	12.50	16.6
802.11ax-HE80 MCS0		42	5210	14.50	12.50	16.6



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	14.50	12.50	16.6
		56	5280	14.50	12.50	16.6
		60	5300	14.50	12.50	16.6
		64	5320	14.50	12.50	16.6
802.11n-HT20 MCS0		52	5260	14.50	12.50	16.6
		56	5280	14.50	12.50	16.6
		60	5300	14.50	12.50	16.6
		64	5320	14.50	12.50	16.6
802.11n-HT40 MCS0		54	5270	14.50	12.50	16.6
		62	5310	14.50	12.50	16.6
802.11ac-VHT20 MCS0		52	5260	14.50	12.50	16.6
		56	5280	14.50	12.50	16.6
		60	5300	14.50	12.50	16.6
		64	5320	14.50	12.50	16.6
802.11ac-VHT40 MCS0		54	5270	14.50	12.50	16.6
		62	5310	14.50	12.50	16.6
802.11ac-VHT80 MCS0		58	5290	14.50	12.50	16.6
802.11ac-VHT160 MCS0		50	5250	14.00	12.50	16.3
802.11ax-HE20 MCS0		52	5260	14.50	12.50	16.6
		56	5280	14.50	12.50	16.6
		60	5300	14.50	12.50	16.6
		64	5320	14.50	12.50	16.6
802.11ax-HE40 MCS0		54	5270	14.50	12.50	16.6
		62	5310	14.50	12.50	16.6
802.11ax-HE80 MCS0		58	5290	14.50	12.50	16.6
802.11ax-HE160 MCS0		50	5250	14	12.50	16.3



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		100	5500	14.50	12.50	16.6
		116	5580	14.50	12.50	16.6
		124	5620	14.50	12.50	16.6
		132	5660	14.50	12.50	16.6
		144	5720	14.50	12.50	16.6
802.11n-HT20 MCS0		100	5500	14.50	12.50	16.6
		116	5580	14.50	12.50	16.6
		124	5620	14.50	12.50	16.6
		132	5660	14.50	12.50	16.6
802.11n-HT40 MCS0		102	5510	14.50	12.50	16.6
		110	5550	14.50	12.50	16.6
		126	5630	14.50	12.50	16.6
		134	5670	14.50	12.50	16.6
802.11ac-VHT20 MCS0		100	5500	14.50	12.50	16.6
		116	5580	14.50	12.50	16.6
		124	5620	14.50	12.50	16.6
		132	5660	14.50	12.50	16.6
802.11ac-VHT40 MCS0		102	5510	14.50	12.50	16.6
		110	5550	14.50	12.50	16.6
		126	5630	14.50	12.50	16.6
		134	5670	14.50	12.50	16.6
802.11ac-VHT80 MCS0		106	5530	14.50	12.50	16.6
		122	5610	14.50	12.50	16.6
		138	5690	14.50	12.50	16.6
802.11ac-VHT160 MCS0		114	5570	14.50	12.50	16.6
802.11ax-HE20 MCS0		100	5500	14.50	12.50	16.6
		116	5580	14.50	12.50	16.6
		124	5620	14.50	12.50	16.6
		132	5660	14.50	12.50	16.6
		144	5720	14.50	12.50	16.6
802.11ax-HE40 MCS0		102	5510	14.50	12.50	16.6
		110	5550	14.50	12.50	16.6
		126	5630	14.50	12.50	16.6
		134	5670	14.50	12.50	16.6
		142	5710	14.50	12.50	16.6
802.11ax-HE80 MCS0		106	5530	14.50	12.50	16.6
		122	5610	14.50	12.50	16.6
		138	5690	14.50	12.50	16.6
802.11ax-HE160 MCS0		114	5570	14.50	12.50	16.6



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	15.00	13.00	17.1
		157	5785	15.00	13.00	17.1
		165	5825	15.00	13.00	17.1
802.11n-HT20 MCS0		149	5745	15.00	13.00	17.1
		157	5785	15.00	13.00	17.1
		165	5825	15.00	13.00	17.1
802.11n-HT40 MCS0		151	5755	15.00	13.00	17.1
		159	5795	15.00	13.00	17.1
802.11ac-VHT20 MCS0		149	5745	15.00	13.00	17.1
		157	5785	15.00	13.00	17.1
		165	5825	15.00	13.00	17.1
802.11ac-VHT40 MCS0		151	5755	15.00	13.00	17.1
		159	5795	15.00	13.00	17.1
802.11ac-VHT80 MCS0		155	5775	15.00	13.00	17.1
802.11ax-HE20 MCS0		149	5745	15.00	13.00	17.1
		157	5785	15.00	13.00	17.1
		165	5825	15.00	13.00	17.1
802.11ax-HE40 MCS0		151	5755	15.00	13.00	17.1
		159	5795	15.00	13.00	17.1
802.11ax-HE80 MCS0		155	5775	15.00	13.00	17.1

Burst Average Power (dBm)						
5.8GHz UNII4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	15.50	12.50	17.3
		173	5865	15.50	12.50	17.3
		177	5885	15.50	12.50	17.3
802.11n-HT20 MCS0		169	5845	15.50	12.50	17.3
		173	5865	15.50	12.50	17.3
		177	5885	15.50	12.50	17.3
802.11n-HT40 MCS0		167	5835	15.50	12.50	17.3
		175	5875	15.50	12.50	17.3
802.11ac-VHT20 MCS0		169	5845	15.50	12.50	17.3
		173	5865	15.50	12.50	17.3
		177	5885	15.50	12.50	17.3
802.11ac-VHT40 MCS0		167	5835	15.50	12.50	17.3
		175	5875	15.50	12.50	17.3
802.11ac-VHT80 MCS0		171	5855	15.50	12.50	17.3
802.11ac-VHT160 MCS0		163	5815	15.50	12.50	17.3
802.11ax-HE20 MCS0		169	5845	15.50	12.50	17.3
		173	5865	15.50	12.50	17.3
		177	5885	15.50	12.50	17.3
802.11ax-HE40 MCS0		167	5835	15.50	12.50	17.3
		175	5875	15.50	12.50	17.3
802.11ax-HE80 MCS0		171	5855	15.50	12.50	17.3
802.11ax-HE160 MCS0		163	5815	15.50	12.50	17.3



<Power Index 3>

<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	16.50
		6	2437	16.50
		11	2462	16.50
		12	2467	16.50
		13	2472	16.50

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	16.00
		6	2437	16.00
		11	2462	16.00
		12	2467	16.00
		13	2472	16.00

Burst Average Power (dBm)							
Transmit Antenna				MIMO Ant 4+3			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3	
	802.11g 6Mbps	1	2412	16.50	16.00	19.3	
		6	2437	16.50	16.00	19.3	
		11	2462	16.50	16.00	19.3	
		12	2467	16.50	16.00	19.3	
		13	2472	16.50	16.00	19.3	
	802.11n-HT20 MCS0	1	2412	16.50	16.00	19.3	
		6	2437	16.50	16.00	19.3	
		11	2462	16.50	16.00	19.3	
		12	2467	16.50	16.00	19.3	
	802.11ac-VHT20 MCS0	1	2412	16.50	16.00	19.3	
		6	2437	16.50	16.00	19.3	
		11	2462	16.50	16.00	19.3	
		12	2467	16.50	16.00	19.3	
	802.11ax-HE20 MCS0	1	2412	16.50	16.00	19.3	
		6	2437	16.50	16.00	19.3	
		11	2462	16.50	16.00	19.3	
		12	2467	16.50	16.00	19.3	
			13	2472	16.50	16.00	19.3



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.2GHz WLAN	802.11a 6Mbps	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
		48	5240	11.00	8.50	12.9
	802.11n-HT20 MCS0	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
	802.11n-HT40 MCS0	38	5190	11.00	8.50	12.9
		46	5230	11.00	8.50	12.9
	802.11ac-VHT20 MCS0	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
	802.11ac-VHT40 MCS0	38	5190	11.00	8.50	12.9
		46	5230	11.00	8.50	12.9
	802.11ac-VHT80 MCS0	42	5210	11.00	8.50	12.9
	802.11ax-HE20 MCS0	36	5180	11.00	8.50	12.9
40		5200	11.00	8.50	12.9	
44		5220	11.00	8.50	12.9	
48		5240	11.00	8.50	12.9	
802.11ax-HE40 MCS0	38	5190	11.00	8.50	12.9	
	46	5230	11.00	8.50	12.9	
802.11ax-HE80 MCS0	42	5210	11.00	8.50	12.9	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11n-HT20 MCS0		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11n-HT40 MCS0		54	5270	11.00	8.50	12.9
		62	5310	11.00	8.50	12.9
802.11ac-VHT20 MCS0		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11ac-VHT40 MCS0		54	5270	11.00	8.50	12.9
		62	5310	11.00	8.50	12.9
802.11ac-VHT80 MCS0		58	5290	11.00	8.50	12.9
802.11ac-VHT160 MCS0		50	5250	11.00	8.50	12.9
802.11ax-HE20 MCS0		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11ax-HE40 MCS0		54	5270	11.00	8.50	12.9
		62	5310	11.00	8.50	12.9
802.11ax-HE80 MCS0		58	5290	11.00	8.50	12.9
802.11ax-HE160 MCS0		50	5250	11.00	8.50	12.9



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.5GHz WLAN	802.11a 6Mbps	100	5500	11.00	9.50	13.3
		116	5580	11.00	9.50	13.3
		124	5620	11.00	9.50	13.3
		132	5660	11.00	9.50	13.3
		144	5720	11.00	9.50	13.3
	802.11n-HT20 MCS0	100	5500	11.00	9.50	13.3
		116	5580	11.00	9.50	13.3
		124	5620	11.00	9.50	13.3
		132	5660	11.00	9.50	13.3
	802.11n-HT40 MCS0	102	5510	11.00	9.50	13.3
		110	5550	11.00	9.50	13.3
		126	5630	11.00	9.50	13.3
		134	5670	11.00	9.50	13.3
	802.11ac-VHT20 MCS0	100	5500	11.00	9.50	13.3
		116	5580	11.00	9.50	13.3
		124	5620	11.00	9.50	13.3
		132	5660	11.00	9.50	13.3
	802.11ac-VHT40 MCS0	102	5510	11.00	9.50	13.3
		110	5550	11.00	9.50	13.3
		126	5630	11.00	9.50	13.3
		134	5670	11.00	9.50	13.3
	802.11ac-VHT80 MCS0	106	5530	11.00	9.50	13.3
		122	5610	11.00	9.50	13.3
		138	5690	11.00	9.50	13.3
	802.11ac-VHT160 MCS0	114	5570	11.00	9.50	13.3
	802.11ax-HE20 MCS0	100	5500	11.00	9.50	13.3
		116	5580	11.00	9.50	13.3
		124	5620	11.00	9.50	13.3
		132	5660	11.00	9.50	13.3
		144	5720	11.00	9.50	13.3
	802.11ax-HE40 MCS0	102	5510	11.00	9.50	13.3
		110	5550	11.00	9.50	13.3
		126	5630	11.00	9.50	13.3
		134	5670	11.00	9.50	13.3
		142	5710	11.00	9.50	13.3
	802.11ax-HE80 MCS0	106	5530	11.00	9.50	13.3
		122	5610	11.00	9.50	13.3
		138	5690	11.00	9.50	13.3
	802.11ax-HE160 MCS0	114	5570	11.00	9.50	13.3



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11n-HT20 MCS0		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11n-HT40 MCS0		151	5755	12.00	9.00	13.8
		159	5795	12.00	9.00	13.8
802.11ac-VHT20 MCS0		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11ac-VHT40 MCS0		151	5755	12.00	9.00	13.8
		159	5795	12.00	9.00	13.8
802.11ac-VHT80 MCS0		155	5775	12.00	9.00	13.8
802.11ax-HE20 MCS0		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11ax-HE40 MCS0		151	5755	12.00	9.00	13.8
		159	5795	12.00	9.00	13.8
802.11ax-HE80 MCS0		155	5775	12.00	9.00	13.8

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11n-HT20 MCS0		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11n-HT40 MCS0		167	5835	12.00	9.00	13.8
		175	5875	12.00	9.00	13.8
802.11ac-VHT20 MCS0		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11ac-VHT40 MCS0		167	5835	12.00	9.00	13.8
		175	5875	12.00	9.00	13.8
802.11ac-VHT80 MCS0		171	5855	12.00	9.00	13.8
802.11ac-VHT160 MCS0		163	5815	12.00	9.00	13.8
802.11ax-HE20 MCS0		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11ax-HE40 MCS0		167	5835	12.00	9.00	13.8
		175	5875	12.00	9.00	13.8
802.11ax-HE80 MCS0		171	5855	12.00	9.00	13.8
802.11ax-HE160 MCS0		163	5815	12.00	9.00	13.8



<Power Index 4>

<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 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3	
	802.11g 6Mbps	1	2412	11.00	11.00	14.0	
		6	2437	11.00	11.00	14.0	
		11	2462	11.00	11.00	14.0	
		12	2467	11.00	11.00	14.0	
		13	2472	11.00	11.00	14.0	
	802.11n-HT20 MCS0	1	2412	11.00	11.00	14.0	
		6	2437	11.00	11.00	14.0	
		11	2462	11.00	11.00	14.0	
		12	2467	11.00	11.00	14.0	
	802.11ac-VHT20 MCS0	1	2412	11.00	11.00	14.0	
		6	2437	11.00	11.00	14.0	
		11	2462	11.00	11.00	14.0	
		12	2467	11.00	11.00	14.0	
	802.11ax-HE20 MCS0	1	2412	11.00	11.00	14.0	
		6	2437	11.00	11.00	14.0	
		11	2462	11.00	11.00	14.0	
		12	2467	11.00	11.00	14.0	
			13	2472	11.00	11.00	14.0



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.2GHz WLAN	802.11a 6Mbps	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
		48	5240	11.00	8.50	12.9
	802.11n-HT20 MCS0	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
		48	5240	11.00	8.50	12.9
	802.11n-HT40 MCS0	38	5190	11.00	8.50	12.9
		46	5230	11.00	8.50	12.9
	802.11ac-VHT20 MCS0	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
		48	5240	11.00	8.50	12.9
	802.11ac-VHT40 MCS0	38	5190	11.00	8.50	12.9
		46	5230	11.00	8.50	12.9
	802.11ac-VHT80 MCS0	42	5210	11.00	8.50	12.9
	802.11ax-HE20 MCS0	36	5180	11.00	8.50	12.9
		40	5200	11.00	8.50	12.9
		44	5220	11.00	8.50	12.9
48		5240	11.00	8.50	12.9	
802.11ax-HE40 MCS0	38	5190	11.00	8.50	12.9	
	46	5230	11.00	8.50	12.9	
802.11ax-HE80 MCS0	42	5210	11.00	8.50	12.9	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11n-HT20 MCS0		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11n-HT40 MCS0		54	5270	11.00	8.50	12.9
		62	5310	11.00	8.50	12.9
802.11ac-VHT20 MCS0		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11ac-VHT40 MCS0		54	5270	11.00	8.50	12.9
		62	5310	11.00	8.50	12.9
802.11ac-VHT80 MCS0		58	5290	11.00	8.50	12.9
802.11ac-VHT160 MCS0		50	5250	11.00	8.50	12.9
802.11ax-HE20 MCS0		52	5260	11.00	8.50	12.9
		56	5280	11.00	8.50	12.9
		60	5300	11.00	8.50	12.9
		64	5320	11.00	8.50	12.9
802.11ax-HE40 MCS0		54	5270	11.00	8.50	12.9
		62	5310	11.00	8.50	12.9
802.11ax-HE80 MCS0		58	5290	11.00	8.50	12.9
802.11ax-HE160 MCS0		50	5250	11.00	8.50	12.9



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.5GHz WLAN	802.11a 6Mbps	100	5500	10.50	9.00	12.8
		116	5580	10.50	9.00	12.8
		124	5620	10.50	9.00	12.8
		132	5660	10.50	9.00	12.8
		144	5720	10.50	9.00	12.8
	802.11n-HT20 MCS0	100	5500	10.50	9.00	12.8
		116	5580	10.50	9.00	12.8
		124	5620	10.50	9.00	12.8
		132	5660	10.50	9.00	12.8
	802.11n-HT40 MCS0	102	5510	10.50	9.00	12.8
		110	5550	10.50	9.00	12.8
		126	5630	10.50	9.00	12.8
		134	5670	10.50	9.00	12.8
	802.11ac-VHT20 MCS0	100	5500	10.50	9.00	12.8
		116	5580	10.50	9.00	12.8
		124	5620	10.50	9.00	12.8
		132	5660	10.50	9.00	12.8
	802.11ac-VHT40 MCS0	102	5510	10.50	9.00	12.8
		110	5550	10.50	9.00	12.8
		126	5630	10.50	9.00	12.8
		134	5670	10.50	9.00	12.8
	802.11ac-VHT80 MCS0	106	5530	10.50	9.00	12.8
		122	5610	10.50	9.00	12.8
		138	5690	10.50	9.00	12.8
	802.11ac-VHT160 MCS0	114	5570	10.50	9.00	12.8
	802.11ax-HE20 MCS0	100	5500	10.50	9.00	12.8
		116	5580	10.50	9.00	12.8
		124	5620	10.50	9.00	12.8
		132	5660	10.50	9.00	12.8
	802.11ax-HE40 MCS0	102	5510	10.50	9.00	12.8
		110	5550	10.50	9.00	12.8
		126	5630	10.50	9.00	12.8
		134	5670	10.50	9.00	12.8
	802.11ax-HE80 MCS0	106	5530	10.50	9.00	12.8
		122	5610	10.50	9.00	12.8
		138	5690	10.50	9.00	12.8
	802.11ax-HE160 MCS0	114	5570	10.50	9.00	12.8



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11n-HT20 MCS0		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11n-HT40 MCS0		151	5755	12.00	9.00	13.8
		159	5795	12.00	9.00	13.8
802.11ac-VHT20 MCS0		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11ac-VHT40 MCS0		151	5755	12.00	9.00	13.8
		159	5795	12.00	9.00	13.8
802.11ac-VHT80 MCS0		155	5775	12.00	9.00	13.8
802.11ax-HE20 MCS0		149	5745	12.00	9.00	13.8
		157	5785	12.00	9.00	13.8
		165	5825	12.00	9.00	13.8
802.11ax-HE40 MCS0		151	5755	12.00	9.00	13.8
		159	5795	12.00	9.00	13.8
802.11ax-HE80 MCS0		155	5775	12.00	9.00	13.8

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11n-HT20 MCS0		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11n-HT40 MCS0		167	5835	12.00	9.00	13.8
		175	5875	12.00	9.00	13.8
802.11ac-VHT20 MCS0		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11ac-VHT40 MCS0		167	5835	12.00	9.00	13.8
		175	5875	12.00	9.00	13.8
802.11ac-VHT80 MCS0		171	5855	12.00	9.00	13.8
802.11ac-VHT160 MCS0		163	5815	12.00	9.00	13.8
802.11ax-HE20 MCS0		169	5845	12.00	9.00	13.8
		173	5865	12.00	9.00	13.8
		177	5885	12.00	9.00	13.8
802.11ax-HE40 MCS0		167	5835	12.00	9.00	13.8
		175	5875	12.00	9.00	13.8
802.11ax-HE80 MCS0		171	5855	12.00	9.00	13.8
802.11ax-HE160 MCS0		163	5815	12.00	9.00	13.8



<Power Index 5>

<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	22.00
		6	2437	22.00
		11	2462	22.00
		12	2467	22.00
		13	2472	22.00

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	22.00
		11	2462	22.00
		12	2467	22.00
		13	2472	22.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11g 6Mbps	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11ax-HE20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
13		2472	17.50	17.50	20.5	



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
802.11n-HT20 MCS0		36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
802.11n-HT40 MCS0		38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
802.11ac-VHT20 MCS0		36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
802.11ac-VHT40 MCS0		38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
802.11ac-VHT80 MCS0		42	5210	16.50	16.50	19.5
802.11ax-HE20 MCS0		36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
802.11ax-HE40 MCS0		38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
802.11ax-HE80 MCS0		42	5210	16.50	16.50	19.5



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	19.00	19.00	22.0
		64	5320	19.50	19.50	22.5
802.11n-HT20 MCS0		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	20.00	20.00	23.0
		64	5320	20.00	20.00	23.0
802.11n-HT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT20 MCS0		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	20.00	20.00	23.0
		64	5320	20.00	20.00	23.0
802.11ac-VHT40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	17.00	17.00	20.0
802.11ac-VHT80 MCS0		58	5290	15.50	15.50	18.5
802.11ac-VHT160 MCS0		50	5250	14.00	14.00	17.0
802.11ax-HE20 MCS0		52	5260	20.00	20.00	23.0
		56	5280	20.00	20.00	23.0
		60	5300	20.00	20.00	23.0
		64	5320	20.00	20.00	23.0
802.11ax-HE40 MCS0		54	5270	19.00	19.00	22.0
		62	5310	16.50	16.50	19.5
802.11ax-HE80 MCS0		58	5290	15.50	15.50	18.5
802.11ax-HE160 MCS0		50	5250	14.00	14.00	17.0



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.5GHz WLAN	802.11a 6Mbps	100	5500	19.00	20.00	22.5
		116	5580	19.00	20.00	22.5
		124	5620	19.00	20.00	22.5
		132	5660	19.00	20.00	22.5
		144	5720	19.00	20.00	22.5
	802.11n-HT20 MCS0	100	5500	19.00	19.50	22.3
		116	5580	19.00	20.00	22.5
		124	5620	19.00	20.00	22.5
		132	5660	19.00	20.00	22.5
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	100	5500	19.00	19.50	22.3
		116	5580	19.00	20.00	22.5
		124	5620	19.00	20.00	22.5
		132	5660	19.00	20.00	22.5
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
	802.11ac-VHT80 MCS0	106	5530	16.00	16.00	19.0
		122	5610	19.00	19.00	22.0
		138	5690	19.00	19.00	22.0
	802.11ac-VHT160 MCS0	114	5570	15.00	15.00	18.0
	802.11ax-HE20 MCS0	100	5500	19.00	19.50	22.3
		116	5580	19.00	20.00	22.5
		124	5620	19.00	20.00	22.5
		132	5660	19.00	20.00	22.5
	802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.0
		110	5550	19.00	19.00	22.0
		126	5630	19.00	19.00	22.0
		134	5670	19.00	19.00	22.0
	802.11ax-HE80 MCS0	106	5530	16.00	16.00	19.0
		122	5610	19.00	19.00	22.0
		138	5690	19.00	19.00	22.0
	802.11ax-HE160 MCS0	114	5570	15.00	15.00	18.0



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	18.50	20.00	22.3
		157	5785	18.50	20.00	22.3
		165	5825	18.50	20.00	22.3
802.11n-HT20 MCS0		149	5745	18.50	20.00	22.3
		157	5785	18.50	20.00	22.3
		165	5825	18.50	20.00	22.3
802.11n-HT40 MCS0		151	5755	18.50	19.00	21.8
		159	5795	18.50	19.00	21.8
802.11ac-VHT20 MCS0		149	5745	18.50	20.00	22.3
		157	5785	18.50	20.00	22.3
		165	5825	18.50	20.00	22.3
802.11ac-VHT40 MCS0		151	5755	18.50	19.00	21.8
		159	5795	18.50	19.00	21.8
802.11ac-VHT80 MCS0		155	5775	18.50	19.00	21.8
802.11ax-HE20 MCS0		149	5745	18.50	20.00	22.3
		157	5785	18.50	20.00	22.3
		165	5825	18.50	20.00	22.3
802.11ax-HE40 MCS0		151	5755	18.50	19.00	21.8
		159	5795	18.50	19.00	21.8
802.11ax-HE80 MCS0		155	5775	18.50	19.00	21.8

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	18.50	20.00	22.3
		173	5865	18.50	20.00	22.3
		177	5885	18.50	20.00	22.3
802.11n-HT20 MCS0		169	5845	18.50	20.00	22.3
		173	5865	18.50	20.00	22.3
		177	5885	18.50	20.00	22.3
802.11n-HT40 MCS0		167	5835	18.50	19.00	21.8
		175	5875	18.50	19.00	21.8
802.11ac-VHT20 MCS0		169	5845	18.50	20.00	22.3
		173	5865	18.50	20.00	22.3
		177	5885	18.50	20.00	22.3
802.11ac-VHT40 MCS0		167	5835	18.50	19.00	21.8
		175	5875	18.50	19.00	21.8
802.11ac-VHT80 MCS0		171	5855	18.50	19.00	21.8
802.11ac-VHT160 MCS0		163	5815	18.50	19.00	21.8
802.11ax-HE20 MCS0		169	5845	18.50	20.00	22.3
		173	5865	18.50	20.00	22.3
		177	5885	18.50	20.00	22.3
802.11ax-HE40 MCS0		167	5835	18.50	19.00	21.8
		175	5875	18.50	19.00	21.8
802.11ax-HE80 MCS0		171	5855	18.50	19.00	21.8
802.11ax-HE160 MCS0		163	5815	18.50	19.00	21.8



<Power Index 6>

<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	22.00
		6	2437	22.00
		11	2462	22.00
		12	2467	22.00
		13	2472	22.00

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	22.00
		11	2462	22.00
		12	2467	22.00
		13	2472	22.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11g 6Mbps	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	21.50	21.50	24.5
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11ax-HE20 MCS0	1	2412	18.00	18.00	21.0
		6	2437	21.00	21.00	24.0
		11	2462	19.00	19.00	22.0
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5



<5GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11a 6Mbps	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
	802.11n-HT20 MCS0	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
		48	5240	20.00	20.00	23.0
	802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	19.00	19.00	22.0
	802.11ac-VHT80 MCS0	42	5210	16.50	16.50	19.5
	802.11ax-HE20 MCS0	36	5180	20.00	20.00	23.0
		40	5200	20.00	20.00	23.0
		44	5220	20.00	20.00	23.0
48		5240	20.00	20.00	23.0	
802.11ax-HE40 MCS0	38	5190	16.00	16.00	19.0	
	46	5230	19.00	19.00	22.0	
802.11ax-HE80 MCS0	42	5210	16.50	16.50	19.5	



Burst Average Power (dBm)							
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3			
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3	
802.11a 6Mbps	802.11a 6Mbps	52	5260	20.00	20.00	23.0	
		56	5280	20.00	20.00	23.0	
		60	5300	19.00	19.00	22.0	
		64	5320	19.50	19.50	22.5	
	802.11n-HT20 MCS0	802.11n-HT20 MCS0	52	5260	20.00	20.00	23.0
			56	5280	20.00	20.00	23.0
			60	5300	20.00	20.00	23.0
	802.11n-HT40 MCS0	802.11n-HT40 MCS0	64	5320	20.00	20.00	23.0
			54	5270	19.00	19.00	22.0
	802.11ac-VHT20 MCS0	802.11ac-VHT20 MCS0	62	5310	17.00	17.00	20.0
			52	5260	20.00	20.00	23.0
			56	5280	20.00	20.00	23.0
60			5300	20.00	20.00	23.0	
802.11ac-VHT40 MCS0	802.11ac-VHT40 MCS0	64	5320	20.00	20.00	23.0	
		54	5270	19.00	19.00	22.0	
802.11ac-VHT80 MCS0	802.11ac-VHT80 MCS0	62	5310	17.00	17.00	20.0	
802.11ac-VHT160 MCS0	802.11ac-VHT160 MCS0	58	5290	15.50	15.50	18.5	
802.11ac-VHT160 MCS0	802.11ac-VHT160 MCS0	50	5250	14.00	14.00	17.0	
802.11ax-HE20 MCS0	802.11ax-HE20 MCS0	52	5260	20.00	20.00	23.0	
		56	5280	20.00	20.00	23.0	
		60	5300	20.00	20.00	23.0	
		64	5320	20.00	20.00	23.0	
802.11ax-HE40 MCS0	802.11ax-HE40 MCS0	54	5270	19.00	19.00	22.0	
		62	5310	16.50	16.50	19.5	
802.11ax-HE80 MCS0	802.11ax-HE80 MCS0	58	5290	15.50	15.50	18.5	
802.11ax-HE160 MCS0	802.11ax-HE160 MCS0	50	5250	14.00	14.00	17.0	



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		100	5500	18.50	20.00	22.3
		116	5580	18.50	20.00	22.3
		124	5620	18.50	20.00	22.3
		132	5660	18.50	20.00	22.3
		144	5720	18.50	20.00	22.3
802.11n-HT20 MCS0		100	5500	18.50	19.50	22.0
		116	5580	18.50	20.00	22.3
		124	5620	18.50	20.00	22.3
		132	5660	18.50	20.00	22.3
802.11n-HT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	18.50	19.00	21.8
		126	5630	18.50	19.00	21.8
		134	5670	18.50	19.00	21.8
802.11ac-VHT20 MCS0		100	5500	18.50	19.50	22.0
		116	5580	18.50	20.00	22.3
		124	5620	18.50	20.00	22.3
		132	5660	18.50	20.00	22.3
802.11ac-VHT40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	18.50	19.00	21.8
		126	5630	18.50	19.00	21.8
		134	5670	18.50	19.00	21.8
802.11ac-VHT80 MCS0		106	5530	16.00	16.00	19.0
		122	5610	18.50	19.00	21.8
		138	5690	18.50	19.00	21.8
802.11ac-VHT160 MCS0		114	5570	15.00	15.00	18.0
802.11ax-HE20 MCS0		100	5500	18.50	19.50	22.0
		116	5580	18.50	20.00	22.3
		124	5620	18.50	20.00	22.3
		132	5660	18.50	20.00	22.3
		144	5720	18.50	20.00	22.3
802.11ax-HE40 MCS0		102	5510	17.00	17.00	20.0
		110	5550	18.50	19.00	21.8
		126	5630	18.50	19.00	21.8
		134	5670	18.50	19.00	21.8
		142	5710	18.50	19.00	21.8
802.11ax-HE80 MCS0		106	5530	16.00	16.00	19.0
		122	5610	18.50	19.00	21.8
		138	5690	18.50	19.00	21.8
802.11ax-HE160 MCS0		114	5570	15.00	15.00	18.0



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	17.50	19.50	21.6
		157	5785	17.50	19.50	21.6
		165	5825	17.50	19.50	21.6
802.11n-HT20 MCS0		149	5745	17.50	19.50	21.6
		157	5785	17.50	19.50	21.6
		165	5825	17.50	19.50	21.6
802.11n-HT40 MCS0		151	5755	17.50	19.00	21.3
		159	5795	17.50	19.00	21.3
802.11ac-VHT20 MCS0		149	5745	17.50	19.50	21.6
		157	5785	17.50	19.50	21.6
		165	5825	17.50	19.50	21.6
802.11ac-VHT40 MCS0		151	5755	17.50	19.00	21.3
		159	5795	17.50	19.00	21.3
802.11ac-VHT80 MCS0		155	5775	17.50	19.00	21.3
802.11ax-HE20 MCS0		149	5745	17.50	19.50	21.6
		157	5785	17.50	19.50	21.6
		165	5825	17.50	19.50	21.6
802.11ax-HE40 MCS0		151	5755	17.50	19.00	21.3
		159	5795	17.50	19.00	21.3
802.11ax-HE80 MCS0		155	5775	17.50	19.00	21.3

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	17.50	19.50	21.6
		173	5865	17.50	19.50	21.6
		177	5885	17.50	19.50	21.6
802.11n-HT20 MCS0		169	5845	17.50	19.50	21.6
		173	5865	17.50	19.50	21.6
		177	5885	17.50	19.50	21.6
802.11n-HT40 MCS0		167	5835	17.50	19.00	21.3
		175	5875	17.50	19.00	21.3
802.11ac-VHT20 MCS0		169	5845	17.50	19.50	21.6
		173	5865	17.50	19.50	21.6
		177	5885	17.50	19.50	21.6
802.11ac-VHT40 MCS0		167	5835	17.50	19.00	21.3
		175	5875	17.50	19.00	21.3
802.11ac-VHT80 MCS0		171	5855	17.50	19.00	21.3
802.11ac-VHT160 MCS0		163	5815	17.50	19.00	21.3
802.11ax-HE20 MCS0		169	5845	17.50	19.50	21.6
		173	5865	17.50	19.50	21.6
		177	5885	17.50	19.50	21.6
802.11ax-HE40 MCS0		167	5835	17.50	19.00	21.3
		175	5875	17.50	19.00	21.3
802.11ax-HE80 MCS0		171	5855	17.50	19.00	21.3
802.11ax-HE160 MCS0		163	5815	17.50	19.00	21.3



<Power Index 7>

<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	20.00
		6	2437	20.00
		11	2462	20.00
		12	2467	20.00
		13	2472	20.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	20.50
		6	2437	20.50
		11	2462	20.50
		12	2467	20.50
		13	2472	20.50

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11g 6Mbps	1	2412	18.50	18.50	21.5
		6	2437	20.00	20.50	23.3
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11n-HT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	20.00	20.50	23.3
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11ac-VHT20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	20.00	20.50	23.3
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
		13	2472	17.50	17.50	20.5
	802.11ax-HE20 MCS0	1	2412	18.50	18.50	21.5
		6	2437	20.00	20.50	23.3
		11	2462	19.50	19.50	22.5
		12	2467	19.00	19.00	22.0
13		2472	17.50	17.50	20.5	



<5 GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11a 6Mbps	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
		48	5240	16.00	17.00	19.5
	802.11n-HT20 MCS0	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
		48	5240	16.00	17.00	19.5
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	16.00	17.00	19.5
	802.11ac-VHT20 MCS0	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
		48	5240	16.00	17.00	19.5
	802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	16.00	17.00	19.5
	802.11ac-VHT80 MCS0	42	5210	16.00	16.50	19.3
	802.11ax-HE20 MCS0	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
48		5240	16.00	17.00	19.5	
802.11ax-HE40 MCS0	38	5190	16.00	16.00	19.0	
	46	5230	16.00	17.00	19.5	
802.11ax-HE80 MCS0	42	5210	16.00	16.50	19.3	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11n-HT20 MCS0		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11n-HT40 MCS0		54	5270	16.00	17.00	19.5
		62	5310	16.00	17.00	19.5
802.11ac-VHT20 MCS0		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11ac-VHT40 MCS0		54	5270	16.00	17.00	19.5
		62	5310	16.00	17.00	19.5
802.11ac-VHT80 MCS0		58	5290	15.50	15.50	18.5
802.11ac-VHT160 MCS0		50	5250	14.00	14.00	17.0
802.11ax-HE20 MCS0		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11ax-HE40 MCS0		54	5270	16.00	17.00	19.5
		62	5310	16.00	17.00	19.5
802.11ax-HE80 MCS0		58	5290	15.50	15.50	18.5
802.11ax-HE160 MCS0		50	5250	14.00	14.00	17.0



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.50	20.00	21.3
		116	5580	15.50	20.00	21.3
		124	5620	15.50	20.00	21.3
		132	5660	15.50	20.00	21.3
		144	5720	15.50	20.00	21.3
	802.11n-HT20 MCS0	100	5500	15.50	19.50	21.0
		116	5580	15.50	20.00	21.3
		124	5620	15.50	20.00	21.3
		132	5660	15.50	20.00	21.3
	802.11n-HT40 MCS0	102	5510	15.50	17.00	19.3
		110	5550	15.50	19.00	20.6
		126	5630	15.50	19.00	20.6
		134	5670	15.50	19.00	20.6
	802.11ac-VHT20 MCS0	100	5500	15.50	19.50	21.0
		116	5580	15.50	20.00	21.3
		124	5620	15.50	20.00	21.3
		132	5660	15.50	20.00	21.3
	802.11ac-VHT40 MCS0	102	5510	15.50	17.00	19.3
		110	5550	15.50	19.00	20.6
		126	5630	15.50	19.00	20.6
		134	5670	15.50	19.00	20.6
	802.11ac-VHT80 MCS0	106	5530	15.50	16.00	18.8
		122	5610	15.50	19.00	20.6
		138	5690	15.50	19.00	20.6
	802.11ac-VHT160 MCS0	114	5570	15.00	15.00	18.0
	802.11ax-HE20 MCS0	100	5500	15.50	19.50	21.0
		116	5580	15.50	20.00	21.3
		124	5620	15.50	20.00	21.3
		132	5660	15.50	20.00	21.3
	802.11ax-HE40 MCS0	102	5510	15.50	17.00	19.3
		110	5550	15.50	19.00	20.6
		126	5630	15.50	19.00	20.6
		134	5670	15.50	19.00	20.6
	802.11ax-HE80 MCS0	106	5530	15.50	16.00	18.8
		122	5610	15.50	19.00	20.6
		138	5690	15.50	19.00	20.6
	802.11ax-HE160 MCS0	114	5570	15.00	15.00	18.0



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	15.50	17.50	19.6
		157	5785	15.50	17.50	19.6
		165	5825	15.50	17.50	19.6
802.11n-HT20 MCS0		149	5745	15.50	17.50	19.6
		157	5785	15.50	17.50	19.6
		165	5825	15.50	17.50	19.6
802.11n-HT40 MCS0		151	5755	15.50	17.50	19.6
		159	5795	15.50	17.50	19.6
802.11ac-VHT20 MCS0		149	5745	15.50	17.50	19.6
		157	5785	15.50	17.50	19.6
		165	5825	15.50	17.50	19.6
802.11ac-VHT40 MCS0		151	5755	15.50	17.50	19.6
		159	5795	15.50	17.50	19.6
802.11ac-VHT80 MCS0		155	5775	15.50	17.50	19.6
802.11ax-HE20 MCS0		149	5745	15.50	17.50	19.6
		157	5785	15.50	17.50	19.6
		165	5825	15.50	17.50	19.6
802.11ax-HE40 MCS0		151	5755	15.50	17.50	19.6
		159	5795	15.50	17.50	19.6
802.11ax-HE80 MCS0		155	5775	15.50	17.50	19.6

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	15.50	17.50	19.6
		173	5865	15.50	17.50	19.6
		177	5885	15.50	17.50	19.6
802.11n-HT20 MCS0		169	5845	15.50	17.50	19.6
		173	5865	15.50	17.50	19.6
		177	5885	15.50	17.50	19.6
802.11n-HT40 MCS0		167	5835	15.50	17.50	19.6
		175	5875	15.50	17.50	19.6
802.11ac-VHT20 MCS0		169	5845	15.50	17.50	19.6
		173	5865	15.50	17.50	19.6
		177	5885	15.50	17.50	19.6
802.11ac-VHT40 MCS0		167	5835	15.50	17.50	19.6
		175	5875	15.50	17.50	19.6
802.11ac-VHT80 MCS0		171	5855	15.50	17.50	19.6
802.11ac-VHT160 MCS0		163	5815	15.50	17.50	19.6
802.11ax-HE20 MCS0		169	5845	15.50	17.50	19.6
		173	5865	15.50	17.50	19.6
		177	5885	15.50	17.50	19.6
802.11ax-HE40 MCS0		167	5835	15.50	17.50	19.6
		175	5875	15.50	17.50	19.6
802.11ax-HE80 MCS0		171	5855	15.50	17.50	19.6
802.11ax-HE160 MCS0		163	5815	15.50	17.50	19.6



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<2.4 GHz 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	17.00
		6	2437	17.00
		11	2462	17.00
		12	2467	17.00
		13	2472	17.00

Burst Average Power (dBm)				
Transmit Antenna				SISO Ant 3
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit
	802.11b 1Mbps	1	2412	18.00
		6	2437	18.00
		11	2462	18.00
		12	2467	18.00
		13	2472	18.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO Ant 4+3		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11g 6Mbps	1	2412	17.00	18.00	20.5
		6	2437	17.00	18.00	20.5
		11	2462	17.00	18.00	20.5
		12	2467	17.00	18.00	20.5
		13	2472	17.00	17.50	20.3
	802.11n-HT20 MCS0	1	2412	17.00	18.00	20.5
		6	2437	17.00	18.00	20.5
		11	2462	17.00	18.00	20.5
		12	2467	17.00	18.00	20.5
		13	2472	17.00	17.50	20.3
	802.11ac-VHT20 MCS0	1	2412	17.00	18.00	20.5
		6	2437	17.00	18.00	20.5
		11	2462	17.00	18.00	20.5
		12	2467	17.00	18.00	20.5
		13	2472	17.00	17.50	20.3
	802.11ax-HE20 MCS0	1	2412	17.00	18.00	20.5
		6	2437	17.00	18.00	20.5
		11	2462	17.00	18.00	20.5
		12	2467	17.00	18.00	20.5
		13	2472	17.00	17.50	20.3

<5 GHz WLAN>

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



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11n-HT20 MCS0		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11n-HT40 MCS0		54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
802.11ac-VHT20 MCS0		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11ac-VHT40 MCS0		54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
802.11ac-VHT80 MCS0		58	5290	15.00	15.00	18.0
802.11ac-VHT160 MCS0		50	5250	14.00	14.00	17.0
802.11ax-HE20 MCS0		52	5260	15.00	15.00	18.0
		56	5280	15.00	15.00	18.0
		60	5300	15.00	15.00	18.0
		64	5320	15.00	15.00	18.0
802.11ax-HE40 MCS0		54	5270	15.00	15.00	18.0
		62	5310	15.00	15.00	18.0
802.11ax-HE80 MCS0		58	5290	15.00	15.00	18.0
802.11ax-HE160 MCS0		50	5250	14.00	14.00	17.0



Burst Average Power (dBm)						
5.5GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
		144	5720	13.00	17.00	18.5
802.11n-HT20 MCS0		100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
802.11n-HT40 MCS0		102	5510	13.00	17.00	18.5
		110	5550	13.00	17.00	18.5
		126	5630	13.00	17.00	18.5
		134	5670	13.00	17.00	18.5
802.11ac-VHT20 MCS0		100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
802.11ac-VHT40 MCS0		102	5510	13.00	17.00	18.5
		110	5550	13.00	17.00	18.5
		126	5630	13.00	17.00	18.5
		134	5670	13.00	17.00	18.5
802.11ac-VHT80 MCS0		106	5530	13.00	16.00	17.8
		122	5610	13.00	17.00	18.5
		138	5690	13.00	17.00	18.5
802.11ac-VHT160 MCS0		114	5570	13.00	15.00	17.1
802.11ax-HE20 MCS0		100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
802.11ax-HE40 MCS0		102	5510	13.00	17.00	18.5
		110	5550	13.00	17.00	18.5
		126	5630	13.00	17.00	18.5
		134	5670	13.00	17.00	18.5
802.11ax-HE80 MCS0		106	5530	13.00	16.00	17.8
		122	5610	13.00	17.00	18.5
		138	5690	13.00	17.00	18.5
802.11ax-HE160 MCS0		114	5570	13.00	15.00	17.1



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	12.50	14.50	16.6
		157	5785	12.50	14.50	16.6
		165	5825	12.50	14.50	16.6
802.11n-HT20 MCS0		149	5745	12.50	14.50	16.6
		157	5785	12.50	14.50	16.6
		165	5825	12.50	14.50	16.6
802.11n-HT40 MCS0		151	5755	12.50	14.50	16.6
		159	5795	12.50	14.50	16.6
802.11ac-VHT20 MCS0		149	5745	12.50	14.50	16.6
		157	5785	12.50	14.50	16.6
		165	5825	12.50	14.50	16.6
802.11ac-VHT40 MCS0		151	5755	12.50	14.50	16.6
		159	5795	12.50	14.50	16.6
802.11ac-VHT80 MCS0		155	5775	12.50	14.50	16.6
802.11ax-HE20 MCS0		149	5745	12.50	14.50	16.6
		157	5785	12.50	14.50	16.6
		165	5825	12.50	14.50	16.6
802.11ax-HE40 MCS0		151	5755	12.50	14.50	16.6
		159	5795	12.50	14.50	16.6
802.11ax-HE80 MCS0		155	5775	12.50	14.50	16.6

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	12.50	14.50	16.6
		173	5865	12.50	14.50	16.6
		177	5885	12.50	14.50	16.6
802.11n-HT20 MCS0		169	5845	12.50	14.50	16.6
		173	5865	12.50	14.50	16.6
		177	5885	12.50	14.50	16.6
802.11n-HT40 MCS0		167	5835	12.50	14.50	16.6
		175	5875	12.50	14.50	16.6
802.11ac-VHT20 MCS0		169	5845	12.50	14.50	16.6
		173	5865	12.50	14.50	16.6
		177	5885	12.50	14.50	16.6
802.11ac-VHT40 MCS0		167	5835	12.50	14.50	16.6
		175	5875	12.50	14.50	16.6
802.11ac-VHT80 MCS0		171	5855	12.50	14.50	16.6
802.11ac-VHT160 MCS0		163	5815	12.50	14.50	16.6
802.11ax-HE20 MCS0		169	5845	12.50	14.50	16.6
		173	5865	12.50	14.50	16.6
		177	5885	12.50	14.50	16.6
802.11ax-HE40 MCS0		167	5835	12.50	14.50	16.6
		175	5875	12.50	14.50	16.6
802.11ax-HE80 MCS0		171	5855	12.50	14.50	16.6
802.11ax-HE160 MCS0		163	5815	12.50	14.50	16.6



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<5 GHz WLAN>

Burst Average Power (dBm)						
5.2GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
		48	5240	16.00	17.00	19.5
	802.11n-HT20 MCS0	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
		48	5240	16.00	17.00	19.5
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	16.00	17.00	19.5
	802.11ac-VHT20 MCS0	36	5180	16.00	17.00	19.5
		40	5200	16.00	17.00	19.5
		44	5220	16.00	17.00	19.5
		48	5240	16.00	17.00	19.5
	802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.0
		46	5230	16.00	17.00	19.5
802.11ac-VHT80 MCS0	42	5210	16.00	16.50	19.3	
802.11ax-HE20 MCS0	36	5180	16.00	17.00	19.5	
	40	5200	16.00	17.00	19.5	
	44	5220	16.00	17.00	19.5	
	48	5240	16.00	17.00	19.5	
802.11ax-HE40 MCS0	38	5190	16.00	16.00	19.0	
	46	5230	16.00	17.00	19.5	
802.11ax-HE80 MCS0	42	5210	16.00	16.50	19.3	



Burst Average Power (dBm)						
5.3GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11n-HT20 MCS0		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11n-HT40 MCS0		54	5270	16.00	17.00	19.5
		62	5310	16.00	17.00	19.5
802.11ac-VHT20 MCS0		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11ac-VHT40 MCS0		54	5270	16.00	17.00	19.5
		62	5310	16.00	17.00	19.5
802.11ac-VHT80 MCS0		58	5290	15.50	15.50	18.5
802.11ac-VHT160 MCS0		50	5250	14.00	14.00	17.0
802.11ax-HE20 MCS0		52	5260	16.00	17.00	19.5
		56	5280	16.00	17.00	19.5
		60	5300	16.00	17.00	19.5
		64	5320	16.00	17.00	19.5
802.11ax-HE40 MCS0		54	5270	16.00	17.00	19.5
		62	5310	16.00	17.00	19.5
802.11ax-HE80 MCS0		58	5290	15.50	15.50	18.5
802.11ax-HE160 MCS0		50	5250	14.00	14.00	17.0



Burst Average Power (dBm)						
	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
		144	5720	13.00	17.00	18.5
	802.11n-HT20 MCS0	100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
	802.11n-HT40 MCS0	102	5510	13.00	17.00	18.5
		110	5550	13.00	17.00	18.5
		126	5630	13.00	17.00	18.5
		134	5670	13.00	17.00	18.5
	802.11ac-VHT20 MCS0	100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
	802.11ac-VHT40 MCS0	102	5510	13.00	17.00	18.5
		110	5550	13.00	17.00	18.5
		126	5630	13.00	17.00	18.5
		134	5670	13.00	17.00	18.5
	802.11ac-VHT80 MCS0	106	5530	13.00	16.00	17.8
		122	5610	13.00	17.00	18.5
		138	5690	13.00	17.00	18.5
	802.11ac-VHT160 MCS0	114	5570	13.00	15.00	17.1
	802.11ax-HE20 MCS0	100	5500	13.00	17.00	18.5
		116	5580	13.00	17.00	18.5
		124	5620	13.00	17.00	18.5
		132	5660	13.00	17.00	18.5
	802.11ax-HE40 MCS0	102	5510	13.00	17.00	18.5
		110	5550	13.00	17.00	18.5
		126	5630	13.00	17.00	18.5
		134	5670	13.00	17.00	18.5
	802.11ax-HE80 MCS0	106	5530	13.00	16.00	17.8
		122	5610	13.00	17.00	18.5
		138	5690	13.00	17.00	18.5
	802.11ax-HE160 MCS0	114	5570	13.00	15.00	17.1



Burst Average Power (dBm)						
5.8GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		149	5745	14.50	16.50	18.6
		157	5785	14.50	16.50	18.6
		165	5825	14.50	16.50	18.6
802.11n-HT20 MCS0		149	5745	14.50	16.50	18.6
		157	5785	14.50	16.50	18.6
		165	5825	14.50	16.50	18.6
802.11n-HT40 MCS0		151	5755	14.50	16.50	18.6
		159	5795	14.50	16.50	18.6
802.11ac-VHT20 MCS0		149	5745	14.50	16.50	18.6
		157	5785	14.50	16.50	18.6
		165	5825	14.50	16.50	18.6
802.11ac-VHT40 MCS0		151	5755	14.50	16.50	18.6
		159	5795	14.50	16.50	18.6
802.11ac-VHT80 MCS0		155	5775	14.50	16.50	18.6
802.11ax-HE20 MCS0		149	5745	14.50	16.50	18.6
		157	5785	14.50	16.50	18.6
		165	5825	14.50	16.50	18.6
802.11ax-HE40 MCS0		151	5755	14.50	16.50	18.6
		159	5795	14.50	16.50	18.6
802.11ax-HE80 MCS0		155	5775	14.50	16.50	18.6

Burst Average Power (dBm)						
5.8GHz UNII 4	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
802.11a 6Mbps		169	5845	14.50	16.50	18.6
		173	5865	14.50	16.50	18.6
		177	5885	14.50	16.50	18.6
802.11n-HT20 MCS0		169	5845	14.50	16.50	18.6
		173	5865	14.50	16.50	18.6
		177	5885	14.50	16.50	18.6
802.11n-HT40 MCS0		167	5835	14.50	16.50	18.6
		175	5875	14.50	16.50	18.6
802.11ac-VHT20 MCS0		169	5845	14.50	16.50	18.6
		173	5865	14.50	16.50	18.6
		177	5885	14.50	16.50	18.6
802.11ac-VHT40 MCS0		167	5835	14.50	16.50	18.6
		175	5875	14.50	16.50	18.6
802.11ac-VHT80 MCS0		171	5855	14.50	16.50	18.6
802.11ac-VHT160 MCS0		163	5815	14.50	16.50	18.6
802.11ax-HE20 MCS0		169	5845	14.50	16.50	18.6
		173	5865	14.50	16.50	18.6
		177	5885	14.50	16.50	18.6
802.11ax-HE40 MCS0		167	5835	14.50	16.50	18.6
		175	5875	14.50	16.50	18.6
802.11ax-HE80 MCS0		171	5855	14.50	16.50	18.6
802.11ax-HE160 MCS0		163	5815	14.50	16.50	18.6



<6GHz WLAN Maximum Power>

<Mobile Condition - Power Index 0>

Burst Average Power (dBm)						
6GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
6GHz WLAN	802.11ax-HE20 MCS0	1	5955	7.00	7.00	10.0
		57	6235	6.50	6.50	9.5
		113	6515	7.00	7.00	10.0
		173	6815	8.00	8.00	11.0
		229	7095	10.50	10.50	13.5
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.0
		59	6245	9.50	9.50	12.5
		107	6485	11.00	11.00	14.0
		171	6805	11.50	11.50	14.5
	802.11ax-HE80 MCS0	227	7085	12.50	12.50	15.5
		7	5985	12.00	12.00	15.0
		71	6305	12.50	12.50	15.5
		119	6545	13.50	13.50	16.5
	802.11ax-HE160 MCS0	167	6785	14.50	14.50	17.5
		215	7025	14.50	14.50	17.5
		15	6025	15.50	15.50	18.5
47		6185	15.50	15.50	18.5	
111		6505	17.00	17.00	20.0	
	175	6825	17.50	17.50	20.5	
	207	6985	17.50	17.50	20.5	

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

Burst Average Power (dBm)						
6GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
6GHz WLAN	802.11ax-HE20 MCS0	1	5955	7.00	7.00	10.0
		57	6235	6.50	6.50	9.5
		113	6515	7.00	7.00	10.0
		173	6815	8.00	8.00	11.0
		229	7095	10.50	10.50	13.5
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.0
		59	6245	9.50	9.50	12.5
		107	6485	10.00	10.00	13.0
		171	6805	9.50	9.50	12.5
	802.11ax-HE80 MCS0	227	7085	11.00	11.00	14.0
		7	5985	10.00	10.00	13.0
		71	6305	10.00	10.00	13.0
		119	6545	10.00	10.00	13.0
	802.11ax-HE160 MCS0	167	6785	9.50	9.50	12.5
		215	7025	11.00	11.00	14.0
		15	6025	10.00	10.00	13.0
47		6185	10.00	10.00	13.0	
111		6505	10.00	10.00	13.0	
	175	6825	9.50	9.50	12.5	
	207	6985	11.00	11.00	14.0	



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

Burst Average Power (dBm)						
6GHz WLAN	Transmit Antenna			MIMO Ant 4+3		
	Mode	Channel	Frequency (MHz)	Tune-Up Limit 4+3(4)	Tune-Up Limit 4+3(3)	Tune-Up Limit 4+3
	802.11ax-HE20 MCS0	1	5955	7.00	7.00	10.0
		57	6235	6.50	6.50	9.5
		113	6515	7.00	7.00	10.0
		173	6815	8.00	8.00	11.0
		229	7095	10.50	10.50	13.5
	802.11ax-HE40 MCS0	3	5965	10.00	10.00	13.0
		59	6245	9.50	9.50	12.5
		107	6485	11.00	11.00	14.0
		171	6805	11.00	11.00	14.0
	802.11ax-HE80 MCS0	227	7085	12.50	12.50	15.5
		7	5985	7.50	7.50	10.5
		71	6305	7.50	7.50	10.5
		119	6545	11.50	11.50	14.5
		167	6785	11.00	11.00	14.0
	802.11ax-HE160 MCS0	215	7025	12.50	12.50	15.5
		15	6025	7.50	7.50	10.5
		47	6185	7.50	7.50	10.5
		111	6505	11.50	11.50	14.5
		175	6825	11.00	11.00	14.0
			207	6985	12.50	12.50



<Bluetooth Maximum Power>

General Note:

1. The device implements the power management for Bluetooth SAR compliance for different exposure conditions and user cases. When the device is operated against the user's head, power index 1 is used; when the device is operated in the body-worn or extremity condition, power index 2-5 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	21	18	18	19	19

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	19	19

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

<Power Index 1>

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

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

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



<Power Index 2>

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	19	19

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	19	19

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

<Power Index 3>

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

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

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		15	15	18	15	15	18	15	15	18



<Power Index 4 >

Mode	Burst Average Power (dBm)				
	Ant 4			Ant 4	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	19	19

Mode	Burst Average Power (dBm)				
	Ant 3			Ant 3	
	BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21	18	18	19	19

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



2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																															
FCC ID	A4RGX7AS																																																														
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 14																																																														
LTE Carrier Aggregation Additional Information	This device supports maximum of 5 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																														



Transmission (H, M, L) channel numbers and frequencies in each LTE band																
LTE Band 2																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860				
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880				
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900				
LTE Band 4																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720				
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5				
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745				
LTE Band 5																
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	20407	824.7	20415	825.5	20425	826.5	20450	829	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		716		23865		719	
H	23825		713.5		23850		716.5		23875		719.5		23900		722	



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



2.4 General 5G NR SAR Test and Reporting Considerations

5G NR Information								
FCC ID	A4RGX7AS							
Equipment Name	Phone							
Operating Frequency Range of each 5G NR transmission band	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n30: 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 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 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 15MHz, 20MHz 5G NR n41: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz,30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz							
SCS	FDD: SCS15KHz, TDD: SCS30KHz							
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM							
A-MPR (Additional MPR) disabled for SAR Testing?	Yes							
LTE Anchor Bands for n2	LTE B5/12/13/14/48							
LTE Anchor Bands for n5	LTE B2/7/30/48/66							
LTE Anchor Bands for n25	LTE B12/26/48							
LTE Anchor Bands for n30	LTE B5/12							
LTE Anchor Bands for n38	LTE B66							
LTE Anchor Bands for n41	LTE B2/4/12/25/26/66							
LTE Anchor Bands for n66	LTE B5/12/13/14/48/71							
LTE Anchor Bands for n71	LTE B2/7/66							
LTE Anchor Bands for n77	LTE B2/5/7/13/41/66							
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900
NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839
NR Band 7								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510
M	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560



NR Band 12																						
Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 15MHz														
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)														
L	140300	701.5		140800	704		141300	706.5														
M	141500	707.5		141500	707.5		141500	707.5														
H	142700	713.5		142200	711		141700	708.5														
NR Band 25																						
Bandwidth 5MHz			Bandwidth 10MHz			Bandwidth 15MHz			Bandwidth 20MHz													
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)											
L	370500	1852.5		371000	1855		371500	1857.5		372000	1860											
M	376500	1882.5		376500	1882.5		376500	1882.5		376500	1882.5											
H	382500	1912.5		382000	1910		381500	1907.5		381000	1905											
NR Band 30																						
Bandwidth 5MHz						Bandwidth 10MHz																
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)															
L	461500		2307.5		462000		2310															
M	462000		2310		462000		2310															
H	462500		2312.5		462000		2310															
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 66																						
Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz												
	Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)		Ch. #	Freq. (MHz)											
L	342500	1712.5		343000	1715		343500	1717.5		344000	1720											
M	349000	1745		349000	1745		349000	1745		349000	1745											
H	355500	1777.5		355000	1775		354500	1772.5		354000	1770											
NR Band 71																						
Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz										
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)							
L	133100		665.5		133600		668		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		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)	
L	630334	3455.01	630500	3457.5	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	633334	3500.01
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636332	3544.98	636166	3542.49	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99	633332	3499.98
NR Band 77 (3700MHz ~ 3980MHz)																						
Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		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)	
L	647000	3705	647168	3707.52	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	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)	Config	Antenna	Duty cycle	Head			Hotspot	Body-worn/Extremity		P Max Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 7	Index 4	Index 5	Index 6	
				P limit						
Burst average power (dBm)										
GSM850 GSM/GPRS 1TX	TX0	0	12.50%	37.20	36.40	35.50	36.00	37.70	36.90	32.50
GSM850 GPRS 2TX	TX0	0	25.00%	34.20	33.40	32.50	33.00	34.70	33.90	31.50
GSM850 GPRS 3TX	TX0	0	37.50%	32.45	31.65	30.75	31.25	32.95	32.15	30.50
GSM850 GPRS 4TX	TX0	0	50.00%	31.20	30.40	29.50	30.00	31.70	30.90	29.50
GSM1900 GSM/GPRS 1TX	TX0	2	12.50%	38.20	37.40	36.50	28.70	30.40	29.60	29.75
GSM1900 GPRS 2TX	TX0	2	25.00%	35.20	34.40	33.50	25.70	27.40	26.60	28.25
GSM1900 GPRS 3TX	TX0	2	37.50%	33.45	32.65	31.75	23.95	25.65	24.85	27.75
GSM1900 GPRS 4TX	TX0	2	50.00%	32.20	31.40	30.50	22.70	24.40	23.60	26.75
WCDMA B2	TX0	2	100.00%	30.00	29.20	28.80	20.10	21.30	20.50	24.45
WCDMA B4	TX0	2	100.00%	31.70	30.90	30.40	21.20	22.50	21.70	24.45
WCDMA B5	TX0	0	100.00%	28.70	27.90	27.10	27.50	29.10	28.30	24.70

Wireless technology/ band (No Accounting duty cycle)	Config	Antenna	Duty cycle	Head			Hotspot	Body-worn/Extremity		P Max Burst average power (dBm)
				Standalone	Simultaneous	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 7	Index 4	Index 5	Index 6	
				P limit						
Burst average power (dBm)										
GSM850 GSM/GPRS 1TX	TX1	1	12.50%	34.00	33.20	33.20	38.00	38.80	38.00	32.50
GSM850 GPRS 2TX	TX1	1	25.00%	31.00	30.20	30.20	35.00	35.80	35.00	31.50
GSM850 GPRS 3TX	TX1	1	37.50%	29.25	28.45	28.45	33.25	34.05	33.25	30.50
GSM850 GPRS 4TX	TX1	1	50.00%	28.00	27.20	27.20	32.00	32.80	32.00	29.50
GSM1900 GSM/GPRS 1TX	TX1	0	12.50%	37.50	36.70	36.70	33.10	33.90	33.10	30.00
GSM1900 GPRS 2TX	TX1	0	25.00%	34.50	33.70	33.70	30.10	30.90	30.10	28.50
GSM1900 GPRS 3TX	TX1	0	37.50%	32.75	31.95	31.95	28.35	29.15	28.35	28.00
GSM1900 GPRS 4TX	TX1	0	50.00%	31.50	30.70	30.70	27.10	27.90	27.10	27.00
WCDMA B2	TX1	0	100.00%	26.60	26.60	25.80	22.10	22.90	22.90	24.70
WCDMA B4	TX1	0	100.00%	27.80	27.00	26.90	22.80	23.70	22.90	24.70
WCDMA B5	TX1	1	100.00%	24.90	24.10	24.10	28.90	29.70	28.90	24.70



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

Wireless technology/ band (Accounting duty cycle)	Config	Antenna	Duty cycle	Head			Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 7	Index 4	Index 5	Index 6	
				P limit						
LTE B7	TX0	2	100.00%	25.20	25.20	24.40	19.40	20.20	20.20	24.40
LTE B12/17	TX0	0	100.00%	30.40	29.60	28.90	26.90	28.40	27.60	24.70
LTE B13	TX0	0	100.00%	29.20	28.40	27.40	26.60	28.40	27.60	24.70
LTE B14	TX0	0	100.00%	29.00	28.20	27.50	27.10	28.60	27.80	24.70
LTE B25/2	TX0	2	100.00%	30.60	29.80	29.40	20.10	21.30	20.50	24.70
LTE B26/5	TX0	0	100.00%	29.10	28.30	27.00	26.90	29.00	28.20	24.70
LTE B30	TX0	2	100.00%	27.50	26.70	26.70	21.70	22.50	21.70	23.70
LTE B41/B38 PC3	TX0	2	63.30%	24.00	24.00	23.20	19.60	20.40	20.40	22.40
LTE B38 PC2	TX0	2	43.30%	24.00	24.00	23.20	19.60	20.40	20.40	22.60
LTE B41 PC2	TX0	2	43.30%	24.00	24.00	23.20	19.60	20.40	20.40	23.10
LTE B48	TX0	6	63.30%	28.40	27.60	27.60	22.10	22.90	22.10	21.00
LTE B66/4	TX0	2	100.00%	32.40	31.60	31.10	21.10	22.40	21.60	24.45
LTE B71	TX0	0	100.00%	30.70	29.90	29.90	27.00	27.80	27.00	24.70
FR1 n5	TX0	0	100.00%	28.70	27.90	27.40	27.80	29.10	28.30	24.70
FR1 n7	TX0	2	100.00%	25.20	25.20	24.40	19.70	20.50	20.50	24.40
FR1 n12	TX0	0	100.00%	30.70	29.90	29.10	26.70	28.30	27.50	24.70
FR1 n25/2	TX0	2	100.00%	30.70	29.90	29.40	20.40	21.70	20.90	24.90
FR1 n30	TX0	2	100.00%	27.50	26.70	26.70	22.20	23.00	22.20	23.70
FR1 n38	TX0	5	100.00%	17.60	16.80	16.80	19.90	20.70	19.90	24.70
FR1 n41 PC3	TX0	5	100.00%	17.60	16.80	16.80	19.90	20.70	19.90	24.70
FR1 n41 PC2	TX0	5	50.00%	17.60	16.80	16.80	19.90	20.70	19.90	23.00
FR1 n66	TX0	2	100.00%	31.90	31.10	30.90	21.90	22.90	22.10	24.45
FR1 n71	TX0	0	100.00%	30.60	29.80	29.80	27.30	28.10	27.30	24.70
FR1 n77 PC3	TX0	6	100.00%	27.00	26.20	26.20	20.60	21.40	20.60	24.00
FR1 n77 PC2	TX0	6	50.00%	27.00	26.20	26.20	20.60	21.40	20.60	23.20

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



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

Wireless technology/ band (Accounting duty cycle)	Config	Antenna	Duty cycle	Head			Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
				Standalone	Simultaneous	Simultaneous	Simultaneous	Standalone	Simultaneous	
				Index 2	Index 3	Index 7	Index 4	Index 5	Index 6	
				P limit						
LTE B7	TX1	0	100.00%	27.20	27.20	26.40	23.10	23.90	23.90	24.20
LTE B12/17	TX1	1	100.00%	24.30	23.50	22.20	29.10	31.20	30.40	24.20
LTE B13	TX1	1	100.00%	24.20	23.40	22.10	29.20	31.30	30.50	24.20
LTE B14	TX1	1	100.00%	24.20	23.40	23.40	29.60	30.40	29.60	24.20
LTE B25/2	TX1	0	100.00%	26.80	26.80	26.00	21.60	22.40	22.40	24.20
LTE B26/5	TX1	1	100.00%	25.00	24.20	24.20	28.60	29.40	28.60	24.20
LTE B30	TX1	0	100.00%	25.70	25.70	24.90	21.90	22.70	22.70	24.00
LTE B41/B38 PC3	TX1	0	63.30%	25.10	24.30	24.30	23.80	24.60	23.80	22.20
LTE B41/B38 PC2	TX1	0	43.30%	25.10	24.30	24.30	23.80	24.60	23.80	22.60
LTE B48	TX1	2	63.30%	29.30	28.50	28.20	23.30	24.40	23.60	20.10
LTE B66/4	TX1	0	100.00%	27.20	26.40	26.00	22.50	23.70	22.90	24.20
LTE B71	TX1	1	100.00%	25.30	24.50	23.20	29.80	31.90	31.10	24.20
FR1 n5	TX1	1	100.00%	26.10	25.30	25.30	29.80	30.60	29.80	24.20
FR1 n7	TX1	0	100.00%	26.50	26.50	25.70	23.20	24.00	24.00	24.20
FR1 n12	TX1	1	100.00%	25.00	24.20	24.00	30.50	31.50	30.70	24.20
FR1 n25/2	TX1	0	100.00%	26.60	26.60	25.80	22.20	23.00	23.00	24.70
FR1 n30	TX1	0	100.00%	26.20	26.20	25.40	22.50	23.30	23.30	24.00
FR1 n30	TX1	1	100.00%	18.50	17.70	17.70	22.40	23.20	22.40	24.50
FR1 n38	TX1	1	100.00%	18.50	17.70	17.70	22.40	23.20	22.40	24.70
FR1 n41 PC3	TX1	1	50.00%	18.50	17.70	17.70	22.40	23.20	22.40	23.20
FR1 n41 PC2	TX1	0	100.00%	27.20	27.20	26.40	23.10	23.90	23.90	24.20
FR1 n66	TX1	0	100.00%	27.90	27.10	26.80	22.90	24.00	23.20	24.70
FR1 n71	TX1	1	100.00%	25.60	24.80	24.00	30.00	31.60	30.80	24.20
FR1 n77 PC3	TX1	2	100.00%	28.30	27.50	27.50	21.70	22.50	21.70	22.65
FR1 n77 PC2	TX1	2	50.00%	28.30	27.50	27.50	21.70	22.50	21.70	21.80

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



4. 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

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:

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

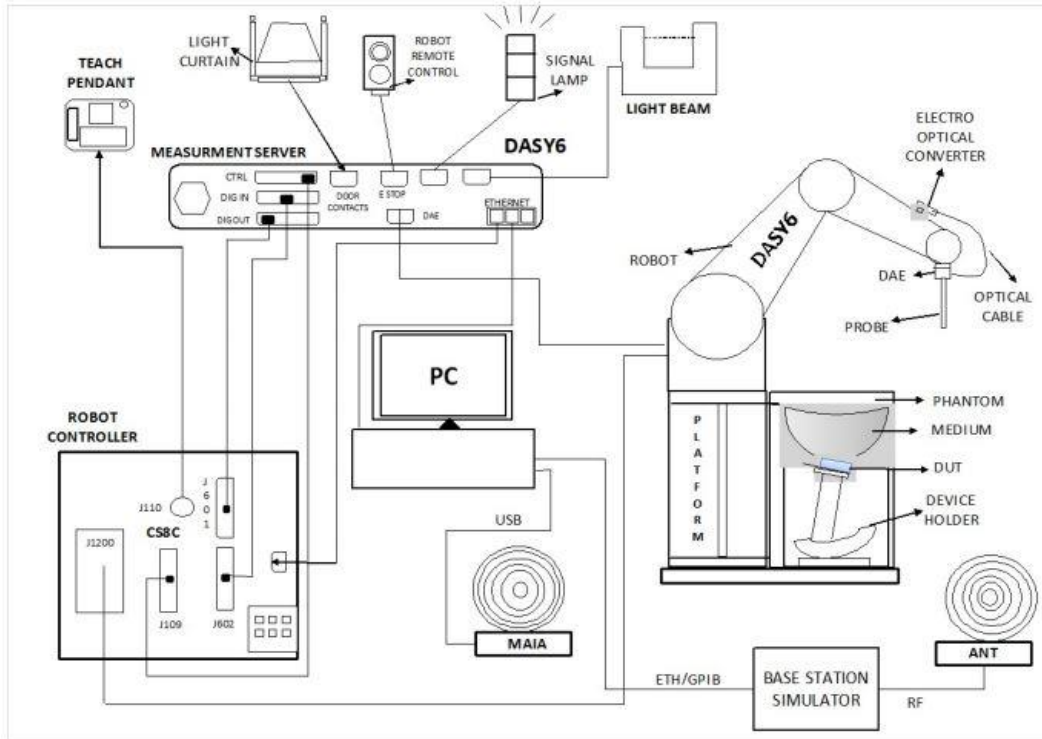
SAR is expressed in units of Watts per kilogram (W/kg)

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

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 DASY6/DASY5 V5.2 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 DASY5/DASY6 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		Wensan Laboratory		
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan		
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	


7.2 E-Field Probe

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

<ES3DV3 Probe>

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

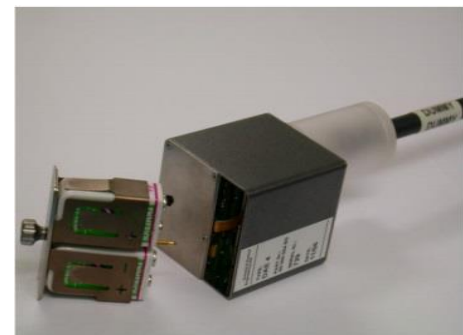



Fig 5.1 Photo of DAE

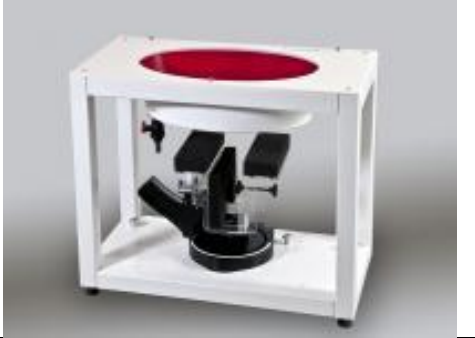
7.4 Phantom

<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:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

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

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

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

8.4 Zoom Scan

Zoom scans are used 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	
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

8.5 Volume Scan Procedures

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

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In 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	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	2600MHz System Validation Kit ⁽²⁾	D2600V2	1078	Mar. 06, 2019	Mar. 03, 2022
SPEAG	5GHz System Validation Kit	D5GHzV2	1006	Sep. 15, 2021	Sep. 14, 2022
SPEAG	5GHz System Validation Kit	D5GHzV2	1171	Apr. 20, 2021	Apr. 19, 2022
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1003	Sep. 24, 2021	Sep. 23, 2022
SPEAG	5G Verification Source	10GHz	1020	Jan. 18, 2021	Jan. 17, 2022
SPEAG	Data Acquisition Electronics	DAE3	577	Sep. 15, 2021	Sep. 14, 2022
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 19, 2021	Jan. 18, 2022
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 22, 2021	Jan. 21, 2022
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 16, 2021	Feb. 15, 2022
SPEAG	Data Acquisition Electronics	DAE4	1399	Feb. 16, 2021	Feb. 15, 2022
SPEAG	Data Acquisition Electronics	DAE4	1424	Jan. 19, 2021	Jan. 18, 2022
SPEAG	Data Acquisition Electronics	DAE4	1512	Feb. 11, 2021	Feb. 10, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 23, 2021	Sep. 22, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	Sep. 21, 2021	Sep. 20, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 26, 2021	Apr. 25, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Feb. 23, 2021	Feb. 22, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 21, 2021	Oct. 20, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	Jan. 27, 2021	Jan. 26, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7346	Jun. 25, 2021	Jun. 24, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Jan. 19, 2021	Jan. 18, 2022
SPEAG	EUmmWV Probe Tip Protection	EUmmWV3	9424	Mar. 23, 2021	Mar. 22, 2022
Testo	Hygro meter	608-H1	45196600	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	6201074414	Jul. 21, 2021	Jul. 20, 2022
Anritsu	Radio Communication Analyzer	MT8820C	6201381766	Jul. 21, 2021	Jul. 20, 2022
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Oct. 21, 2021	Oct. 20, 2022
Keysight	Wireless Communication Test Set	E5515C	MY50266977	May. 12, 2021	May. 11, 2022
R&S	BT Base Station	CBT	100815	Feb. 19, 2021	Feb. 18, 2022
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Oct. 24, 2021	Oct. 23, 2022
Keysight	ENA Network Analyzer	E5071C	MY46104758	Sep. 07, 2021	Sep. 06, 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	MS2830A	6201396378	Jul. 16, 2021	Jul. 15, 2022
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	22.1	0.887	42.666	0.89	41.90	-0.34	1.83	±5	2021/12/3
750	22.5	0.903	41.752	0.89	41.90	1.46	-0.35	±5	2021/12/5
750	22.6	0.887	40.871	0.89	41.90	-0.34	-2.46	±5	2021/12/6
835	22.6	0.921	41.099	0.90	41.50	2.33	-0.97	±5	2021/11/28
835	22.1	0.883	41.203	0.90	41.50	-1.89	-0.72	±5	2021/12/3
835	22.3	0.885	42.574	0.90	41.50	-1.67	2.59	±5	2021/12/4
835	22.3	0.885	42.574	0.90	41.50	-1.67	2.59	±5	2021/12/4
2450	22.5	1.802	39.247	1.80	39.20	0.11	0.12	±5	2021/12/20
2450	22.3	1.777	39.819	1.80	39.20	-1.28	1.58	±5	2021/12/21
2450	22.5	1.782	40.073	1.80	39.20	-1.00	2.23	±5	2022/1/2
2450	22.5	1.790	39.627	1.80	39.20	-0.56	1.09	±5	2022/1/4
2450	22.6	1.768	39.957	1.80	39.20	-1.78	1.93	±5	2022/1/5
2450	22.8	1.784	39.587	1.80	39.20	-0.89	0.99	±5	2022/1/5
2450	22.7	1.777	39.537	1.80	39.20	-1.28	0.86	±5	2022/1/6
2450	22.2	1.761	39.907	1.80	39.20	-2.17	1.80	±5	2022/1/7
2600	22.5	1.988	39.136	1.96	39.00	1.43	0.35	±5	2021/11/30
2600	22.5	1.990	39.146	1.96	39.00	1.53	0.37	±5	2021/12/1
2600	22.8	1.929	39.377	1.96	39.00	-1.58	0.97	±5	2021/12/23
2600	22.5	2.003	38.855	1.96	39.00	2.19	-0.37	±5	2021/12/24



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
5250	22.4	4.594	35.871	4.71	35.95	-2.46	-0.22	±5	2021/12/20
5250	22.6	4.706	36.778	4.71	35.95	-0.08	2.30	±5	2021/12/30
5250	22.1	4.748	36.596	4.71	35.95	0.81	1.80	±5	2022/1/1
5250	22.4	4.753	36.613	4.71	35.95	0.91	1.84	±5	2022/1/4
5250	22.6	4.787	36.929	4.71	35.95	1.63	2.72	±5	2022/1/5
5250	22.7	4.765	36.797	4.71	35.95	1.17	2.36	±5	2022/1/6
5250	22.5	4.693	36.549	4.71	35.95	-0.36	1.67	±5	2022/1/7
5250	22.9	4.733	37.303	4.71	35.95	0.49	3.76	±5	2022/1/9
5600	22.4	5.099	36.215	5.07	35.50	0.57	2.01	±5	2021/12/28
5600	22.6	5.104	36.231	5.07	35.50	0.67	2.06	±5	2021/12/30
5600	22.1	5.148	36.048	5.07	35.50	1.54	1.54	±5	2022/1/1
5600	22.4	5.153	36.065	5.07	35.50	1.64	1.59	±5	2022/1/4
5600	22.6	5.189	36.381	5.07	35.50	2.35	2.48	±5	2022/1/5
5600	22.7	5.166	36.250	5.07	35.50	1.89	2.11	±5	2022/1/6
5600	22.5	5.089	36.002	5.07	35.50	0.37	1.41	±5	2022/1/7
5600	22.9	5.069	36.848	5.07	35.50	-0.02	3.80	±5	2022/1/9
5750	22.4	5.254	36.023	5.22	35.35	0.65	1.90	±5	2021/12/28
5750	22.6	5.259	36.039	5.22	35.35	0.75	1.95	±5	2021/12/30
5750	22.1	5.304	35.856	5.22	35.35	1.61	1.43	±5	2022/1/1
5750	22.4	5.310	35.873	5.22	35.35	1.72	1.48	±5	2022/1/4
5750	22.6	5.347	36.189	5.22	35.35	2.43	2.37	±5	2022/1/5
5750	22.7	5.323	36.058	5.22	35.35	1.97	2.00	±5	2022/1/6
5750	22.5	5.244	35.810	5.22	35.35	0.46	1.30	±5	2022/1/7
5850	22.1	5.521	36.207	5.32	35.25	3.78	2.71	±5	2022/1/4
5850	22.3	5.494	36.032	5.32	35.25	3.27	2.22	±5	2022/1/6
5850	22.6	5.478	35.982	5.32	35.25	2.97	2.08	±5	2022/1/7
5850	22.9	5.293	36.480	5.32	35.25	-0.51	3.49	±5	2022/1/9
6500	22.1	5.950	33.950	6.07	34.50	-1.98	-1.59	±5	2022/1/6



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.

Table with 15 columns: Test Site, Date, Frequency (MHz), Input Power (mW), Dipole S/N, Probe S/N, DAE S/N, Measured 1g SAR (W/kg), Targeted 1g SAR (W/kg), Normalized 1g SAR (W/kg), Deviation (%), Measured 10g SAR (W/kg), Targeted 10g SAR (W/kg), Normalized 10g SAR (W/kg), Deviation (%). Rows include test data for SAR09, SAR11, and SAR08 across various dates and frequencies.

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg) ²	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR12	2021/12/20	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn656	8.470	81.70	84.7	3.67	2.400	23.20	24	3.45
SAR14	2021/12/30	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1399	8.430	81.70	84.3	3.18	2.390	23.20	23.9	3.02
SAR14	2022/1/1	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1399	8.500	81.70	85	4.04	2.410	23.20	24.1	3.88
SAR14	2022/1/4	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1399	8.510	81.70	85.1	4.16	2.420	23.20	24.2	4.31
SAR14	2022/1/5	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1399	8.570	81.70	85.7	4.90	2.430	23.20	24.3	4.74
SAR14	2022/1/6	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1399	3.970	81.70	79.4	-2.82	1.140	23.20	22.8	-1.72
SAR14	2022/1/7	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN3931	DAE4 Sn1399	3.910	81.70	78.2	-4.28	1.120	23.20	22.4	-3.45
SAR12	2022/1/9	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn699	8.900	81.70	89	8.94	2.550	23.20	25.5	9.91
SAR14	2021/12/28	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	8.940	85.10	89.4	5.05	2.520	24.00	25.2	5.00
SAR14	2021/12/30	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	8.950	85.10	89.5	5.17	2.530	24.00	25.3	5.42
SAR14	2022/1/1	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	9.030	85.10	90.3	6.11	2.550	24.00	25.5	6.25
SAR14	2022/1/4	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	9.040	85.10	90.4	6.23	2.550	24.00	25.5	6.25
SAR14	2022/1/5	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	9.100	85.10	91	6.93	2.570	24.00	25.7	7.08
SAR14	2022/1/6	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	4.310	85.10	86.2	1.29	1.240	24.00	24.8	3.33
SAR14	2022/1/7	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN3931	DAE4 Sn1399	4.240	85.10	84.8	-0.35	1.220	24.00	24.4	1.67
SAR12	2022/1/9	5600	100	D5GHzV2-1006-5600	EX3DV4 - SN3642	DAE4 Sn699	9.020	85.10	90.2	5.99	2.500	24.00	25	4.17
SAR14	2021/12/28	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	8.550	81.40	85.5	5.04	2.400	22.90	24	4.80
SAR14	2021/12/30	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	8.560	81.40	85.6	5.16	2.410	22.90	24.1	5.24
SAR14	2022/1/1	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	8.630	81.40	86.3	6.02	2.430	22.90	24.3	6.11
SAR14	2022/1/4	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	8.640	81.40	86.4	6.14	2.430	22.90	24.3	6.11
SAR14	2022/1/5	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	8.700	81.40	87	6.88	2.450	22.90	24.5	6.99
SAR14	2022/1/6	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	8.060	81.40	80.6	-0.98	2.300	22.90	23	0.44
SAR14	2022/1/7	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3931	DAE4 Sn1399	7.940	81.40	79.4	-2.46	2.270	22.90	22.7	-0.87
SAR12	2022/1/4	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN3642	DAE4 Sn656	7.730	82.30	77.3	-6.08	2.160	23.10	21.6	-6.49
SAR12	2022/1/6	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN3642	DAE4 Sn656	7.880	82.30	78.8	-4.25	2.190	23.10	21.9	-5.19
SAR12	2022/1/7	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN3642	DAE4 Sn699	8.150	82.30	81.5	-0.97	2.270	23.10	22.7	-1.73
SAR12	2022/1/9	5850	100	D5GHzV2-1171-5850	EX3DV4 - SN3642	DAE4 Sn699	7.880	82.30	78.8	-4.25	2.190	23.10	21.9	-5.19
SAR13	2022/1/6	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE3 Sn577	28.100	292.00	281	-3.77	5.270	53.80	52.7	-2.04

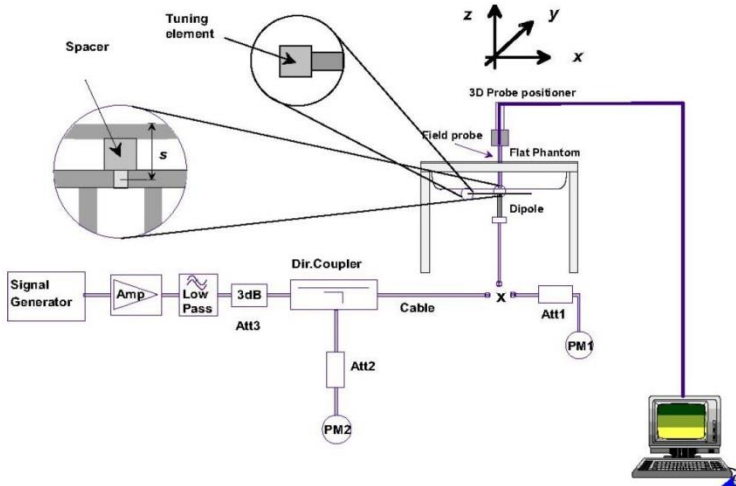


Fig 8.3.1 System Performance Check Setup



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 mm Wave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

Test Location	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm ² (W/m ²)	Targeted 4 cm ² (W/m ²)	Deviation (dB)	Date
SAR06	10GHz	10GHz_1020	EUmmWV3-9424	DAE4 SN699	10mm	41.4	42.2	-0.08	2021/12/28

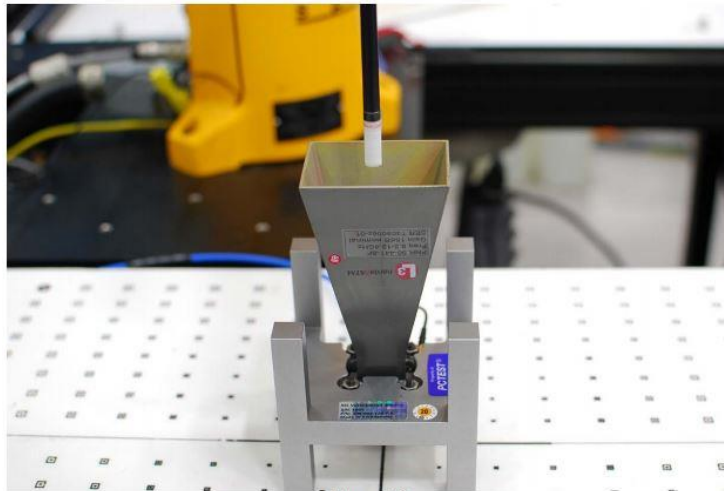


Figure 4-3
System Verification Setup Photo

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.

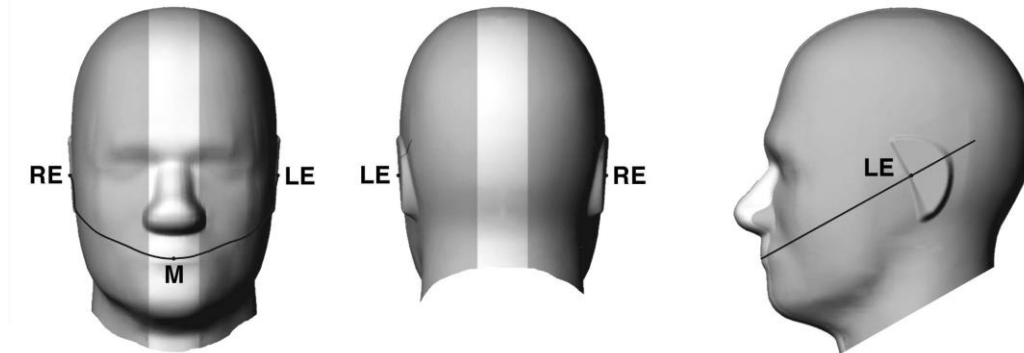


Fig 9.1.1 Front, back, and side views of SAM twin phantom

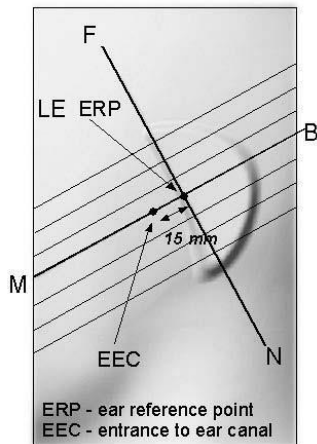


Fig 9.1.2 Close-up side view of phantom showing the ear region.

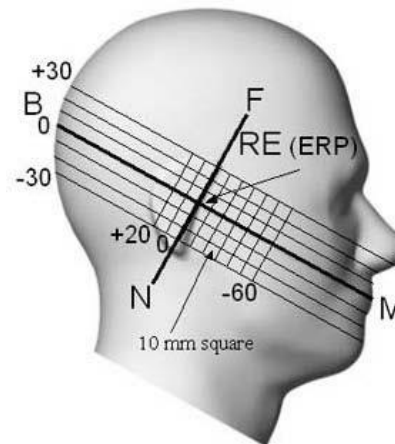


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

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.

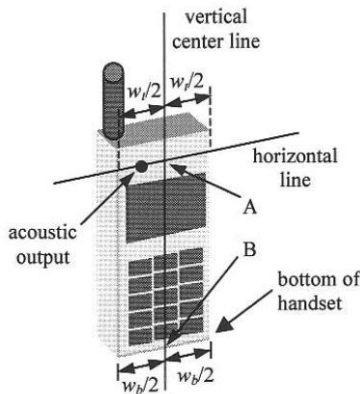


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

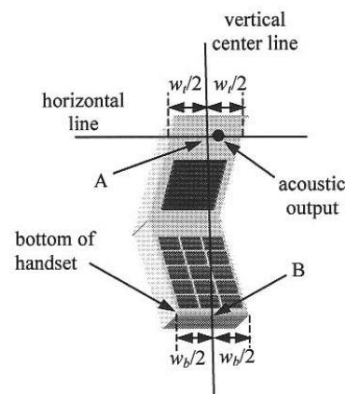


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

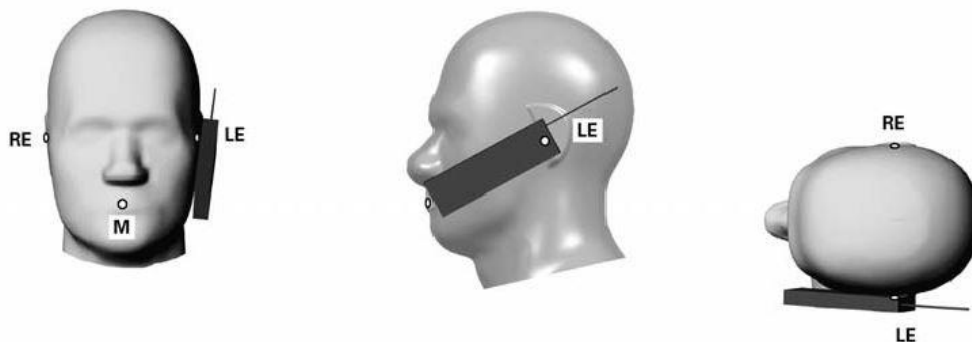


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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

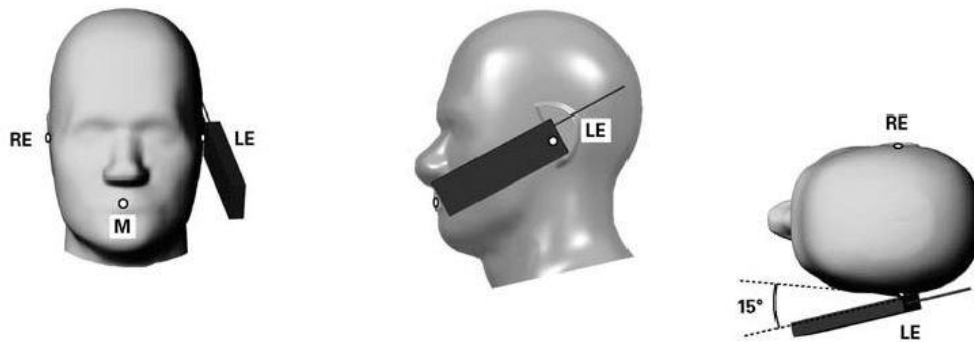


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

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.

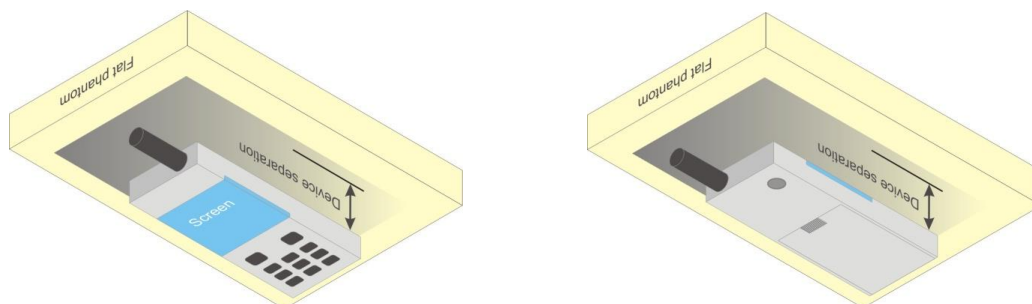


Fig 9.4 Body Worn Position

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 Note>

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

<WCDMA Note>

1. 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: Δ_{ACK} , Δ_{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	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:

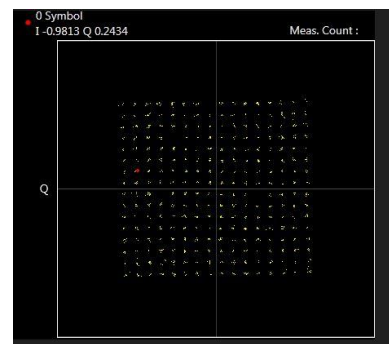
1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested 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 B5/B12/B17/B26/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 5/17 SAR test was covered by Band 12/26; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is \leq the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
10. According to 2017 TCB workshop, for 16QAM, 64QAM, 256QAM should be verified by checking the signal constellation with a call box to avoid incorrect maximum power levels due to MPR and other requirements associated with signal modulation, and the following figure is taken from the "Fundamental Measurement >> Modulation Analysis >> constellation" mode of the device connect to the MT8821C base station, therefore, the device 64QAM and 16QAM signal modulation are correct.



16QAM



64QAM



256QAM

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

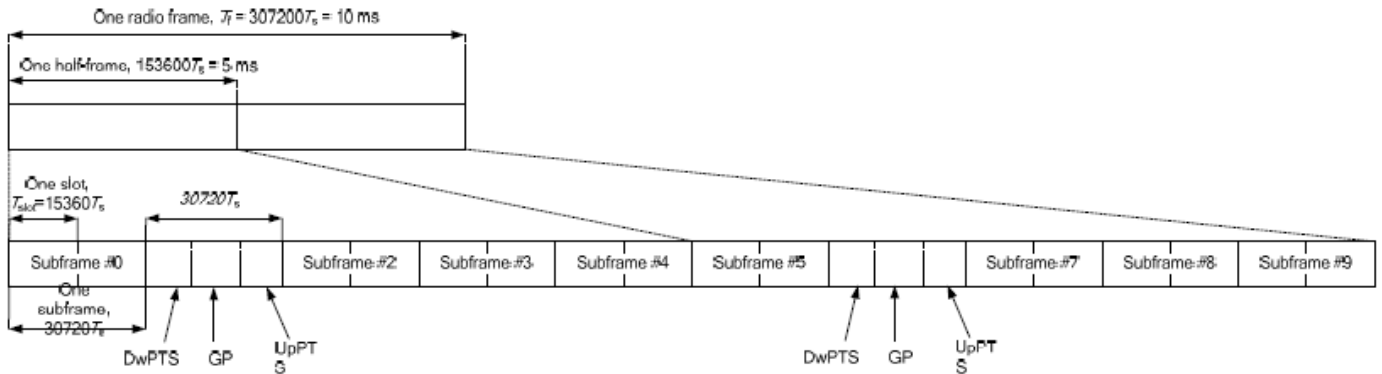


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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



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

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

The highest duty factor is resulted from:

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

<5G FR1 Note>

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. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

<3GPP 38.101 MPR for EN-DC>

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

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

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

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

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

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



<WLAN Note>

1. 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 positions 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(4)	77.22
	2	Ant 4	77.22
	2	Ant 3	77.22
	2	Ant 4+3(3)	77.22
	3/5	Ant 4	77.22
	3/5	Ant 3	77.22
	3/5	Ant 4+3(3)	76.83
	4	Ant 4	77.22
	4	Ant 3	77.22
	4	Ant 4+3(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	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset
1	CA_2A-12A		3CC-1	1	CA_2A-12A-30A		4CC-10	1	CA_2A-12A-66A-66A		5CC-8
2	CA_2A-13A		3CC-5	2	CA_2A-12A-66A		4CC-1	2	CA_2A-12A-66C		4CC-1
3	CA_2A-14A		3CC-7	3	CA_2A-12A-12A		3CC-1	3	CA_2A-12B-66A		4CC-1
4	CA_2A-17A	O6	3CC-25	4	CA_2A-12B		3CC-1	4	CA_2A-13A-48A-48A		5CC-2
5	CA_2A-29A	B29 SCC Only	3CC-8	5	CA_2A-13A-48A		4CC-4	5	CA_2A-13A-48C		4CC-4
6	CA_2A-2A		3CC-1	6	CA_2A-13A-66A		4CC-6	6	CA_2A-13A-66A-66A		5CC-10
7	CA_2A-30A		3CC-1	7	CA_2A-14A-30A	O6	4CC-146	7	CA_2A-13A-66B		4CC-6
8	CA_2A-48A		3CC-5	8	CA_2A-29A-30A	B29 SCC Only	4CC-14	8	CA_2A-13A-66C	O6	4CC-6
9	CA_2A-4A		3CC-14	9	CA_2A-29A-66A	B29 SCC Only	4CC-147	9	CA_2A-14A-66A-66A		5CC-11
10	CA_2A-5A		3CC-15	10	CA_2A-2A-12A		3CC-1	10	CA_2A-2A-12A-30A		5CC-67
11	CA_2A-66A		3CC-2	11	CA_2A-2A-13A		3CC-5	11	CA_2A-2A-12A-66A		4CC-1
12	CA_2A-71A		3CC-17	12	CA_2A-2A-29A	B29 SCC Only	3CC-8	12	CA_2A-2A-12B		4CC-1
13	CA_2A-7A		3CC-18	13	CA_2A-2A-30A		3CC-1	13	CA_2A-2A-13A-66A		4CC-6
14	CA_2C		3CC-1	14	CA_2A-2A-4A		3CC-23	14	CA_2A-2A-29A-30A	B29 SCC Only	5CC-74
15	CA_4A-12A		3CC-23	15	CA_2A-2A-5A		3CC-29	15	CA_2A-2A-30A-66A		5CC-63
16	CA_4A-13A		3CC-24	16	CA_2A-2A-66A		3CC-2	16	CA_2A-2A-4A-12A		
17	CA_4A-17A		3CC-25	17	CA_2A-2A-71A		3CC-30	17	CA_2A-2A-4A-13A		5CC-13
18	CA_4A-29A	B29 SCC Only	3CC-26	18	CA_2A-2A-7A		3CC-31	18	CA_2A-2A-4A-4A		4CC-16
19	CA_4A-30A		3CC-27	19	CA_2A-30A-66A		4CC-15	19	CA_2A-2A-4A-5A		5CC-14
20	CA_4A-48A		3CC-148	20	CA_2A-48A-48A		3CC-21	20	CA_2A-2A-4A-71A	O6	
21	CA_4A-4A		3CC-23	21	CA_2A-48A-66A		4CC-32	21	CA_2A-2A-5A-30A		5CC-70
22	CA_4A-5A		3CC-29	22	CA_2A-48C		3CC-21	22	CA_2A-2A-5A-5A		4CC-19
23	CA_4A-71A		3CC-30	23	CA_2A-4A-12A		4CC-16	23	CA_2A-2A-5A-66A		5CC-30
24	CA_4A-7A		3CC-31	24	CA_2A-4A-13A		4CC-17	24	CA_2A-2A-5B	O6	4CC-19
25	CA_5A-25A	O6		25	CA_2A-4A-17A			25	CA_2A-2A-66A-66A		4CC-1
26	CA_5A-30A		3CC-64	26	CA_2A-4A-29A	B29 SCC Only		26	CA_2A-2A-66A-71A		5CC-79
27	CA_5A-38A		3CC-84	27	CA_2A-4A-30A			27	CA_2A-2A-66B		4CC-1
28	CA_5A-41A			28	CA_2A-4A-4A		3CC-23	28	CA_2A-2A-66C		4CC-1
29	CA_5A-48A		4CC-83	29	CA_2A-4A-5A		4CC-19	29	CA_2A-2A-7A-12A		
30	CA_5A-5A		3CC-15	30	CA_2A-4A-71A		4CC-20	30	CA_2A-2A-7A-66A		5CC-33
31	CA_5A-66A		4CC-76	31	CA_2A-4A-7A		4CC-44	31	CA_2A-30A-66A-66A		4CC-15
32	CA_5A-7A		4CC-80	32	CA_2A-5A-30A		4CC-21	32	CA_2A-48A-48A-66A		6CC-1
33	CA_5B		3CC-15	33	CA_2A-5A-48A		4CC-46	33	CA_2A-48A-48C		4CC-4
34	CA_5C		3CC-15	34	CA_2A-5A-66A		4CC-48	34	CA_2A-48C-66A		4CC-32
35	CA_7A-12A		3CC-86	35	CA_2A-5A-7A		4CC-163	35	CA_2A-48D		4CC-32
36	CA_7A-13A		3CC-90	36	CA_2A-5B		3CC-32	36	CA_2A-4A-12A-12A		4CC-16
37	CA_7A-26A		3CC-91	37	CA_2A-66A-66A		3CC-2	37	CA_2A-4A-12B		4CC-16
38	CA_7A-29A	B29 SCC Only	3CC-88	38	CA_2A-66A-71A		4CC-55	38	CA_2A-4A-4A-12A		4CC-16
39	CA_7A-66A		3CC-86	39	CA_2A-66B		3CC-2	39	CA_2A-4A-4A-13A		4CC-17
40	CA_7A-7A		3CC-18	40	CA_2A-66C		3CC-2	40	CA_2A-4A-4A-5A		4CC-19
41	CA_7B		3CC-18	41	CA_2A-7A-12A		4CC-29	41	CA_2A-4A-4A-71A		4CC-20
42	CA_7C		3CC-18	42	CA_2A-7A-13A		4CC-64	42	CA_2A-4A-5A-5A		4CC-19
43	CA_12A-12A		3CC-1	43	CA_2A-7A-29A	B29 SCC Only	4CC-62	43	CA_2A-4A-5B		4CC-19



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44	CA_12A-25A			44	CA_2A-7A-66A		4CC-30	44	CA_2A-4A-7A-7A		
45	CA_12A-30A		3CC-1	45	CA_2A-7A-7A		3CC-31	45	CA_2A-4A-7C		4CC-44
46	CA_12A-66A		3CC-2	46	CA_2A-7C		3CC-31	46	CA_2A-5A-48A-48A		5CC-28
47	CA_12B		3CC-1	47	CA_2C-12A		3CC-1	47	CA_2A-5A-48C		4CC-46
48	CA_13A-48A		3CC-5	48	CA_2C-29A	B29 SCC Only	3CC-8	48	CA_2A-5A-5A-66A		5CC-16
49	CA_13A-66A		3CC-6	49	CA_2C-30A		3CC-8	49	CA_2A-5A-66A-66A		4CC-48
50	CA_14A-30A		3CC-7	50	CA_2C-5A		3CC-29	50	CA_2A-5A-66B		4CC-48
51	CA_14A-66A		3CC-108	51	CA_2C-66A		3CC-2	51	CA_2A-5A-66C		4CC-48
52	CA_25A-25A		3CC-111	52	CA_4A-12A-12A		3CC-23	52	CA_2A-5B-30A		4CC-21
53	CA_25A-26A		3CC-111	53	CA_4A-12A-30A		4CC-73	53	CA_2A-5B-66A		4CC-48
54	CA_25A-41A		3CC-112	54	CA_4A-12B		3CC-23	54	CA_2A-66A-66A-66A		4CC-48
55	CA_25A-48A			55	CA_4A-29A-30A	B29 SCC Only	4CC-75	55	CA_2A-66A-66A-71A		5CC-79
56	CA_26A-41A		3CC-117	56	CA_4A-48C		3CC-149	56	CA_2A-66A-66B		4CC-48
57	CA_29A-30A	B29 SCC Only	3CC-8	57	CA_4A-4A-12A		3CC-23	57	CA_2A-66A-66C		4CC-48
58	CA_29A-66A	B29 SCC Only	3CC-9	58	CA_4A-4A-13A		3CC-24	58	CA_2A-66C-71A		4CC-55
59	CA_30A-66A		3CC-118	59	CA_4A-4A-29A	B29 SCC Only	3CC-26	59	CA_2A-66D		4CC-48
60	CA_38A-38A		3CC-84	60	CA_4A-4A-30A		3CC-64	60	CA_2A-7A-12B		4CC-29
61	CA_38C		3CC-84	61	CA_4A-4A-5A		3CC-64	61	CA_2A-7A-66A-66A		5CC-33
62	CA_41A-41A		3CC-112	62	CA_4A-4A-71A		3CC-30	62	CA_2A-7A-7A-29A	B29 SCC Only	
63	CA_41C		3CC-112	63	CA_4A-4A-7A		3CC-66	63	CA_2A-7A-7A-66A		4CC-61
64	CA_48A-48A		3CC-73	64	CA_4A-5A-30A		4CC-77	64	CA_2A-7A-7A-13A		
65	CA_48A-66A		3CC-103	65	CA_4A-5B		3CC-64	65	CA_2A-7C-66A		4CC-61
66	CA_48C		3CC-73	66	CA_4A-7A-12A		4CC-81	66	CA_2A-7C-13A		4CC-46
67	CA_66A-66A		3CC-2	67	CA_4A-7A-7A		3CC-66	67	CA_2A-7C-29A	B29 SCC Only	4CC-62
68	CA_66A-71A		3CC-131	68	CA_4A-7C		3CC-66	68	CA_2C-12A-30A		4CC-10
69	CA_66B		3CC-2	69	CA_4C-12A		3CC-66	69	CA_2C-29A-30A	B29 SCC Only	4CC-14
70	CA_66C		3CC-2	70	CA_4C-5A		3CC-64	70	CA_2C-5A-66A		4CC-23
71	CA_48A-71A		3CC-139	71	CA_4C-7A		3CC-66	71	CA_2C-66A-66A		4CC-61
72	CA_2A-26A		3CC-141	72	CA_5A-30A-66A		4CC-82	72	CA_4A-48D		4CC-76
73	CA_4A-41A			73	CA_5A-48A-48A		3CC-74	73	CA_4A-4A-12A-30A		
74	CA_25C		3CC-111	74	CA_5A-48A-66A		4CC-83	74	CA_4A-4A-12B		4CC-73
75	CA_26A-66A		3CC-142	75	CA_5A-48C		3CC-74	75	CA_4A-4A-29A-30A	B29 SCC Only	
76	CA_7A-71A		3CC-156	76	CA_5A-5A-66A		3CC-81	76	CA_4A-4A-48A-48A		5CC-36
77	CA_25A-66A		3CC-164	77	CA_5A-66A-66A		3CC-81	77	CA_4A-4A-5A-30A		
78	CA_7A-25A		3CC-164	78	CA_5A-66B		3CC-81	78	CA_4A-4A-5A-5A		4CC-77
				79	CA_5A-66C		3CC-81	79	CA_4A-4A-5B		4CC-77
				80	CA_5A-7A-7A		3CC-81	80	CA_4A-5B-30A		4CC-77
				81	CA_5A-7A-66A		4CC-94	81	CA_4A-7A-12B		
				82	CA_5A-7C		3CC-81	82	CA_5A-30A-66A-66A		
				83	CA_5B-30A		3CC-72	83	CA_5A-48A-48A-66A		5CC-37
				84	CA_5B-38A			84	CA_5A-48A-48C		4CC-83
				85	CA_5B-66A		3CC-81	85	CA_5A-48C-66A		4CC-83
				86	CA_7A-12A-66A		4CC-100	86	CA_5A-48D		4CC-83
				87	CA_7A-12B		3CC-86	87	CA_5A-5A-66A-66A		4CC-83
				88	CA_7A-29A-66A	B29 SCC Only	4CC-102	88	CA_5A-5A-66B		4CC-83
				89	CA_7A-66A-66A		3CC-86	89	CA_5A-5A-66C		4CC-83
				90	CA_7A-7A-13A		3CC-42	90	CA_5A-66A-66A-66A		4CC-83
				91	CA_7A-7A-26A		3CC-141	91	CA_5A-66A-66B		4CC-83
				92	CA_7A-7A-29A	B29 SCC Only	3CC-88	92	CA_5A-66A-66C		4CC-83
				93	CA_7A-7A-66A		3CC-86	93	CA_5A-66D		4CC-83
				94	CA_7C-29A	B29 SCC Only	3CC-88	94	CA_5A-7A-66A-66A		5CC-42
				95	CA_7C-66A		3CC-86	95	CA_5A-7C-66A		4CC-94
				96	CA_7C-13A		3CC-90	96	CA_5B-30A-66A		4CC-82
				97	CA_12A-12A-66A		3CC-86	97	CA_5B-66A-66A		4CC-82
				98	CA_12A-30A-66A		4CC-106	98	CA_5B-66B		4CC-82
				99	CA_12A-66A-66A		3CC-86	99	CA_5B-66C		4CC-82



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			100	CA_12A-66C		3CC-86	100	CA_7A-12A-66A-66A		
			101	CA_12B-66A		3CC-86	101	CA_7A-12B-66A		4CC-101
			102	CA_13A-48A-48A		3CC-102	102	CA_7A-7A-29A-66A	B29 SCC Only	
			103	CA_13A-48A-66A		4CC-108	103	CA_7A-7A-66A-66A		4CC-102
			104	CA_13A-48C		3CC-102	104	CA_7C-29A-66A	B29 SCC Only	4CC-102
			105	CA_13A-66A-66A		3CC-102	105	CA_7C-66A-66A		4CC-102
			106	CA_13A-66B		3CC-102	106	CA_12A-30A-66A-66A		
			107	CA_13A-66C		3CC-102	107	CA_12B-66A-66A		4CC-106
			108	CA_14A-30A-66A		4CC-118	108	CA_13A-48A-48A-66A		5CC-44
			109	CA_14A-66A-66A		3CC-109	109	CA_13A-48A-48C		4CC-108
			110	CA_25A-25A-25A		3CC-111	110	CA_13A-48A-66B		4CC-108
			111	CA_25A-25A-26A			111	CA_13A-48A-66C		4CC-108
			112	CA_25A-25A-41A		4CC-119	112	CA_13A-48C-66A		4CC-108
			113	CA_25C-26A		3CC-111	113	CA_13A-48D		4CC-108
			114	CA_25A-25C		3CC-111	114	CA_13A-66A-66A-66A		4CC-108
			115	CA_25A-41C		3CC-112	115	CA_13A-66A-66B		4CC-108
			116	CA_25D		3CC-111	116	CA_13A-66A-66C		4CC-108
			117	CA_26A-41C			117	CA_13A-66D		4CC-108
			118	CA_29A-30A-66A	B29 SCC Only	4CC-121	118	CA_14A-30A-66A-66A		
			119	CA_29A-66A-66A	B29 SCC Only	3CC-118	119	CA_25A-25A-41C		5CC-50
			120	CA_30A-66A-66A		3CC-118	120	CA_25A-41D		4CC-119
			121	CA_41A-41C		3CC-112	121	CA_29A-30A-66A-66A	B29 SCC Only	
			122	CA_41D		3CC-112	122	CA_41A-41A-41C		4CC-119
			123	CA_48A-48A-66A		3CC-74	123	CA_41A-41D		4CC-119
			124	CA_48A-48C		3CC-74	124	CA_41C-41C		4CC-119
			125	CA_48A-66A-66A		3CC-74	125	CA_41E		4CC-119
			126	CA_48A-66B		3CC-74	126	CA_48A-48A-66A-66A		4CC-108
			127	CA_48A-66C		3CC-74	127	CA_48A-48A-66B		4CC-108
			128	CA_48C-66A		3CC-74	128	CA_48A-48A-66C		4CC-108
			129	CA_48D		3CC-74	129	CA_48A-48D		4CC-108
			130	CA_66A-66A-66A		3CC-74	130	CA_48A-48C-66A		4CC-108
			131	CA_66A-66A-71A		3CC-38	131	CA_48A-66A-66A-66A		4CC-108
			132	CA_66A-66B		3CC-74	132	CA_48C-48C		4CC-108
			133	CA_66A-66C		3CC-74	133	CA_48C-66A-66A		4CC-108
			134	CA_66C-71A		3CC-131	134	CA_48C-66B		4CC-108
			135	CA_66D		3CC-74	135	CA_48C-66C		4CC-108
			136	CA_2A-14A-66A		4CC-146	136	CA_48D-66A		4CC-108
			137	CA_2A-2A-14A		4CC-146	137	CA_48E		4CC-108
			138	CA_48C-48A		3CC-74	138	CA_66B-66C		4CC-108
			139	CA_48A-48A-71A			139	CA_2A-2A-2A-12A		5CC-8
			140	CA_48C-71A		3CC-139	140	CA_2A-2A-2A-5A		5CC-70
			141	CA_2A-7A-26A			141	CA_2A-2A-2A-30A		5CC-70
			142	CA_2A-26A-66A			142	CA_2A-2A-2A-66A		5CC-8
			143	CA_7A-26A-66A			143	CA_2A-2A-14A-66A		5CC-11
			144	CA_7A-13A-66A		4CC-144	144	CA_7C-13A-66A		4CC-168
			145	CA_2A-5A-5A		3CC-35	145	CA_14A-66A-66A-66A		5CC-11
			146	CA_4A-5A-5A		4CC-77	146	CA_2A-2A-14A-30A		5CC-72
			147	CA_4A-7A-29A	B29 SCC Only	4CC-150	147	CA_2A-2A-29A-66A	B29 SCC Only	5CC-75
			148	CA_4A-4A-48A		4CC-76	148	CA_2A-29A-66A-66A	B29 SCC Only	4CC-147
			149	CA_4A-48A-48A		3CC-149	149	CA_2A-48C-48A		4CC-32
			150	CA_25C-41A		3CC-112	150	CA_4A-7A-7A-29A	B29 SCC Only	
			151	CA_41A-41A-41A		3CC-112	151	CA_2C-5A-30A		5CC-70
			152	CA_41C-41A		3CC-112	152	CA_2C-5B		4CC-48
			153	CA_66B-66A		3CC-74	153	CA_5A-48C-48A		5CC-37
			154	CA_4A-7A-71A			154	CA_13A-48C-48A		5CC-44
			155	CA_2A-2A-2A		3CC-1	155	CA_25C-41C		4CC-119



FCC SAR TEST REPORT

Report No. : FA161608-05C

5CC Downlink Carrier Aggregation				6CC Downlink Carrier Aggregation			
Number	Combination	Restriction	Covered by Measurement Superset	Number	Combination	Restriction	Covered by Measurement Superset
156	CA_2A-7A-71A		4CC-162	156	CA_48C-48A-66A		5CC-44
157	CA_7A-66A-71A		4CC-166	157	CA_12A-66A-66A-66A		5CC-8
158	CA_7A-7A-12A		3CC-41	158	CA_30A-66A-66A-66A		5CC-63
159	CA_13A-48B		3CC-103	159	CA_2A-2A-2A-14A		4CC-146
160	CA_48B-66A		3CC-103	160	CA_2A-2A-2A-29A	B29 SCC Only	4CC-147
161	CA_25A-25A-66A		3CC-74	161	CA_29A-66A-66A-66A	B29 SCC Only	5CC-76
162	CA_7A-7A-25A		3CC-74	162	CA_2A-2A-7A-71A		
163	CA_7A-25A-25A		3CC-74	163	CA_2A-5A-7A-7A		
164	CA_7A-25A-66A		4CC-170	164	CA_2A-5A-7C		4CC-163
				165	CA_2A-7A-7A-12A		4CC-29
				166	CA_7A-66A-66A-71A		
				167	CA_5A-7A-7A-66A		5CC-42
				168	CA_7A-7A-13A-66A		
				169	CA_7A-7A-25A-25A		4CC-170
				170	CA_7A-7A-25A-66A		5CC-81
				171	CA_7A-25A-25A-66A		4CC-170



			36	CA_4A-48E						
			37	CA_5A-48A-48C-66A						
			38	CA_5A-48A-48D		5CC-28				
			39	CA_5A-48C-48C		5CC-28				
			40	CA_5A-48D-66A		5CC-37				
			41	CA_5A-48E		5CC-28				
			42	CA_5A-7C-66A-66A						
			43	CA_13A-48A-48D		5CC-44				
			44	CA_13A-48A-48C-66A						
			45	CA_13A-48C-48C		5CC-44				
			46	CA_13A-48C-66B		5CC-44				
			47	CA_13A-48C-66C		5CC-44				
			48	CA_13A-48D-66A		5CC-44				
			49	CA_13A-48E		5CC-44				
			50	CA_25A-25A-41D						
			51	CA_25C-41D		5CC-50				
			52	CA_41C-41D		5CC-50				
			53	CA_41F		5CC-50				
			54	CA_48A-48E		5CC-44				
			55	CA_48A-48C-66B		5CC-44				
			56	CA_48A-48C-66C		5CC-44				
			57	CA_48A-48D-66A		5CC-44				
			58	CA_48C-48D		5CC-44				
			59	CA_48C-48C-66A		5CC-44				
			60	CA_48C-66A-66A-66A		5CC-44				
			61	CA_48E-66A		5CC-44				
			62	CA_48F		5CC-44				
			63	CA_2A-2A-30A-66A-66A						
			64	CA_2A-12A-66A-66A-66A		5CC-8				
			65	CA_2A-30A-66A-66A-66A		5CC-63				
			66	CA_2A-5A-66A-66A-66A		5CC-16				
			67	CA_2A-2A-2A-12A-30A						
			68	CA_2A-2A-2A-12A-66A		5CC-8				
			69	CA_2A-2A-2A-30A-66A		5CC-63				
			70	CA_2A-2A-2A-5A-30A						
			71	CA_2A-2A-2A-5A-66A		5CC-16				
			72	CA_2A-2A-2A-14A-30A						
			73	CA_2A-2A-2A-14A-66A		5CC-11				
			74	CA_2A-2A-2A-29A-30A	B29 SCC Only					
			75	CA_2A-2A-2A-29A-66A	B29 SCC Only					
			76	CA_2A-29A-66A-66A-66A	B29 SCC Only					
			77	CA_2A-2A-5B-30A		5CC-70				
			78	CA_2A-2A-7A-66A-66A		5CC-33				
			79	CA_2A-2A-66A-66A-71A						
			80	CA_2A-5A-5A-66A-66A		5CC-16				
			81	CA_7A-7A-25A-25A-66A						

<Power verification when LTE Carrier Aggregation Active>

Since this variant model is depopulate mmWave related components, therefore, the downlink carrier power verification results were reference to the parent model FCC ID: A4RGB62Z, Sporton Report No.: FA161608-03C, section14. And the power verification results 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.



<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. Since this variant model is depopulate mmWave related components, according to RF Exposure verification report no.: FA161608-05E only measured Ant1 CA_5B, other band power measurement and UL CA SAR verification result refer to parent model FCC ID: A4RGB62Z, Sporton Report No.: FA161608-03C
- ii. 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.
- iii. The device supports 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 the 3GPP requirement.
- iv. 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.
- v. 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.

TX 1

Index 1/2/3/4/5/6								
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	21.52	23.20
20575	20476	QPSK	1	0	1	49	21.59	23.20
20600	20501	QPSK	1	0	1	49	21.49	23.20

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 6	≤ 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 6	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:

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



15. 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. 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) 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 B5/B12/B17/B26/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 5/17 SAR test was covered by Band 12/26; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is \leq the larger band to qualify for the SAR test exclusion.
 - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device is not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n41, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission
 - g. NR n38 SAR test was covered by NR n41; 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. For OFDM transmission configurations in the 2.4 GHz / 5 GHz / 6GHz 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
3. 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.
4. 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.
5. 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.
6. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain
7. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

WLAN PD Note:

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. 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=2mm.

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



15.1 Head SAR

<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)
01	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23095	707.5	23.94	25.20	1.337	-0.05	0.871	1.164
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23095	707.5	23.07	24.20	1.297	-0.03	0.617	0.800
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23095	707.5	23.09	24.20	1.291	-0.04	0.621	0.802
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23095	707.5	23.94	25.20	1.337	-0.08	0.778	1.040
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23095	707.5	23.07	24.20	1.297	-0.02	0.601	0.780
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	2	23095	707.5	23.09	24.20	1.291	-0.08	0.603	0.779
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23095	707.5	23.94	25.20	1.337	-0.15	0.346	0.462
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23095	707.5	23.07	24.20	1.297	-0.06	0.286	0.371
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23095	707.5	23.94	25.20	1.337	-0.03	0.347	0.464
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23095	707.5	23.07	24.20	1.297	0.02	0.284	0.368
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23095	707.5	23.94	24.50	1.138	-0.05	0.871	0.991
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23095	707.5	23.07	24.00	1.239	-0.03	0.617	0.764
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	3	23095	707.5	23.09	24.00	1.233	-0.04	0.621	0.766
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23095	707.5	23.94	24.50	1.138	-0.08	0.778	0.885
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23095	707.5	23.07	24.00	1.239	-0.02	0.601	0.745
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	3	23095	707.5	23.09	24.00	1.233	-0.08	0.603	0.744
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23095	707.5	23.94	24.50	1.138	-0.15	0.346	0.394
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23095	707.5	23.07	24.00	1.239	-0.06	0.286	0.354
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23095	707.5	23.94	24.50	1.138	-0.03	0.347	0.395
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23095	707.5	23.07	24.00	1.239	0.02	0.284	0.352
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23230	782	24.02	25.20	1.312	-0.15	0.776	1.018
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23230	782	23.12	24.20	1.282	-0.09	0.677	0.868
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23230	782	23.14	24.20	1.276	-0.07	0.669	0.854
02	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23230	782	24.02	25.20	1.312	-0.13	0.844	1.107
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23230	782	23.12	24.20	1.282	0.03	0.677	0.868
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	2	23230	782	23.14	24.20	1.276	-0.06	0.675	0.862
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23230	782	24.02	25.20	1.312	-0.1	0.398	0.522
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23230	782	23.12	24.20	1.282	0.03	0.343	0.440
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23230	782	24.02	25.20	1.312	-0.09	0.375	0.492
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23230	782	23.12	24.20	1.282	0.05	0.322	0.413
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23230	782	24.02	24.40	1.091	-0.15	0.776	0.847
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23230	782	23.12	23.90	1.197	-0.09	0.677	0.810
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	3	23230	782	23.14	23.90	1.191	-0.07	0.669	0.797
	LTE Band 13_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23230	782	24.02	24.40	1.091	-0.13	0.844	0.921
	LTE Band 13_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23230	782	23.12	23.90	1.197	0.03	0.677	0.810
	LTE Band 13_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	3	23230	782	23.14	23.90	1.191	-0.06	0.675	0.804
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23230	782	24.02	24.40	1.091	-0.1	0.398	0.434
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23230	782	23.12	23.90	1.197	0.03	0.343	0.410
	LTE Band 13_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23230	782	24.02	24.40	1.091	-0.09	0.375	0.409
	LTE Band 13_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23230	782	23.12	23.90	1.197	0.05	0.322	0.385



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)
03	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23330	793	23.94	25.20	1.337	-0.1	0.886	1.184
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2	23330	793	22.97	24.20	1.327	-0.07	0.682	0.905
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	2	23330	793	23.01	24.20	1.315	-0.12	0.641	0.843
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2	23330	793	23.94	25.20	1.337	-0.11	0.810	1.083
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2	23330	793	22.97	24.20	1.327	-0.04	0.658	0.873
	LTE Band 14_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	2	23330	793	23.01	24.20	1.315	-0.07	0.641	0.843
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2	23330	793	23.94	25.20	1.337	-0.12	0.411	0.549
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2	23330	793	22.97	24.20	1.327	-0.05	0.344	0.457
	LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2	23330	793	23.94	25.20	1.337	-0.13	0.362	0.484
	LTE Band 14_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2	23330	793	22.97	24.20	1.327	0	0.302	0.401
	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	3	23330	793	23.94	24.40	1.112	-0.1	0.886	0.985
	LTE Band 14_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	3	23330	793	22.97	23.90	1.239	-0.07	0.682	0.845
LTE Band 14_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	3	23330	793	23.01	23.90	1.227	-0.12	0.641	0.787	
LTE Band 14_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	3	23330	793	23.94	24.40	1.112	-0.11	0.810	0.901	
LTE Band 14_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	3	23330	793	22.97	23.90	1.239	-0.04	0.658	0.815	
LTE Band 14_Ant 1	10M	QPSK	50	0	Right Tilted	0mm	3	23330	793	23.01	23.90	1.227	-0.07	0.641	0.787	
LTE Band 14_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	3	23330	793	23.94	24.40	1.112	-0.12	0.411	0.457	
LTE Band 14_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	3	23330	793	22.97	23.90	1.239	-0.05	0.344	0.426	
LTE Band 14_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	3	23330	793	23.94	24.40	1.112	-0.13	0.362	0.402	
LTE Band 14_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	3	23330	793	22.97	23.90	1.239	0	0.302	0.374	
LTE Band 26_Ant 1	15M	QPSK	1	0	Right Cheek	0mm	2/3	26865	831.5	24.55	25.20	1.161	-0.13	0.790	0.918	
LTE Band 26_Ant 1	15M	QPSK	36	0	Right Cheek	0mm	2/3	26865	831.5	23.54	24.20	1.164	-0.02	0.642	0.747	
LTE Band 26_Ant 1	15M	QPSK	75	0	Right Cheek	0mm	2/3	26865	831.5	23.47	24.20	1.183	-0.04	0.628	0.743	
04	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	2/3	26865	831.5	24.55	25.20	1.161	-0.19	0.846	0.983
	LTE Band 26_Ant 1	15M	QPSK	36	0	Right Tilted	0mm	2/3	26865	831.5	23.54	24.20	1.164	-0.01	0.677	0.788
	LTE Band 26_Ant 1	15M	QPSK	75	0	Right Tilted	0mm	2/3	26865	831.5	23.47	24.20	1.183	-0.13	0.656	0.776
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Cheek	0mm	2/3	26865	831.5	24.55	25.20	1.161	-0.11	0.473	0.549
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Cheek	0mm	2/3	26865	831.5	23.54	24.20	1.164	-0.01	0.389	0.453
	LTE Band 26_Ant 1	15M	QPSK	1	0	Left Tilted	0mm	2/3	26865	831.5	24.55	25.20	1.161	-0.07	0.439	0.510
	LTE Band 26_Ant 1	15M	QPSK	36	0	Left Tilted	0mm	2/3	26865	831.5	23.54	24.20	1.164	0.06	0.358	0.417
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2/3	20575	841.5	21.59	23.20	1.449	-0.13	0.354	0.513
05	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2/3	133322	683	24.08	25.20	1.294	-0.05	0.651	0.843
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2/3	133322	683	23.28	24.20	1.236	0	0.507	0.627
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	2/3	133322	683	23.26	24.20	1.242	-0.1	0.453	0.562
	LTE Band 71_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2/3	133322	683	24.08	25.20	1.294	-0.1	0.645	0.835
	LTE Band 71_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2/3	133322	683	23.28	24.20	1.236	-0.08	0.508	0.628
	LTE Band 71_Ant 1	20M	QPSK	100	0	Right Tilted	0mm	2/3	133322	683	23.26	24.20	1.242	-0.1	0.459	0.570
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2/3	133322	683	24.08	25.20	1.294	-0.04	0.287	0.371
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2/3	133322	683	23.28	24.20	1.236	-0.16	0.221	0.273
	LTE Band 71_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	2/3	133322	683	24.08	25.20	1.294	-0.17	0.269	0.348
	LTE Band 71_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	2/3	133322	683	23.28	24.20	1.236	0.01	0.208	0.257



<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 n41_Ant 5	100M	BPSK	1	137	Right Cheek	0mm	2	518598	2592.99	17.46	18.60	1.300	-0.07	0.244	0.317
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	2	518598	2592.99	17.37	18.60	1.327	-0.02	0.238	0.316
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	2	518598	2592.99	17.46	18.60	1.300	-0.15	0.147	0.191
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	2	518598	2592.99	17.37	18.60	1.327	0.09	0.144	0.191
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	2	518598	2592.99	17.46	18.60	1.300	-0.1	0.840	1.092
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	2	518598	2592.99	17.37	18.60	1.327	-0.07	0.861	1.143
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	518598	2592.99	17.31	18.60	1.346	-0.17	0.860	1.157
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	2	518598	2592.99	17.46	18.60	1.300	-0.17	0.293	0.381
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	2	518598	2592.99	17.37	18.60	1.327	-0.03	0.289	0.384
06	FR1 n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	518598	2592.99	20.52	21.60	1.282	-0.08	0.915	1.173
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Cheek	0mm	3	518598	2592.99	17.46	17.80	1.081	-0.07	0.244	0.264
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	3	518598	2592.99	17.37	17.80	1.104	-0.02	0.238	0.263
	FR1 n41_Ant 5	100M	BPSK	1	137	Right Tilted	0mm	3	518598	2592.99	17.46	17.80	1.081	-0.15	0.147	0.159
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	3	518598	2592.99	17.37	17.80	1.104	0.09	0.144	0.159
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Cheek	0mm	3	518598	2592.99	17.46	17.80	1.081	-0.1	0.840	0.908
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	3	518598	2592.99	17.37	17.80	1.104	-0.07	0.861	0.951
	FR1 n41_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	3	518598	2592.99	17.31	17.80	1.119	-0.17	0.860	0.963
	FR1 n41_Ant 5	100M	BPSK	1	137	Left Tilted	0mm	3	518598	2592.99	17.46	17.80	1.081	-0.17	0.293	0.317
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	3	518598	2592.99	17.37	17.80	1.104	-0.03	0.289	0.319
	FR1 n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	3	518598	2592.99	20.52	20.80	1.067	-0.08	0.915	0.976
	FR1 n41_Ant 1	100M	BPSK	1	271	Right Cheek	0mm	2	518598	2592.99	18.54	19.50	1.247	-0.09	0.857	1.069
	FR1 n41_Ant 1	100M	BPSK	135	138	Right Cheek	0mm	2	518598	2592.99	18.53	19.50	1.250	-0.19	0.844	1.055
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	2	518598	2592.99	18.41	19.50	1.285	-0.09	0.779	1.001
	FR1 n41_Ant 1	100M	BPSK	1	271	Right Tilted	0mm	2	518598	2592.99	18.54	19.50	1.247	0.02	0.867	1.081
	FR1 n41_Ant 1	100M	BPSK	135	138	Right Tilted	0mm	2	518598	2592.99	18.53	19.50	1.250	-0.11	0.871	1.089
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	2	518598	2592.99	18.41	19.50	1.285	0.19	0.840	1.080
	FR1 n41_Ant 1	100M	BPSK	1	271	Left Cheek	0mm	2	518598	2592.99	18.54	19.50	1.247	-0.01	0.509	0.635
	FR1 n41_Ant 1	100M	BPSK	135	138	Left Cheek	0mm	2	518598	2592.99	18.53	19.50	1.250	-0.17	0.544	0.680
	FR1 n41_Ant 1	100M	BPSK	1	271	Left Tilted	0mm	2	518598	2592.99	18.54	19.50	1.247	0.02	0.519	0.647
	FR1 n41_Ant 1	100M	BPSK	135	138	Left Tilted	0mm	2	518598	2592.99	18.53	19.50	1.250	-0.11	0.557	0.696
	FR1 n41_HPUE_Ant 1	100M	BPSK	135	138	Right Tilted	0mm	2	518598	2592.99	21.54	22.50	1.247	-0.04	0.827	1.032
	FR1 n41_Ant 1	100M	BPSK	1	271	Right Cheek	0mm	3	518598	2592.99	18.54	18.70	1.038	-0.09	0.857	0.889
	FR1 n41_Ant 1	100M	BPSK	135	138	Right Cheek	0mm	3	518598	2592.99	18.53	18.70	1.040	-0.19	0.844	0.878
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Cheek	0mm	3	518598	2592.99	18.41	18.70	1.069	-0.09	0.779	0.833
	FR1 n41_Ant 1	100M	BPSK	1	271	Right Tilted	0mm	3	518598	2592.99	18.54	18.70	1.038	0.02	0.867	0.900
	FR1 n41_Ant 1	100M	BPSK	135	138	Right Tilted	0mm	3	518598	2592.99	18.53	18.70	1.040	-0.11	0.871	0.906
	FR1 n41_Ant 1	100M	BPSK	270	0	Right Tilted	0mm	3	518598	2592.99	18.41	18.70	1.069	0.19	0.840	0.898
	FR1 n41_Ant 1	100M	BPSK	1	271	Left Cheek	0mm	3	518598	2592.99	18.54	18.70	1.038	-0.01	0.509	0.528
	FR1 n41_Ant 1	100M	BPSK	135	138	Left Cheek	0mm	3	518598	2592.99	18.53	18.70	1.040	-0.17	0.544	0.566
	FR1 n41_Ant 1	100M	BPSK	1	271	Left Tilted	0mm	3	518598	2592.99	18.54	18.70	1.038	0.02	0.519	0.538
	FR1 n41_Ant 1	100M	BPSK	135	138	Left Tilted	0mm	3	518598	2592.99	18.53	18.70	1.040	-0.11	0.557	0.579
	FR1 n41_HPUE_Ant 1	100M	BPSK	135	138	Right Tilted	0mm	3	518598	2592.99	21.54	21.70	1.038	-0.04	0.827	0.858



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 4	11	2462	18.45	18.50	1.012	98.90	1.011	-0.17	0.520	0.532
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 4	11	2462	18.45	18.50	1.012	98.90	1.011	-0.11	0.594	0.607
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	Ant 4	11	2462	18.45	18.50	1.012	98.90	1.011	-0.02	0.697	0.713
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4	11	2462	18.45	18.50	1.012	98.90	1.011	-0.11	0.823	0.842
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4	1	2412	18.35	18.50	1.035	98.90	1.011	-0.11	0.744	0.779
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4	6	2437	18.25	18.50	1.059	98.90	1.011	-0.15	0.808	0.865
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4	12	2467	18.25	18.50	1.059	98.90	1.011	-0.16	0.909	0.973
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 4	13	2472	18.25	18.50	1.059	98.90	1.011	-0.12	0.851	0.911
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 3	6	2437	17.95	18.50	1.135	98.90	1.011	-0.19	0.573	0.658
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 3	1	2412	17.65	18.50	1.216	98.90	1.011	-0.13	0.711	0.874
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 3	11	2462	17.65	18.50	1.216	98.90	1.011	-0.17	0.777	0.955
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 3	12	2467	17.55	18.50	1.245	98.90	1.011	-0.19	0.811	1.020
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	1	Ant 3	13	2472	17.85	18.50	1.161	98.90	1.011	-0.11	0.687	0.807
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	1	Ant 3	6	2437	17.95	18.50	1.135	98.90	1.011	-0.06	0.124	0.142
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	1	Ant 3	6	2437	17.95	18.50	1.135	98.90	1.011	-0.16	0.215	0.247
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	1	Ant 3	6	2437	17.95	18.50	1.135	98.90	1.011	-0.12	0.076	0.087
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(4)	11	2462	18.45	18.50	1.012	93.40	1.071	0.19	0.366	0.397
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(3)	11	2462	17.95	18.50	1.135	93.40	1.071	0.19	0.756	0.919
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(4)	1	2412	17.95	18.50	1.135	93.40	1.071	0.1	0.307	0.373
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(3)	1	2412	17.55	18.50	1.245	93.40	1.071	0.1	0.458	0.610
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(4)	6	2437	18.35	18.50	1.035	93.40	1.071	-0.11	0.330	0.366
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(3)	6	2437	17.95	18.50	1.135	93.40	1.071	-0.11	0.366	0.445
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(4)	12	2472	18.25	18.50	1.059	93.40	1.071	-0.01	0.343	0.389
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(3)	12	2472	17.95	18.50	1.135	93.40	1.071	-0.01	0.691	0.840
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(4)	13	2472	17.15	17.50	1.084	93.40	1.071	0.14	0.293	0.340
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	1	Ant 4+3(3)	13	2472	17.05	17.50	1.109	93.40	1.071	0.14	0.400	0.475
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	1	Ant 4+3(4)	11	2462	18.45	18.50	1.012	93.40	1.071	0.08	0.462	0.501
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	1	Ant 4+3(3)	11	2462	17.95	18.50	1.135	93.40	1.071	0.08	0.101	0.123
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(4)	11	2462	18.45	18.50	1.012	93.40	1.071	-0.18	0.765	0.829
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(3)	11	2462	17.95	18.50	1.135	93.40	1.071	-0.18	0.374	0.455
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(4)	1	2412	17.95	18.50	1.135	93.40	1.071	0.11	0.622	0.756
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(3)	1	2412	17.55	18.50	1.245	93.40	1.071	0.11	0.228	0.304
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(4)	6	2437	18.35	18.50	1.035	93.40	1.071	-0.07	0.622	0.690
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(3)	6	2437	17.95	18.50	1.135	93.40	1.071	-0.07	0.211	0.256
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(4)	12	2467	18.25	18.50	1.059	93.40	1.071	-0.16	0.346	0.393
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(3)	12	2467	17.95	18.50	1.135	93.40	1.071	-0.16	0.069	0.084
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(4)	13	2472	17.15	17.50	1.084	93.40	1.071	-0.04	0.246	0.286
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	1	Ant 4+3(3)	13	2472	17.05	17.50	1.109	93.40	1.071	-0.04	0.094	0.112
07	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	11	2462	18.45	18.50	1.012	93.40	1.071	-0.01	1.030	1.116
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	11	2462	17.95	18.50	1.135	93.40	1.071	-0.01	0.189	0.230
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	1	2412	17.95	18.50	1.135	93.40	1.071	-0.06	0.786	0.955
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	1	2412	17.55	18.50	1.245	93.40	1.071	-0.06	0.054	0.072
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	6	2437	18.35	18.50	1.035	93.40	1.071	0.15	0.780	0.865
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	6	2437	17.95	18.50	1.135	93.40	1.071	0.15	0.054	0.066
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	12	2467	18.25	18.50	1.059	93.40	1.071	-0.05	0.845	0.959
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	12	2467	17.95	18.50	1.135	93.40	1.071	-0.05	0.189	0.230
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	13	2472	17.15	17.50	1.084	93.40	1.071	0.19	0.392	0.455
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	13	2472	17.05	17.50	1.109	93.40	1.071	0.19	0.088	0.105



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2/3	Ant 4	11	2462	16.45	16.50	1.012	98.9	1.011	0.11	0.234	0.239
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2/3	Ant 4	11	2462	16.45	16.50	1.012	98.9	1.011	0.15	0.316	0.323
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	2/3	Ant 4	11	2462	16.45	16.50	1.012	98.9	1.011	0.03	0.204	0.209
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	2/3	Ant 4	11	2462	16.45	16.50	1.012	98.9	1.011	-0.04	0.325	0.332
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	2/3	Ant 3	11	2462	15.00	16.00	1.259	98.9	1.011	-0.17	0.330	0.420
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	2/3	Ant 3	11	2462	15.00	16.00	1.259	98.9	1.011	0.13	0.068	0.087
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	2/3	Ant 3	11	2462	15.00	16.00	1.259	98.9	1.011	-0.17	0.193	0.246
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	2/3	Ant 3	11	2462	15.00	16.00	1.259	98.9	1.011	-0.17	0.046	0.059
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	2/3	Ant 4+3(4)	11	2467	16.45	16.50	1.012	93.4	1.071	-0.07	0.368	0.399
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	2/3	Ant 4+3(3)	11	2467	14.75	16.00	1.334	93.4	1.071	-0.07	0.243	0.347
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	2/3	Ant 4+3(4)	11	2467	16.45	16.50	1.012	93.4	1.071	0.11	0.478	0.518
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	2/3	Ant 4+3(3)	11	2467	14.75	16.00	1.334	93.4	1.071	0.11	0.084	0.120
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	2/3	Ant 4+3(4)	11	2462	16.45	16.50	1.012	93.4	1.071	0.17	0.432	0.468
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	2/3	Ant 4+3(3)	11	2462	14.75	16.00	1.334	93.4	1.071	0.17	0.153	0.219
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	2/3	Ant 4+3(4)	11	2462	16.45	16.50	1.012	93.4	1.071	0.12	0.550	0.596
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	2/3	Ant 4+3(3)	11	2462	14.75	16.00	1.334	93.4	1.071	0.12	0.096	0.137
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 4	6	2437	10.95	11.00	1.012	98.9	1.011	-0.03	0.059	0.060
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	4	Ant 4	6	2437	10.95	11.00	1.012	98.9	1.011	0.07	0.079	0.081
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	4	Ant 4	6	2437	10.95	11.00	1.012	98.9	1.011	-0.13	0.063	0.064
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 4	6	2437	10.95	11.00	1.012	98.9	1.011	0	0.081	0.083
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	4	Ant 3	11	2462	10.00	11.00	1.259	98.9	1.011	-0.17	0.102	0.130
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	4	Ant 3	11	2462	10.00	11.00	1.259	98.9	1.011	-0.16	0.028	0.036
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	4	Ant 3	11	2462	10.00	11.00	1.259	98.9	1.011	-0.19	0.070	0.089
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	4	Ant 3	11	2462	10.00	11.00	1.259	98.9	1.011	-0.14	0.013	0.017
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	4	Ant 4+3(4)	1	2412	10.85	11.00	1.035	93.4	1.071	-0.16	0.048	0.053
	WLAN2.4GHz	802.11g 6Mbps	Right Cheek	0mm	4	Ant 4+3(3)	1	2412	9.85	11.00	1.303	93.4	1.071	-0.16	0.092	0.128
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	4	Ant 4+3(4)	1	2412	10.85	11.00	1.035	93.4	1.071	0.19	0.067	0.074
	WLAN2.4GHz	802.11g 6Mbps	Right Tilted	0mm	4	Ant 4+3(3)	1	2412	9.85	11.00	1.303	93.4	1.071	0.19	0.040	0.056
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	4	Ant 4+3(4)	1	2412	10.85	11.00	1.035	93.4	1.071	0.09	0.039	0.043
	WLAN2.4GHz	802.11g 6Mbps	Left Cheek	0mm	4	Ant 4+3(3)	1	2412	9.85	11.00	1.303	93.4	1.071	0.09	0.002	0.003
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	4	Ant 4+3(4)	1	2412	10.85	11.00	1.035	93.4	1.071	0.13	0.091	0.101
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	4	Ant 4+3(3)	1	2412	9.85	11.00	1.303	93.4	1.071	0.13	0.001	0.001



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	58	5290	13.90	15.00	1.288	88.30	1.133	0.02	0.148	0.216
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	58	5290	12.20	13.50	1.349	88.30	1.133	0.02	0.667	1.019
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	62	5310	13.80	15.00	1.318	96.80	1.033	0.16	0.169	0.230
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	62	5310	12.20	13.50	1.349	96.80	1.033	0.16	0.721	1.005
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	58	5570	13.90	15.00	1.288	88.30	1.133	-0.13	0.190	0.277
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	58	5570	12.20	13.50	1.349	88.30	1.133	-0.13	0.204	0.312
08	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	58	5290	13.90	15.00	1.288	88.30	1.133	-0.01	0.763	1.114
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	58	5290	12.20	13.50	1.349	88.30	1.133	-0.01	0.161	0.246
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	62	5310	13.80	15.00	1.318	96.80	1.033	-0.02	0.706	0.961
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	62	5310	12.20	13.50	1.349	96.80	1.033	-0.02	0.131	0.183
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	58	5290	13.90	15.00	1.288	88.30	1.133	-0.01	0.421	0.614
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	58	5290	12.20	13.50	1.349	88.30	1.133	-0.01	0.093	0.142
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	58	5290	13.90	14.50	1.148	88.30	1.133	0.02	0.148	0.193
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	58	5290	12.20	12.50	1.072	88.30	1.133	0.02	0.667	0.810
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	62	5310	13.80	14.50	1.175	96.80	1.033	0.16	0.169	0.205
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	62	5310	12.20	12.50	1.072	96.80	1.033	0.16	0.721	0.798
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	58	5570	13.90	14.50	1.148	88.30	1.133	-0.13	0.190	0.247
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	58	5570	12.20	12.50	1.072	88.30	1.133	-0.13	0.204	0.248
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	58	5290	13.90	14.50	1.148	88.30	1.133	-0.01	0.763	0.993
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	58	5290	12.20	12.50	1.072	88.30	1.133	-0.01	0.161	0.195
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	62	5310	13.80	14.50	1.175	96.80	1.033	-0.02	0.706	0.857
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	62	5310	12.20	12.50	1.072	96.80	1.033	-0.02	0.131	0.145
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	58	5290	13.90	14.50	1.148	88.30	1.133	-0.01	0.421	0.548
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	58	5290	12.20	12.50	1.072	88.30	1.133	-0.01	0.093	0.113
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	50	5250	10.80	11.00	1.047	88.2	1.134	0.07	0.076	0.090
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	50	5250	8.20	8.50	1.072	88.2	1.134	0.07	0.199	0.242
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3/4	Ant 4+3(4)	50	5250	10.80	11.00	1.047	88.2	1.134	-0.08	0.054	0.064
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3/4	Ant 4+3(3)	50	5250	8.20	8.50	1.072	88.2	1.134	-0.08	0.009	0.011
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3/4	Ant 4+3(4)	50	5250	10.80	11.00	1.047	88.2	1.134	0.07	0.273	0.324
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3/4	Ant 4+3(3)	50	5250	8.20	8.50	1.072	88.2	1.134	0.07	0.034	0.041
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3/4	Ant 4+3(4)	50	5250	10.80	11.00	1.047	88.2	1.134	0.16	0.207	0.246
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3/4	Ant 4+3(3)	50	5250	8.20	8.50	1.072	88.2	1.134	0.16	0.008	0.010



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	114	5570	14.10	15.00	1.230	88.20	1.134	0.03	0.243	0.339
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	114	5570	12.80	14.00	1.318	88.20	1.134	0.03	0.746	1.115
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	122	5610	14.20	15.00	1.202	88.30	1.133	0.01	0.295	0.402
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	122	5610	12.80	14.00	1.318	88.30	1.133	0.01	0.693	1.035
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	114	5570	14.10	15.00	1.230	88.20	1.134	-0.06	0.238	0.332
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	114	5570	12.80	14.00	1.318	88.20	1.134	-0.06	0.082	0.123
09	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	114	5570	14.10	15.00	1.230	88.20	1.134	0	0.803	1.120
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	114	5570	12.80	14.00	1.318	88.20	1.134	0	0.114	0.170
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	122	5610	14.20	15.00	1.202	88.30	1.133	0	0.806	1.098
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	122	5610	12.80	14.00	1.318	88.30	1.133	0	0.098	0.146
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	114	5570	14.10	15.00	1.230	88.20	1.134	0.05	0.532	0.742
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	114	5570	12.80	14.00	1.318	88.20	1.134	0.05	0.134	0.200
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	114	5570	14.10	14.50	1.096	88.2	1.134	0.1	0.194	0.241
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	114	5570	12.10	12.50	1.096	88.2	1.134	0.1	0.658	0.818
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	106	5530	14.20	14.50	1.072	88.3	1.133	0.14	0.278	0.338
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	106	5530	12.20	12.50	1.072	88.3	1.133	0.14	0.693	0.841
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	114	5570	14.10	14.50	1.096	88.2	1.134	-0.07	0.254	0.316
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	114	5570	12.10	12.50	1.096	88.2	1.134	-0.07	0.098	0.122
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	114	5570	14.10	14.50	1.096	88.2	1.134	-0.03	0.778	0.967
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	114	5570	12.10	12.50	1.096	88.2	1.134	-0.03	0.163	0.203
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	106	5530	14.20	14.50	1.072	88.3	1.133	-0.13	0.780	0.947
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	106	5530	12.20	12.50	1.072	88.3	1.133	-0.13	0.086	0.104
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	114	5570	14.10	14.50	1.096	88.2	1.134	-0.03	0.590	0.734
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	114	5570	12.10	12.50	1.096	88.2	1.134	-0.03	0.141	0.175
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(4)	114	5570	9.70	11.00	1.349	88.2	1.134	0.12	0.085	0.130
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3	Ant 4+3(3)	114	5570	8.40	9.50	1.288	88.2	1.134	0.12	0.153	0.224
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(4)	114	5570	9.70	11.00	1.349	88.2	1.134	-0.14	0.049	0.075
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3	Ant 4+3(3)	114	5570	8.40	9.50	1.288	88.2	1.134	-0.14	0.216	0.316
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(4)	114	5570	9.70	11.00	1.349	88.2	1.134	-0.07	0.246	0.376
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3	Ant 4+3(3)	114	5570	8.40	9.50	1.288	88.2	1.134	-0.07	0.017	0.025
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(4)	114	5570	9.70	11.00	1.349	88.2	1.134	0.09	0.191	0.292
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3	Ant 4+3(3)	114	5570	8.40	9.50	1.288	88.2	1.134	0.09	0.027	0.039
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(4)	114	5570	9.70	10.50	1.202	88.2	1.134	0.12	0.085	0.116
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	4	Ant 4+3(3)	114	5570	8.40	9.00	1.148	88.2	1.134	0.12	0.153	0.199
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(4)	114	5570	9.70	10.50	1.202	88.2	1.134	-0.14	0.049	0.067
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	4	Ant 4+3(3)	114	5570	8.40	9.00	1.148	88.2	1.134	-0.14	0.216	0.281
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	114	5570	9.70	10.50	1.202	88.2	1.134	-0.07	0.246	0.335
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	4	Ant 4+3(4)	114	5570	8.40	9.00	1.148	88.2	1.134	-0.07	0.017	0.022
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(4)	114	5570	9.70	10.50	1.202	88.2	1.134	0.09	0.191	0.260
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	4	Ant 4+3(3)	114	5570	8.40	9.00	1.148	88.2	1.134	0.09	0.027	0.035



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	155	5775	14.40	15.50	1.288	88.3	1.133	-0.08	0.206	0.301
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	155	5775	11.60	13.50	1.549	88.3	1.133	-0.08	0.595	1.044
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	151	5755	14.30	15.50	1.318	96.8	1.033	-0.11	0.266	0.362
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	151	5755	11.70	13.50	1.514	96.8	1.033	-0.11	0.590	0.922
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	155	5775	14.40	15.50	1.288	88.3	1.133	-0.05	0.252	0.368
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	155	5775	11.60	13.50	1.549	88.3	1.133	-0.05	0.159	0.279
10	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	155	5775	14.40	15.50	1.288	88.3	1.133	-0.04	0.752	1.098
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	155	5775	11.60	13.50	1.549	88.3	1.133	-0.04	0.152	0.267
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	151	5755	14.30	15.50	1.318	96.8	1.033	-0.04	0.589	0.802
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	151	5755	11.70	13.50	1.514	96.8	1.033	-0.04	0.150	0.235
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	155	5775	14.40	15.50	1.288	88.3	1.133	-0.12	0.470	0.686
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	155	5775	11.60	13.50	1.549	88.3	1.133	-0.12	0.076	0.133
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	155	5775	14.40	15.00	1.148	88.3	1.133	-0.08	0.206	0.268
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	155	5775	11.60	13.00	1.380	88.3	1.133	-0.08	0.595	0.931
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	151	5755	14.30	15.00	1.175	96.8	1.033	-0.11	0.266	0.323
	WLAN 5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	151	5755	11.70	13.00	1.349	96.8	1.033	-0.11	0.590	0.822
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	155	5775	14.40	15.00	1.148	88.3	1.133	-0.05	0.252	0.328
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	155	5775	11.60	13.00	1.380	88.3	1.133	-0.05	0.159	0.249
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	155	5775	14.40	15.00	1.148	88.3	1.133	-0.04	0.752	0.978
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	155	5775	11.60	13.00	1.380	88.3	1.133	-0.04	0.152	0.238
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	151	5755	14.30	15.00	1.175	96.8	1.033	-0.04	0.589	0.715
	WLAN 5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	151	5755	11.70	13.00	1.349	96.8	1.033	-0.04	0.150	0.209
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	155	5775	14.40	15.00	1.148	88.3	1.133	-0.12	0.470	0.611
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	155	5775	11.60	13.00	1.380	88.3	1.133	-0.12	0.076	0.119
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	155	5775	11.20	12.00	1.202	88.3	1.133	-0.02	0.085	0.116
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	155	5775	8.20	9.00	1.202	88.3	1.133	-0.02	0.225	0.306
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	3/4	Ant 4+3(4)	155	5775	11.20	12.00	1.202	88.3	1.133	-0.02	0.083	0.113
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	3/4	Ant 4+3(3)	155	5775	8.20	9.00	1.202	88.3	1.133	-0.02	0.050	0.068
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	3/4	Ant 4+3(4)	155	5775	11.20	12.00	1.202	88.3	1.133	-0.03	0.266	0.362
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	3/4	Ant 4+3(3)	155	5775	8.20	9.00	1.202	88.3	1.133	-0.03	0.051	0.069
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	3/4	Ant 4+3(4)	155	5775	11.20	12.00	1.202	88.3	1.133	0.1	0.148	0.202
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	3/4	Ant 4+3(3)	155	5775	8.20	9.00	1.202	88.3	1.133	0.1	0.021	0.029



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	163	5815	15.20	16.00	1.202	88.20	1.134	0.1	0.223	0.304
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	163	5815	12.50	13.50	1.259	88.20	1.134	0.1	0.726	1.036
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(4)	171	5855	15.10	16.00	1.230	88.20	1.134	0.05	0.240	0.335
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	1	Ant 4+3(3)	171	5855	12.80	13.50	1.175	88.20	1.134	0.05	0.849	1.131
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(4)	163	5815	15.20	16.00	1.202	88.20	1.134	-0.13	0.229	0.312
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	1	Ant 4+3(3)	163	5815	12.50	13.50	1.259	88.20	1.134	-0.13	0.134	0.191
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	163	5815	15.20	16.00	1.202	88.20	1.134	-0.1	0.741	1.010
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	163	5815	12.50	13.50	1.259	88.20	1.134	-0.1	0.200	0.286
11	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	171	5855	15.10	16.00	1.230	88.20	1.134	-0.04	0.831	1.159
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	171	5855	12.80	13.50	1.175	88.20	1.134	-0.04	0.243	0.324
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	163	5815	15.20	16.00	1.202	88.20	1.134	-0.12	0.695	0.948
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	163	5815	12.50	13.50	1.259	88.20	1.134	-0.12	0.082	0.117
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(4)	171	5855	15.10	16.00	1.230	88.20	1.134	0.15	0.648	0.904
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	1	Ant 4+3(3)	171	5855	12.80	13.50	1.175	88.20	1.134	0.08	0.055	0.073
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	163	5815	15.20	15.50	1.072	88.2	1.134	0.1	0.223	0.271
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	163	5815	12.50	12.50	1.000	88.2	1.134	0.1	0.726	0.823
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(4)	171	5855	14.70	15.50	1.202	88.2	1.134	0.03	0.206	0.281
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	2	Ant 4+3(3)	171	5855	11.70	12.50	1.202	88.2	1.134	0.03	0.691	0.942
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(4)	163	5815	15.20	15.50	1.072	88.2	1.134	-0.13	0.229	0.278
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	2	Ant 4+3(3)	163	5815	12.50	12.50	1.000	88.2	1.134	-0.13	0.134	0.152
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	163	5815	15.20	15.50	1.072	88.2	1.134	-0.1	0.741	0.900
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	163	5815	12.50	12.50	1.000	88.2	1.134	-0.1	0.200	0.227
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(4)	171	5855	14.70	15.50	1.202	88.2	1.134	-0.03	0.660	0.900
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	2	Ant 4+3(3)	171	5855	11.70	12.50	1.202	88.2	1.134	-0.03	0.167	0.228
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(4)	163	5815	15.20	15.50	1.072	88.2	1.134	-0.12	0.695	0.844
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	2	Ant 4+3(3)	163	5815	12.50	12.50	1.000	88.2	1.134	-0.12	0.082	0.093
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	163	5815	11.30	12.00	1.175	88.2	1.134	0.09	0.073	0.097
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	163	5815	8.40	9.00	1.148	88.2	1.134	0.09	0.276	0.359
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3/4	Ant 4+3(4)	163	5815	11.30	12.00	1.175	88.2	1.134	-0.15	0.071	0.095
	WLAN 5GHz	802.11ac-VHT160 MCS0	Right Tilted	0mm	3/4	Ant 4+3(3)	163	5815	8.40	9.00	1.148	88.2	1.134	-0.15	0.035	0.046
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3/4	Ant 4+3(4)	163	5815	11.30	12.00	1.175	88.2	1.134	-0.1	0.312	0.416
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Cheek	0mm	3/4	Ant 4+3(3)	163	5815	8.40	9.00	1.148	88.2	1.134	-0.1	0.061	0.079
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3/4	Ant 4+3(4)	163	5815	11.30	12.00	1.175	88.2	1.134	-0.18	0.220	0.293
	WLAN 5GHz	802.11ac-VHT160 MCS0	Left Tilted	0mm	3/4	Ant 4+3(3)	163	5815	8.40	9.00	1.148	88.2	1.134	-0.18	0.023	0.030



<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	APD
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	-0.16	0.049	0.060	0.31
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	-0.16	0.239	0.304	1.69
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(4)	15	6025	9.80	10.00	1.047	86.20	1.160	-0.09	0.068	0.083	0.51
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(3)	15	6025	10.00	10.00	1.000	86.20	1.160	-0.09	0.278	0.322	1.95
12	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(4)	47	6185	9.80	10.00	1.047	86.20	1.160	-0.14	0.048	0.058	0.36
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(3)	47	6185	10.00	10.00	1.000	86.20	1.160	-0.14	0.310	0.360	2.19
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(4)	111	6505	10.00	10.00	1.000	86.20	1.160	0.17	0.022	0.026	0.18
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(3)	111	6505	9.40	10.00	1.148	86.20	1.160	0.17	0.268	0.357	1.86
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(4)	175	6825	9.40	9.50	1.023	86.20	1.160	0.02	0.029	0.034	0.20
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	1/2	Ant 4+3(3)	175	6825	8.00	9.50	1.413	86.20	1.160	0.02	0.185	0.303	1.24
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	1/2	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	-0.03	0.041	0.050	0.25
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	1/2	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	-0.03	0.041	0.052	0.33
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	1/2	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	0.11	0.126	0.153	0.81
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	1/2	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	0.11	0.122	0.155	0.95
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	1/2	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	0.04	0.073	0.089	0.50
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	1/2	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	0.04	0.036	0.046	0.26
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	-0.16	0.049	0.060	0.31
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	-0.16	0.239	0.304	1.69
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	15	6025	9.80	10.00	1.047	86.20	1.160	-0.09	0.068	0.083	0.51
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	15	6025	10.00	10.00	1.000	86.20	1.160	-0.09	0.278	0.322	1.95
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	47	6185	9.80	10.00	1.047	86.20	1.160	-0.14	0.048	0.058	0.36
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	47	6185	10.00	10.00	1.000	86.20	1.160	-0.14	0.310	0.360	2.19
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	111	6505	10.00	10.00	1.000	86.20	1.160	0.17	0.022	0.026	0.18
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	111	6505	9.40	10.00	1.148	86.20	1.160	0.17	0.268	0.357	1.86
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(4)	175	6825	9.40	9.50	1.023	86.20	1.160	0.02	0.029	0.034	0.20
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	3/4	Ant 4+3(3)	175	6825	8.00	9.50	1.413	86.20	1.160	0.02	0.185	0.303	1.24
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	3/4	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	-0.03	0.041	0.050	0.25
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	3/4	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	-0.03	0.041	0.052	0.33
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	3/4	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	0.11	0.126	0.153	0.81
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	3/4	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	0.11	0.122	0.155	0.95
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	3/4	Ant 4+3(4)	207	6985	10.80	11.00	1.047	86.20	1.160	0.04	0.073	0.089	0.50
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	3/4	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	0.04	0.036	0.046	0.26



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4	78	2480	11.15	12.00	1.216	77.22	1.079	-0.14	0.067	0.088
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4	78	2480	11.15	12.00	1.216	77.22	1.079	0.01	0.080	0.105
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4	78	2480	11.15	12.00	1.216	77.22	1.079	-0.01	0.104	0.136
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	78	2480	11.15	12.00	1.216	77.22	1.079	0.14	0.112	0.147
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	0	2402	10.65	12.00	1.365	77.22	1.079	0.02	0.111	0.163
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4	39	2441	10.95	12.00	1.274	77.22	1.079	0.03	0.106	0.146
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 3	39	2441	10.45	12.00	1.429	77.22	1.079	0.04	0.104	0.160
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 3	0	2402	10.13	12.00	1.538	77.22	1.079	0.04	0.092	0.153
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 3	78	2480	10.05	12.00	1.567	77.22	1.079	0.12	0.119	0.201
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 3	39	2441	10.45	12.00	1.429	77.22	1.079	0.17	0.030	0.046
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 3	39	2441	10.45	12.00	1.429	77.22	1.079	0.1	0.035	0.054
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 3	39	2441	10.45	12.00	1.429	77.22	1.079	0.11	0.010	0.015
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	78	2480	10.95	12.00	1.274	77.22	1.079	0.14	0.133	0.183
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	78	2480	10.05	12.00	1.567	77.22	1.079	0.14	0.080	0.135
13	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	39	2441	10.85	12.00	1.303	77.22	1.079	0.14	0.085	0.120
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	39	2441	10.35	12.00	1.462	77.22	1.079	0.14	0.154	0.243
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(4)	0	2402	10.65	12.00	1.365	77.22	1.079	0.12	0.071	0.105
	Bluetooth	1Mbps	Right Cheek	0mm	1	Ant 4+3(3)	0	2402	10.04	12.00	1.570	77.22	1.079	0.12	0.114	0.193
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(4)	78	2480	10.95	12.00	1.274	77.22	1.079	0.12	0.085	0.117
	Bluetooth	1Mbps	Right Tilted	0mm	1	Ant 4+3(3)	78	2480	10.05	12.00	1.567	77.22	1.079	0.12	0.018	0.030
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4+3(4)	78	2480	10.95	12.00	1.274	77.22	1.079	0.09	0.107	0.147
	Bluetooth	1Mbps	Left Cheek	0mm	1	Ant 4+3(3)	78	2480	10.05	12.00	1.567	77.22	1.079	0.09	0.036	0.061
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4+3(4)	78	2480	10.95	12.00	1.274	77.22	1.079	0.06	0.126	0.173
	Bluetooth	1Mbps	Left Tilted	0mm	1	Ant 4+3(3)	78	2480	10.05	12.00	1.567	77.22	1.079	0.06	0.009	0.015



15.2 Hotspot SAR

<FDD LTE SAR>

Table with 17 columns: Plot No., Band, BW (MHz), Modulation, RB Size, RB offset, Test Position, Gap (mm), Power State, Ch., Freq. (MHz), Average Power (dBm), Tune-Up Limit (dBm), Tune-up Scaling Factor, Power Drift (dB), Measured 1g SAR (W/kg), Reported 1g SAR (W/kg). Rows are grouped by Plot No. (14, 15, 16, 17, 18) and contain various LTE band configurations.



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	10mm	4	518598	2592.99	20.21	20.90	1.172	-0.1	0.300	0.352
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	4	518598	2592.99	20.15	20.90	1.189	-0.09	0.297	0.353
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	10mm	4	518598	2592.99	20.21	20.90	1.172	-0.11	0.457	0.536
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	4	518598	2592.99	20.15	20.90	1.189	-0.19	0.452	0.537
	FR1 n41_Ant 5	100M	BPSK	1	1	Left Side	10mm	4	518598	2592.99	20.21	20.90	1.172	-0.12	0.015	0.018
	FR1 n41_Ant 5	100M	BPSK	135	69	Left Side	10mm	4	518598	2592.99	20.15	20.90	1.189	0.04	0.015	0.018
	FR1 n41_Ant 5	100M	BPSK	1	1	Right Side	10mm	4	518598	2592.99	20.21	20.90	1.172	-0.17	0.786	0.921
	FR1 n41_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	518598	2592.99	20.15	20.90	1.189	-0.1	0.825	0.981
	FR1 n41_Ant 5	100M	BPSK	270	0	Right Side	10mm	4	518598	2592.99	20.08	20.90	1.208	-0.12	0.769	0.929
	FR1 n41_Ant 5	100M	BPSK	1	1	Top Side	10mm	4	518598	2592.99	20.21	20.90	1.172	-0.19	0.196	0.230
	FR1 n41_Ant 5	100M	BPSK	135	69	Top Side	10mm	4	518598	2592.99	20.15	20.90	1.189	-0.05	0.156	0.185
19	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	518598	2592.99	23.52	23.90	1.091	-0.19	0.912	0.995
	FR1 n41_Ant 1	100M	BPSK	1	271	Front	10mm	4	518598	2592.99	22.90	23.40	1.122	-0.09	0.436	0.489
	FR1 n41_Ant 1	100M	BPSK	135	138	Front	10mm	4	518598	2592.99	22.78	23.40	1.153	0.06	0.455	0.525
	FR1 n41_Ant 1	100M	BPSK	1	271	Back	10mm	4	518598	2592.99	22.90	23.40	1.122	-0.18	0.411	0.461
	FR1 n41_Ant 1	100M	BPSK	135	138	Back	10mm	4	518598	2592.99	22.78	23.40	1.153	-0.18	0.433	0.499
	FR1 n41_Ant 1	100M	BPSK	1	271	Left Side	10mm	4	518598	2592.99	22.90	23.40	1.122	-0.09	0.106	0.119
	FR1 n41_Ant 1	100M	BPSK	135	138	Left Side	10mm	4	518598	2592.99	22.78	23.40	1.153	-0.07	0.102	0.118
	FR1 n41_Ant 1	100M	BPSK	1	271	Right Side	10mm	4	518598	2592.99	22.90	23.40	1.122	-0.1	0.033	0.037
	FR1 n41_Ant 1	100M	BPSK	135	138	Right Side	10mm	4	518598	2592.99	22.78	23.40	1.153	-0.16	0.037	0.043
	FR1 n41_Ant 1	100M	BPSK	1	271	Top Side	10mm	4	518598	2592.99	22.90	23.40	1.122	-0.15	0.743	0.834
	FR1 n41_Ant 1	100M	BPSK	135	138	Top Side	10mm	4	518598	2592.99	22.78	23.40	1.153	-0.01	0.784	0.904
	FR1 n41_Ant 1	100M	BPSK	270	0	Top Side	10mm	4	518598	2592.99	22.62	23.40	1.197	0.04	0.790	0.945
	FR1 n41_HPUE_Ant 1	100M	BPSK	270	0	Top Side	10mm	4	518598	2592.99	25.39	26.40	1.262	0.11	0.787	0.993



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	0.12	0.231	0.236
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	0.1	0.323	0.330
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	-0.17	0.022	0.022
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	-0.09	0.081	0.083
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	0.08	0.466	0.477
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4	6	2437	19.95	20.00	1.012	98.90	1.011	0.01	0.460	0.470
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4	11	2462	19.65	20.00	1.084	98.90	1.011	-0.18	0.454	0.498
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4	12	2467	19.75	20.00	1.059	98.90	1.011	0.13	0.421	0.451
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 4	13	2472	19.95	20.00	1.012	98.90	1.011	0.08	0.446	0.456
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	-0.11	0.296	0.303
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	-0.12	0.387	0.396
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	0.05	0.530	0.542
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 3	6	2437	20.45	20.50	1.012	98.90	1.011	0.02	0.506	0.517
20	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 3	11	2462	20.35	20.50	1.035	98.90	1.011	-0.13	0.539	0.564
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 3	12	2467	20.35	20.50	1.035	98.90	1.011	0.02	0.506	0.530
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	7	Ant 3	13	2472	20.45	20.50	1.012	98.90	1.011	-0.13	0.539	0.551
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	0.11	0.003	0.003
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	-0.01	0.045	0.046
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	-0.11	0.154	0.179
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	-0.11	0.196	0.212
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	-0.09	0.241	0.280
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	-0.09	0.308	0.334
	WLAN2.4GHz	802.11g 1Mbps	Left Side	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	0.06	0.001	0.001
	WLAN2.4GHz	802.11g 1Mbps	Left Side	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	0.06	0.432	0.468
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	0.04	0.057	0.066
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	0.04	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	0.17	0.467	0.542
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	0.17	0.001	0.001
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(4)	1	2412	17.95	18.50	1.135	93.40	1.071	0.15	0.321	0.390
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(3)	1	2412	17.55	18.50	1.245	93.40	1.071	0.15	0.001	0.001
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(4)	11	2462	19.25	19.50	1.059	93.40	1.071	0.02	0.389	0.441
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(3)	11	2462	19.35	19.50	1.035	93.40	1.071	0.02	0.001	0.001
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(4)	12	2467	18.35	19.00	1.161	93.40	1.071	-0.01	0.287	0.357
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(3)	12	2467	18.95	19.00	1.012	93.40	1.071	0.09	0.001	0.001
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(4)	13	2472	17.15	17.50	1.084	93.40	1.071	0.11	0.218	0.253
	WLAN2.4GHz	802.11g 1Mbps	Top Side	10mm	7	Ant 4+3(3)	13	2472	17.05	17.50	1.109	93.40	1.071	0.13	0.001	0.001



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	-0.14	0.086	0.088
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	0.14	0.133	0.136
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	-0.06	0.008	0.008
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	0.07	0.037	0.038
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	0.04	0.261	0.267
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	-0.14	0.119	0.122
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	0.03	0.166	0.170
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	0.04	0.269	0.275
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	-0.04	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	0.04	0.011	0.011
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	-0.11	0.117	0.127
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	-0.11	0.181	0.196
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	-0.08	0.189	0.205
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	-0.08	0.232	0.251
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	-0.02	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Left Side	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	-0.02	0.341	0.369
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	0.02	0.050	0.054
	WLAN2.4GHz	802.11g 6Mbps	Right Side	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	0.02	0.001	0.001
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	0.17	0.221	0.239
	WLAN2.4GHz	802.11g 6Mbps	Top Side	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	0.17	0.001	0.001



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
21	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.15	0.231	0.244
	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.15	0.383	0.414
	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(4)	38	5190	15.70	16.00	1.072	96.79	1.033	-0.04	0.195	0.216
	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	7	Ant 4+3(3)	38	5190	15.30	16.00	1.175	96.79	1.033	-0.04	0.163	0.198
	WLAN 5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.06	0.221	0.234
	WLAN 5GHz	802.11n-HT40 MCS0	Back	10mm	7	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.06	0.177	0.191
	WLAN 5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.07	0.001	0.001
	WLAN 5GHz	802.11n-HT40 MCS0	Left Side	10mm	7	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.07	0.096	0.104
	WLAN 5GHz	802.11n-HT40 MCS0	Right Side	10mm	7	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.14	0.135	0.143
	WLAN 5GHz	802.11n-HT40 MCS0	Right Side	10mm	7	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.14	0.001	0.001
	WLAN 5GHz	802.11n-HT40 MCS0	Top Side	10mm	7	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	0.03	0.078	0.082
	WLAN 5GHz	802.11n-HT40 MCS0	Top Side	10mm	7	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	0.03	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	42	5210	14.90	15.00	1.023	88.3	1.133	-0.16	0.129	0.150
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	42	5210	14.80	15.00	1.047	88.3	1.133	-0.16	0.131	0.155
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	42	5210	14.90	15.00	1.023	88.3	1.133	-0.02	0.155	0.180
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	42	5210	14.80	15.00	1.047	88.3	1.133	-0.02	0.131	0.155
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(4)	42	5210	14.90	15.00	1.023	88.3	1.133	0.04	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(3)	42	5210	14.80	15.00	1.047	88.3	1.133	0.04	0.051	0.061
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(4)	42	5210	14.90	15.00	1.023	88.3	1.133	-0.19	0.099	0.115
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(3)	42	5210	14.80	15.00	1.047	88.3	1.133	-0.19	0.099	0.117
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(4)	42	5210	14.90	15.00	1.023	88.3	1.133	-0.01	0.055	0.064
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(3)	42	5210	14.80	15.00	1.047	88.3	1.133	-0.01	0.055	0.065
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.15	0.231	0.244
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.15	0.383	0.414
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	38	5190	15.70	16.00	1.072	96.79	1.033	-0.04	0.195	0.216
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	38	5190	15.30	16.00	1.175	96.79	1.033	-0.04	0.163	0.198
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.06	0.221	0.234
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.06	0.177	0.191
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.07	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.07	0.096	0.104
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	-0.14	0.135	0.143
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	-0.14	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(4)	46	5230	15.90	16.00	1.023	96.79	1.033	0.03	0.078	0.082
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(3)	46	5230	16.80	17.00	1.047	96.79	1.033	0.03	0.001	0.001



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
22	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	-0.04	0.128	0.152
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	-0.04	0.411	0.488
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	-0.02	0.322	0.382
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	-0.02	0.215	0.255
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	-0.01	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	-0.01	0.261	0.310
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	0.04	0.228	0.270
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	0.04	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	0.08	0.179	0.212
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	0.08	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	-0.01	0.057	0.065
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.01	0.251	0.291
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	0.06	0.176	0.199
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	0.06	0.138	0.160
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	0.11	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	0.11	0.126	0.146
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	0.06	0.113	0.128
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	0.06	0.113	0.131
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	0	0.089	0.101
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	0	0.089	0.103
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.01	0.103	0.119
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.01	0.371	0.440
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.02	0.271	0.314
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.02	0.168	0.199
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.08	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.08	0.235	0.279
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.03	0.183	0.212
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.03	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.05	0.158	0.183
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.05	0.045	0.053



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	-0.09	0.047	0.055
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	0.01	0.064	0.075
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	-0.12	0.001	0.001
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	-0.17	0.016	0.019
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	0.15	0.110	0.129
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4	0	2402	14.25	15.00	1.189	77.22	1.079	0.16	0.103	0.132
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4	39	2441	14.15	15.00	1.216	77.22	1.079	0	0.096	0.126
	Bluetooth	1Mbps	Front	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	-0.11	0.060	0.070
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	-0.1	0.078	0.091
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	0.1	0.112	0.131
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 3	0	2402	14.55	15.00	1.109	77.22	1.079	0.19	0.056	0.067
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 3	39	2441	14.45	15.00	1.135	77.22	1.079	0.09	0.034	0.042
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	0.01	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	0.07	0.002	0.003
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	-0.16	0.042	0.050
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	-0.16	0.031	0.036
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	0.06	0.057	0.069
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	0.06	0.038	0.045
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	0.18	0.001	0.001
	Bluetooth	1Mbps	Left Side	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	0.18	0.050	0.059
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	0.13	0.015	0.018
	Bluetooth	1Mbps	Right Side	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	0.13	0.010	0.012
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	0.13	0.090	0.108
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	0.13	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(4)	39	2441	14.05	15.00	1.245	76.83	1.084	0.06	0.088	0.119
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(3)	39	2441	14.35	15.00	1.161	76.83	1.084	0.06	0.001	0.001
23	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(4)	78	2480	14.55	15.00	1.109	76.83	1.084	0.1	0.134	0.161
	Bluetooth	1Mbps	Top Side	10mm	3	Ant 4+3(3)	78	2480	14.55	15.00	1.109	76.83	1.084	0.1	0.001	0.001



15.3 Body-Worn Accessory SAR

<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 12_Ant 1	10M	QPSK	1	0	Front	10mm	5/6	23095	707.5	23.94	25.20	1.337	0.11	0.142	0.190
	LTE Band 12_Ant 1	10M	QPSK	25	0	Front	10mm	5/6	23095	707.5	23.07	24.20	1.297	0.08	0.120	0.156
24	LTE Band 12_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	23095	707.5	23.94	25.20	1.337	-0.12	0.207	0.277
	LTE Band 12_Ant 1	10M	QPSK	25	0	Back	10mm	5/6	23095	707.5	23.07	24.20	1.297	0.06	0.170	0.221
	LTE Band 13_Ant 1	10M	QPSK	1	0	Front	10mm	5/6	23230	782	24.02	25.20	1.312	-0.01	0.165	0.217
	LTE Band 13_Ant 1	10M	QPSK	25	0	Front	10mm	5/6	23230	782	23.12	24.20	1.282	-0.18	0.124	0.159
25	LTE Band 13_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	23230	782	24.02	25.20	1.312	-0.19	0.220	0.289
	LTE Band 13_Ant 1	10M	QPSK	25	0	Back	10mm	5/6	23230	782	23.12	24.20	1.282	-0.06	0.185	0.237
	LTE Band 14_Ant 1	10M	QPSK	1	0	Front	10mm	5/6	23330	793	23.94	25.20	1.337	0.07	0.174	0.233
	LTE Band 14_Ant 1	10M	QPSK	25	0	Front	10mm	5/6	23330	793	22.97	24.20	1.327	0.06	0.140	0.186
26	LTE Band 14_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	23330	793	23.94	25.20	1.337	-0.14	0.261	0.349
	LTE Band 14_Ant 1	10M	QPSK	25	0	Back	10mm	5/6	23330	793	22.97	24.20	1.327	-0.12	0.201	0.267
	LTE Band 26_Ant 1	15M	QPSK	1	0	Front	10mm	5/6	26865	831.5	24.55	25.20	1.161	-0.11	0.181	0.210
	LTE Band 26_Ant 1	15M	QPSK	36	0	Front	10mm	5/6	26865	831.5	23.54	24.20	1.164	-0.07	0.145	0.169
27	LTE Band 26_Ant 1	15M	QPSK	1	0	Back	10mm	5/6	26865	831.5	24.55	25.20	1.161	-0.18	0.259	0.301
	LTE Band 26_Ant 1	15M	QPSK	36	0	Back	10mm	5/6	26865	831.5	23.54	24.20	1.164	-0.17	0.205	0.239
	LTE Band 5B_Ant 1	10M	QPSK	1	0	Back	10mm	5/6	20575	841.5	21.59	23.20	1.449	-0.01	0.150	0.217
	LTE Band 71_Ant 1	20M	QPSK	1	0	Front	10mm	5/6	133322	683	24.08	25.20	1.294	-0.14	0.139	0.180
	LTE Band 71_Ant 1	20M	QPSK	50	0	Front	10mm	5/6	133322	683	23.28	24.20	1.236	-0.15	0.107	0.132
28	LTE Band 71_Ant 1	20M	QPSK	1	0	Back	10mm	5/6	133322	683	24.08	25.20	1.294	-0.12	0.188	0.243
	LTE Band 71_Ant 1	20M	QPSK	50	0	Back	10mm	5/6	133322	683	23.28	24.20	1.236	0	0.144	0.178

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	10mm	5	518598	2592.99	20.21	21.70	1.409	-0.1	0.300	0.423
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	5	518598	2592.99	20.15	21.70	1.429	-0.09	0.297	0.424
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	10mm	5	518598	2592.99	20.21	21.70	1.409	-0.11	0.457	0.644
29	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	5	518598	2592.99	20.15	21.70	1.429	-0.19	0.452	0.646
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	5	518598	2592.99	23.52	24.70	1.312	-0.11	0.472	0.619
	FR1 n41_Ant 5	100M	BPSK	1	1	Front	10mm	6	518598	2592.99	20.21	20.90	1.172	-0.1	0.300	0.352
	FR1 n41_Ant 5	100M	BPSK	135	69	Front	10mm	6	518598	2592.99	20.15	20.90	1.189	-0.09	0.297	0.353
	FR1 n41_Ant 5	100M	BPSK	1	1	Back	10mm	6	518598	2592.99	20.21	20.90	1.172	-0.11	0.457	0.536
	FR1 n41_Ant 5	100M	BPSK	135	69	Back	10mm	6	518598	2592.99	20.15	20.90	1.189	-0.19	0.452	0.537
	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Back	10mm	6	518598	2592.99	23.52	23.90	1.091	-0.11	0.472	0.515
	FR1 n41_Ant 1	100M	BPSK	1	271	Front	10mm	5	518598	2592.99	22.90	24.20	1.349	-0.09	0.436	0.588
	FR1 n41_Ant 1	100M	BPSK	135	138	Front	10mm	5	518598	2592.99	22.78	24.20	1.387	0.06	0.455	0.631
	FR1 n41_Ant 1	100M	BPSK	1	271	Back	10mm	5	518598	2592.99	22.90	24.20	1.349	-0.18	0.411	0.554
	FR1 n41_Ant 1	100M	BPSK	135	138	Back	10mm	5	518598	2592.99	22.78	24.20	1.387	-0.18	0.433	0.600
	FR1 n41_HPUE_Ant 1	100M	BPSK	135	138	Front	10mm	5	518598	2592.99	25.59	27.20	1.449	0.07	0.398	0.577
	FR1 n41_Ant 1	100M	BPSK	1	271	Front	10mm	6	518598	2592.99	22.90	23.40	1.122	-0.09	0.436	0.489
	FR1 n41_Ant 1	100M	BPSK	135	138	Front	10mm	6	518598	2592.99	22.78	23.40	1.153	0.06	0.455	0.525
	FR1 n41_Ant 1	100M	BPSK	1	271	Back	10mm	6	518598	2592.99	22.90	23.40	1.122	-0.18	0.411	0.461
	FR1 n41_Ant 1	100M	BPSK	135	138	Back	10mm	6	518598	2592.99	22.78	23.40	1.153	-0.18	0.433	0.499
	FR1 n41_HPUE_Ant 1	100M	BPSK	135	138	Front	10mm	6	518598	2592.99	25.59	26.40	1.205	0.07	0.398	0.480



<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5/6	Ant 4	11	2462	21.75	22.00	1.059	100.00	1.000	-0.19	0.405	0.429
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 4	11	2462	21.75	22.00	1.059	100.00	1.000	0.1	0.547	0.579
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 4	1	2412	21.55	22.00	1.109	100.00	1.000	0.12	0.445	0.494
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 4	6	2437	21.55	22.00	1.109	100.00	1.000	0.04	0.430	0.477
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 4	12	2467	21.75	22.00	1.059	100.00	1.000	0.19	0.538	0.570
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 4	13	2472	21.75	22.00	1.059	100.00	1.000	0.1	0.523	0.554
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	5/6	Ant 3	13	2472	21.95	22.00	1.012	100.00	1.000	-0.14	0.384	0.388
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 3	13	2472	21.95	22.00	1.012	100.00	1.000	-0.14	0.469	0.474
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 3	1	2412	21.75	22.00	1.059	100.00	1.000	-0.06	0.426	0.451
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 3	6	2437	21.85	22.00	1.035	100.00	1.000	-0.02	0.422	0.437
30	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 3	11	2462	21.75	22.00	1.059	100.00	1.000	-0.16	0.597	0.632
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	5/6	Ant 3	12	2467	21.75	22.00	1.059	100.00	1.000	-0.1	0.486	0.515
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	5/6	Ant 4+3(4)	6	2437	20.95	21.50	1.135	93.40	1.071	-0.1	0.286	0.348
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	5/6	Ant 4+3(3)	6	2437	21.25	21.50	1.059	93.40	1.071	-0.1	0.263	0.298
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(4)	6	2437	20.95	21.50	1.135	93.40	1.071	-0.17	0.406	0.494
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(3)	6	2437	21.25	21.50	1.059	93.40	1.071	-0.17	0.391	0.444
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(4)	1	2412	17.95	18.50	1.135	93.40	1.071	0.1	0.196	0.238
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(3)	1	2412	17.55	18.50	1.245	93.40	1.071	0.1	0.165	0.220
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(4)	11	2462	19.25	19.50	1.059	93.40	1.071	-0.18	0.316	0.358
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(3)	11	2462	19.35	19.50	1.035	93.40	1.071	-0.18	0.354	0.392
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(4)	12	2467	18.35	19.00	1.161	93.40	1.071	0.01	0.243	0.302
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(3)	12	2467	18.95	19.00	1.012	93.40	1.071	0.01	0.259	0.281
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(4)	13	2472	17.15	17.50	1.084	93.40	1.071	-0.17	0.173	0.201
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	5/6	Ant 4+3(3)	13	2472	17.05	17.50	1.109	93.40	1.071	-0.17	0.161	0.191
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	0.12	0.231	0.236
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 4	1	2412	19.95	20.00	1.012	98.90	1.011	0.1	0.323	0.330
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	-0.11	0.296	0.303
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	7	Ant 3	1	2412	20.45	20.50	1.012	98.90	1.011	-0.12	0.387	0.396
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	-0.11	0.154	0.179
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	-0.11	0.196	0.212
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	7	Ant 4+3(4)	6	2437	19.65	20.00	1.084	93.40	1.071	-0.09	0.241	0.280
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	7	Ant 4+3(3)	6	2437	20.45	20.50	1.012	93.40	1.071	-0.09	0.308	0.334
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	-0.14	0.086	0.088
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 4	1	2412	16.95	17.00	1.012	98.90	1.011	0.14	0.133	0.136
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	-0.14	0.119	0.122
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	8	Ant 3	6	2437	17.95	18.00	1.012	98.90	1.011	0.03	0.166	0.170
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	-0.11	0.117	0.127
	WLAN2.4GHz	802.11g 6Mbps	Front	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	-0.11	0.181	0.196
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	8	Ant 4+3(4)	11	2462	16.95	17.00	1.012	93.40	1.071	-0.08	0.189	0.205
	WLAN2.4GHz	802.11g 6Mbps	Back	10mm	8	Ant 4+3(3)	11	2462	17.95	18.00	1.012	93.40	1.071	-0.08	0.232	0.251



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
31	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	-0.15	0.452	0.495
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	-0.15	0.525	0.630
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(4)	56	5280	19.90	20.00	1.023	93.42	1.070	-0.18	0.494	0.541
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(3)	56	5280	19.30	20.00	1.175	93.42	1.070	-0.18	0.581	0.730
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(4)	60	5300	19.00	19.00	1.000	93.42	1.070	-0.17	0.338	0.362
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(3)	60	5300	18.20	19.00	1.202	93.42	1.070	-0.17	0.355	0.457
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(4)	64	5320	19.30	19.50	1.047	93.42	1.070	-0.19	0.385	0.431
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5/6	Ant 4+3(3)	64	5320	18.40	19.50	1.288	93.42	1.070	-0.19	0.363	0.500
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	-0.16	0.558	0.611
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	-0.16	0.322	0.387
	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	-0.02	0.210	0.255
	WLAN 5GHz	802.11n-HT40 MCS0	Front	10mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	-0.02	0.332	0.395
	WLAN 5GHz	802.11n-HT40 MCS0	Back	10mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	-0.05	0.187	0.227
	WLAN 5GHz	802.11n-HT40 MCS0	Back	10mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	-0.05	0.167	0.198
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	-0.09	0.129	0.146
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	-0.09	0.139	0.169
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	-0.01	0.167	0.189
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	-0.01	0.127	0.154



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
32	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.6	1.068	-0.18	0.238	0.320
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.18	0.695	0.795
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.6	1.068	-0.15	0.761	1.023
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.15	0.546	0.625
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	100	5500	18.00	19.00	1.259	93.6	1.068	-0.07	0.541	0.727
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	100	5500	19.70	20.00	1.072	93.6	1.068	-0.07	0.303	0.347
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	116	5580	18.10	19.00	1.230	93.6	1.068	-0.17	0.595	0.782
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	116	5580	19.60	20.00	1.096	93.6	1.068	-0.17	0.371	0.434
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	124	5620	18.20	19.00	1.202	93.6	1.068	-0.19	0.648	0.832
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	124	5620	19.40	20.00	1.148	93.6	1.068	-0.19	0.426	0.522
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	132	5660	18.10	19.00	1.230	93.6	1.068	-0.12	0.688	0.904
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	132	5660	19.50	20.00	1.122	93.6	1.068	-0.12	0.483	0.579
32	WLAN 5GHz	802.11a 6Mbps	Front	10mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	-0.18	0.238	0.285
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.18	0.695	0.795
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	-0.15	0.761	0.912
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.15	0.546	0.625
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	100	5500	18.00	18.50	1.122	93.6	1.068	-0.07	0.541	0.648
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	100	5500	19.70	20.00	1.072	93.6	1.068	-0.07	0.303	0.347
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	116	5580	18.10	18.50	1.096	93.6	1.068	-0.17	0.595	0.697
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	116	5580	19.60	20.00	1.096	93.6	1.068	-0.17	0.371	0.434
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	124	5620	18.20	18.50	1.072	93.6	1.068	-0.19	0.648	0.742
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	124	5620	19.40	20.00	1.148	93.6	1.068	-0.19	0.426	0.522
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	132	5660	18.10	18.50	1.096	93.6	1.068	-0.12	0.688	0.806
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	132	5660	19.50	20.00	1.122	93.6	1.068	-0.12	0.483	0.579
32	WLAN 5GHz	802.11a 6Mbps	Front	10mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	-0.05	0.163	0.178
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	-0.05	0.386	0.412
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	-0.02	0.391	0.427
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	-0.02	0.477	0.509
32	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	-0.02	0.080	0.093
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	-0.02	0.287	0.325
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	0.02	0.178	0.206
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	0.02	0.182	0.206



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
33	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(4)	149	5745	18.40	18.50	1.023	96.6	1.035	-0.01	0.224	0.237
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(3)	149	5745	19.90	20.00	1.023	96.6	1.035	-0.01	0.703	0.745
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	149	5745	18.40	18.50	1.023	96.6	1.035	-0.11	0.735	0.778
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	149	5745	19.90	20.00	1.023	96.6	1.035	-0.11	0.512	0.542
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	157	5785	18.40	18.50	1.023	96.6	1.035	-0.03	0.804	0.852
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	157	5785	19.70	20.00	1.072	96.6	1.035	-0.03	0.536	0.594
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	165	5825	18.20	18.50	1.072	96.6	1.035	0.08	0.910	1.009
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	165	5825	19.90	20.00	1.023	96.6	1.035	0.08	0.397	0.420
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	6	Ant 4+3(4)	165	5825	17.30	17.50	1.047	93.6	1.068	-0.19	0.158	0.177
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	6	Ant 4+3(3)	165	5825	19.50	19.50	1.000	93.6	1.068	-0.19	0.653	0.697
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	165	5825	17.30	17.50	1.047	93.6	1.068	-0.03	0.720	0.805
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	165	5825	19.50	19.50	1.000	93.6	1.068	-0.03	0.417	0.445
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	149	5745	17.30	17.50	1.047	93.6	1.068	0.01	0.568	0.635
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	149	5745	19.30	19.50	1.047	93.6	1.068	0.01	0.513	0.574
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	157	5785	17.20	17.50	1.072	93.6	1.068	0.01	0.614	0.703
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	157	5785	19.00	19.50	1.122	93.6	1.068	0.01	0.535	0.641
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	-0.04	0.128	0.152
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	-0.04	0.411	0.488
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(4)	155	5775	15.30	15.50	1.047	88.3	1.133	-0.02	0.322	0.382
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	7	Ant 4+3(3)	155	5775	17.30	17.50	1.047	88.3	1.133	-0.02	0.215	0.255
WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	-0.01	0.057	0.065	
WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.01	0.251	0.291	
WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(4)	155	5775	12.50	12.50	1.000	88.3	1.133	0.06	0.176	0.199	
WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	8	Ant 4+3(3)	155	5775	14.40	14.50	1.023	88.3	1.133	0.06	0.138	0.160	
WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.01	0.103	0.119	
WLAN 5GHz	802.11ac-VHT80 MCS0	Front	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.01	0.371	0.440	
WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(4)	155	5775	14.40	14.50	1.023	88.3	1.133	-0.02	0.271	0.314	
WLAN 5GHz	802.11ac-VHT80 MCS0	Back	10mm	9	Ant 4+3(3)	155	5775	16.30	16.50	1.047	88.3	1.133	-0.02	0.168	0.199	



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
34	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(4)	169	5845	18.40	18.50	1.023	93.6	1.068	0.02	0.211	0.231
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(3)	169	5845	19.90	20.00	1.023	93.6	1.068	0.02	0.821	0.897
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(4)	173	5865	18.40	18.50	1.023	93.6	1.068	0.06	0.178	0.195
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(3)	173	5865	19.70	20.00	1.072	93.6	1.068	0.06	0.699	0.800
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(4)	177	5885	18.40	18.50	1.023	93.6	1.068	0.01	0.180	0.197
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	5	Ant 4+3(3)	177	5885	19.90	20.00	1.023	93.6	1.068	0.01	0.683	0.746
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	169	5845	18.40	18.50	1.023	93.6	1.068	0.04	0.880	0.962
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	169	5845	19.90	20.00	1.023	93.6	1.068	0.04	0.346	0.378
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	173	5865	18.40	18.50	1.023	93.6	1.068	-0.07	0.867	0.948
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	173	5865	19.70	20.00	1.072	93.6	1.068	-0.07	0.359	0.411
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	177	5885	18.40	18.50	1.023	93.6	1.068	0.14	1.030	1.126
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	177	5885	19.90	20.00	1.023	93.6	1.068	0.14	0.414	0.452
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	6	Ant 4+3(4)	169	5845	17.50	17.50	1.000	93.6	1.068	-0.01	0.197	0.210
	WLAN 5GHz	802.11a 6Mbps	Front	10mm	6	Ant 4+3(3)	169	5845	19.40	19.50	1.023	93.6	1.068	-0.01	0.687	0.751
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	169	5845	17.50	17.50	1.000	93.6	1.068	0.02	0.705	0.753
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	169	5845	19.40	19.50	1.023	93.6	1.068	0.02	0.343	0.375
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	173	5865	17.50	17.50	1.000	93.6	1.068	0.03	0.737	0.787
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	173	5865	19.30	19.50	1.047	93.6	1.068	0.03	0.337	0.377
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(4)	177	5885	17.50	17.50	1.000	93.6	1.068	0.12	0.880	0.940
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	6	Ant 4+3(3)	177	5885	19.30	19.50	1.047	93.6	1.068	0.12	0.393	0.440
	WLAN 5GHz	802.11ac-VHT160 MCS0	Front	10mm	7	Ant 4+3(4)	163	5815	15.30	15.50	1.047	88.2	1.134	-0.15	0.081	0.096
	WLAN 5GHz	802.11ac-VHT160 MCS0	Front	10mm	7	Ant 4+3(3)	163	5815	17.20	17.50	1.072	88.2	1.134	-0.15	0.344	0.418
	WLAN 5GHz	802.11ac-VHT160 MCS0	Back	10mm	7	Ant 4+3(4)	163	5815	15.30	15.50	1.047	88.2	1.134	0.07	0.325	0.386
	WLAN 5GHz	802.11ac-VHT160 MCS0	Back	10mm	7	Ant 4+3(3)	163	5815	17.20	17.50	1.072	88.2	1.134	0.07	0.189	0.230
	WLAN 5GHz	802.11ac-VHT160 MCS0	Front	10mm	8	Ant 4+3(4)	163	5815	12.40	12.50	1.023	88.2	1.134	-0.12	0.037	0.043
	WLAN 5GHz	802.11ac-VHT160 MCS0	Front	10mm	8	Ant 4+3(3)	163	5815	14.50	14.50	1.000	88.2	1.134	-0.12	0.167	0.189
	WLAN 5GHz	802.11ac-VHT160 MCS0	Back	10mm	8	Ant 4+3(4)	163	5815	12.40	12.50	1.023	88.2	1.134	0.06	0.150	0.174
	WLAN 5GHz	802.11ac-VHT160 MCS0	Back	10mm	8	Ant 4+3(3)	163	5815	14.50	14.50	1.000	88.2	1.134	0.06	0.087	0.099
WLAN 5GHz	802.11ac-VHT160 MCS0	Front	10mm	9	Ant 4+3(4)	163	5815	14.20	14.50	1.072	88.2	1.134	-0.05	0.056	0.068	
WLAN 5GHz	802.11ac-VHT160 MCS0	Front	10mm	9	Ant 4+3(3)	163	5815	16.30	16.50	1.047	88.2	1.134	-0.05	0.287	0.341	
WLAN 5GHz	802.11ac-VHT160 MCS0	Back	10mm	9	Ant 4+3(4)	163	5815	14.20	14.50	1.072	88.2	1.134	-0.19	0.219	0.266	
WLAN 5GHz	802.11ac-VHT160 MCS0	Back	10mm	9	Ant 4+3(3)	163	5815	16.30	16.50	1.047	88.2	1.134	-0.19	0.144	0.171	

<6GHz WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	APD
	WLAN 6GHz	802.11ax-HE160 MCS0	Front	10mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	0.16	0.039	0.046	0.29
	WLAN 6GHz	802.11ax-HE160 MCS0	Front	10mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	0.16	0.106	0.123	0.88
35	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	0.04	0.044	0.052	0.35
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	0.04	0.144	0.167	1.08
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(4)	15	6025	6.00	7.50	1.413	86.2	1.160	0.15	0.055	0.090	0.45
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(3)	15	6025	5.60	7.50	1.549	86.2	1.160	0.15	0.011	0.020	0.07
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(4)	47	6185	5.90	7.50	1.445	86.2	1.160	-0.04	0.049	0.082	0.37
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(3)	47	6185	5.60	7.50	1.549	86.2	1.160	-0.04	0.013	0.023	0.07
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(4)	111	6505	11.50	11.50	1.000	86.2	1.160	0.02	0.087	0.101	0.67
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(3)	111	6505	10.80	11.50	1.175	86.2	1.160	0.02	0.094	0.128	0.70
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(4)	175	6825	10.30	11.00	1.175	86.2	1.160	-0.08	0.029	0.040	0.23
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	10mm	5/6/7/8/9	Ant 4+3(3)	175	6825	9.40	11.00	1.445	86.2	1.160	-0.08	0.060	0.101	0.45



<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	2/4	Ant 4	78	2480	20.08	21.00	1.236	77.22	1.079	-0.13	0.165	0.220
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4	78	2480	20.08	21.00	1.236	77.22	1.079	0.06	0.254	0.339
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4	0	2402	19.60	21.00	1.381	77.22	1.079	0.14	0.163	0.243
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4	39	2402	19.51	21.00	1.410	77.22	1.079	-0.06	0.167	0.254
	Bluetooth	1Mbps	Front	10mm	2/4	Ant 3	0	2402	20.01	21.00	1.256	77.22	1.079	-0.12	0.093	0.126
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 3	0	2402	20.01	21.00	1.256	77.22	1.079	-0.04	0.119	0.161
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4	39	2441	19.45	21.00	1.429	77.22	1.079	0.02	0.155	0.239
36	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4	78	2480	19.73	21.00	1.340	77.22	1.079	-0.05	0.244	0.353
	Bluetooth	1Mbps	Front	10mm	2/4	Ant 4+3(4)	78	2480	16.57	17.50	1.239	77.22	1.079	-0.11	0.073	0.098
	Bluetooth	1Mbps	Front	10mm	2/4	Ant 4+3(3)	78	2480	16.38	17.50	1.295	77.22	1.079	-0.11	0.044	0.061
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4+3(4)	78	2480	16.57	17.50	1.239	77.22	1.079	0.09	0.117	0.156
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4+3(3)	78	2480	16.38	17.50	1.295	77.22	1.079	0.09	0.057	0.080
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4+3(4)	0	2402	15.91	17.50	1.443	77.22	1.079	0.11	0.068	0.106
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4+3(3)	0	2402	16.14	17.50	1.368	77.22	1.079	0.11	0.024	0.035
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4+3(4)	39	2441	15.97	17.50	1.423	77.22	1.079	-0.08	0.076	0.117
	Bluetooth	1Mbps	Back	10mm	2/4	Ant 4+3(3)	39	2441	16.10	17.50	1.381	77.22	1.079	-0.08	0.040	0.060
	Bluetooth	1Mbps	Front	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	-0.09	0.047	0.055
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	78	2480	14.65	15.00	1.084	77.22	1.079	0.01	0.064	0.075
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	0	2402	14.25	15.00	1.189	77.22	1.079	0.09	0.058	0.074
	Bluetooth	1Mbps	Back	10mm	3	Ant 4	39	2441	14.15	15.00	1.216	77.22	1.079	0.08	0.060	0.079
	Bluetooth	1Mbps	Front	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	-0.11	0.060	0.070
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	78	2480	14.65	15.00	1.084	77.22	1.079	-0.1	0.078	0.091
	Bluetooth	1Mbps	Back	10mm	3	Ant 3	0	2402	14.55	15.00	1.109	77.22	1.079	-0.04	0.037	0.044
36	Bluetooth	1Mbps	Back	10mm	3	Ant 3	39	2441	14.45	15.00	1.135	77.22	1.079	-0.13	0.023	0.028
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	-0.16	0.042	0.050
	Bluetooth	1Mbps	Front	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	-0.16	0.031	0.036
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	0	2402	14.55	15.00	1.109	76.83	1.084	0.06	0.057	0.069
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	0	2402	14.65	15.00	1.084	76.83	1.084	0.06	0.038	0.045
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	39	2441	14.05	15.00	1.245	76.83	1.084	-0.13	0.062	0.084
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	39	2441	14.35	15.00	1.161	76.83	1.084	-0.13	0.031	0.039
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(4)	78	2480	14.55	15.00	1.109	76.83	1.084	0.19	0.076	0.091
	Bluetooth	1Mbps	Back	10mm	3	Ant 4+3(3)	78	2480	14.55	15.00	1.109	76.83	1.084	0.19	0.114	0.137



15.4 Product Specific SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	
37	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	-0.18	1.630	1.785	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	-0.18	1.920	2.305	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(4)	56	5280	19.90	20.00	1.023	93.42	1.070	-0.15	1.860	2.037	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(3)	56	5280	19.30	20.00	1.175	93.42	1.070	-0.15	2.040	2.565	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(4)	60	5300	19.00	19.00	1.000	93.42	1.070	-0.15	1.200	1.284	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(3)	60	5300	18.20	19.00	1.202	93.42	1.070	-0.15	1.290	1.659	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(4)	64	5320	19.30	19.50	1.047	93.42	1.070	-0.11	1.240	1.389	
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5/6	Ant 4+3(3)	64	5320	18.40	19.50	1.288	93.42	1.070	-0.11	1.270	1.751	
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	-0.14	1.770	1.938	
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	-0.14	1.430	1.717	
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	-0.03	0.001	0.001	
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	-0.03	0.716	0.860	
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	-0.08	0.872	0.955	
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	-0.08	0.001	0.001	
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	5/6	Ant 4+3(4)	52	5260	19.90	20.00	1.023	93.42	1.070	0.09	0.361	0.395	
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	5/6	Ant 4+3(3)	52	5260	19.50	20.00	1.122	93.42	1.070	0.09	0.001	0.001	
		WLAN 5GHz	802.11n-HT40 MCS0	Front	0mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	-0.07	0.660	0.803
		WLAN 5GHz	802.11n-HT40 MCS0	Front	0mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	-0.07	1.160	1.378
WLAN 5GHz		802.11n-HT40 MCS0	Back	0mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	-0.08	0.645	0.784	
WLAN 5GHz		802.11n-HT40 MCS0	Back	0mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	-0.08	0.758	0.901	
WLAN 5GHz		802.11n-HT40 MCS0	Left Side	0mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	-0.05	0.001	0.001	
WLAN 5GHz		802.11n-HT40 MCS0	Left Side	0mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	-0.05	0.155	0.184	
WLAN 5GHz		802.11n-HT40 MCS0	Right Side	0mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	0.06	0.321	0.390	
WLAN 5GHz		802.11n-HT40 MCS0	Right Side	0mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	0.06	0.001	0.001	
WLAN 5GHz		802.11n-HT40 MCS0	Top Side	0mm	7/9	Ant 4+3(4)	54	5270	15.30	16.00	1.175	96.6	1.035	0.02	0.155	0.188	
WLAN 5GHz		802.11n-HT40 MCS0	Top Side	0mm	7/9	Ant 4+3(3)	54	5270	16.40	17.00	1.148	96.6	1.035	0.02	0.001	0.001	
		WLAN 5GHz	802.11ac-VHT80 MCS0	Front	0mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	-0.05	0.555	0.629
		WLAN 5GHz	802.11ac-VHT80 MCS0	Front	0mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	-0.05	0.814	0.988
		WLAN 5GHz	802.11ac-VHT80 MCS0	Back	0mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	0.01	0.553	0.627
		WLAN 5GHz	802.11ac-VHT80 MCS0	Back	0mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	0.01	0.365	0.443
		WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	0	0.001	0.001
		WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	0	0.228	0.277
		WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	-0.16	0.233	0.264
		WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	-0.16	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	8	Ant 4+3(4)	58	5290	15.00	15.00	1.000	88.3	1.133	0.04	0.130	0.147	
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	8	Ant 4+3(3)	58	5290	14.70	15.00	1.072	88.3	1.133	0.04	0.137	0.166	



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.60	1.068	-0.03	0.684	0.920
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.60	1.068	-0.03	1.960	2.243
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	100	5500	18.00	19.00	1.259	93.60	1.068	-0.06	1.110	1.492
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	100	5500	19.70	20.00	1.072	93.60	1.068	-0.06	1.470	1.682
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	116	5580	18.10	19.00	1.230	93.60	1.068	-0.08	1.150	1.511
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	116	5580	19.60	20.00	1.096	93.60	1.068	-0.08	1.840	2.155
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	124	5620	18.20	19.00	1.202	93.60	1.068	0.06	0.985	1.265
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	124	5620	19.40	20.00	1.148	93.60	1.068	0.06	1.870	2.293
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	132	5660	18.10	19.00	1.230	93.60	1.068	0	0.858	1.127
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	132	5660	19.50	20.00	1.122	93.60	1.068	0	1.970	2.361
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.60	1.068	-0.04	1.420	1.909
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.60	1.068	-0.04	0.803	0.919
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.60	1.068	-0.16	0.001	0.001
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.60	1.068	-0.16	0.639	0.731
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.60	1.068	-0.03	0.766	1.030
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.60	1.068	-0.03	0.001	0.001
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	5	Ant 4+3(4)	144	5720	18.00	19.00	1.259	93.60	1.068	0.04	0.499	0.671
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	5	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.60	1.068	0.04	0.187	0.214
38	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	0.05	1.020	1.222
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	0.05	2.210	2.529
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	100	5500	18.00	18.50	1.122	93.6	1.068	0.06	1.170	1.402
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	100	5500	19.70	20.00	1.072	93.6	1.068	0.06	1.600	1.831
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	116	5580	18.10	18.50	1.096	93.6	1.068	-0.03	1.110	1.300
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	116	5580	19.60	20.00	1.096	93.6	1.068	-0.03	1.750	2.049
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	124	5620	18.20	18.50	1.072	93.6	1.068	0.02	1.180	1.350
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	124	5620	19.40	20.00	1.148	93.6	1.068	0.02	1.830	2.244
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	132	5660	18.10	18.50	1.096	93.6	1.068	0.09	1.140	1.335
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	132	5660	19.50	20.00	1.122	93.6	1.068	0.09	1.970	2.361
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	0.02	1.310	1.570
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	0.02	1.410	1.614
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	-0.08	0.001	0.001
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.08	1.060	1.213
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	-0.09	0.695	0.833
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.09	0.001	0.001
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	-0.05	0.519	0.622
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	-0.05	0.260	0.298



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	-0.07	0.509	0.556
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	-0.07	2.190	2.339
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(4)	100	5500	15.40	15.50	1.023	93.6	1.068	0.08	0.414	0.452
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(3)	100	5500	19.70	20.00	1.072	93.6	1.068	0.08	1.980	2.266
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(4)	116	5580	15.40	15.50	1.023	93.6	1.068	0.13	0.425	0.464
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(3)	116	5580	19.90	20.00	1.023	93.6	1.068	0.13	1.990	2.175
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(4)	124	5620	15.40	15.50	1.023	93.6	1.068	-0.06	0.487	0.532
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(3)	124	5620	19.90	20.00	1.023	93.6	1.068	-0.06	1.890	2.066
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(4)	132	5660	15.40	15.50	1.023	93.6	1.068	0.15	0.468	0.511
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	7	Ant 4+3(3)	132	5660	19.90	20.00	1.023	93.6	1.068	0.15	1.880	2.055
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	-0.09	0.687	0.751
	WLAN 5GHz	802.11a 6Mbps	Back	0mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	-0.09	1.280	1.367
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	0.15	0.001	0.001
	WLAN 5GHz	802.11a 6Mbps	Left Side	0mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	0.15	0.967	1.033
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	-0.09	0.396	0.433
	WLAN 5GHz	802.11a 6Mbps	Right Side	0mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	-0.09	0.001	0.001
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	7	Ant 4+3(4)	144	5720	15.40	15.50	1.023	93.6	1.068	0.04	0.279	0.305
	WLAN 5GHz	802.11a 6Mbps	Top Side	0mm	7	Ant 4+3(3)	144	5720	20.00	20.00	1.000	93.6	1.068	0.04	0.263	0.281
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	0mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	0.02	0.340	0.394
	WLAN 5GHz	802.11ac-VHT80 MCS0	Front	0mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	0.02	0.968	1.097
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	0mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	-0.15	0.358	0.415
	WLAN 5GHz	802.11ac-VHT80 MCS0	Back	0mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	-0.15	0.465	0.527
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	-0.18	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Side	0mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	-0.18	0.334	0.378
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	0.15	0.161	0.187
	WLAN 5GHz	802.11ac-VHT80 MCS0	Right Side	0mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	0.15	0.001	0.001
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	8/9	Ant 4+3(4)	122	5610	12.90	13.00	1.023	88.3	1.133	-0.02	0.103	0.119
	WLAN 5GHz	802.11ac-VHT80 MCS0	Top Side	0mm	8/9	Ant 4+3(3)	122	5610	17.00	17.00	1.000	88.3	1.133	-0.02	0.059	0.067



Table with columns: Plot No., Band, Mode, Test Position, Gap (mm), Power Index, Antenna, Ch., Freq. (MHz), Average Power (dBm), Tune-Up Limit (dBm), Tune-Up Scaling Factor, Duty Cycle %, Duty Cycle Scaling Factor, Power Drift (dB), Measured 10g SAR (W/kg), Reported 10g SAR (W/kg). The table contains multiple rows of test data for various frequencies and antenna configurations.

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	APD
40	WLAN 6GHz	802.11ax-HE160 MCS0	Front	0mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	0.04	0.112	0.133	2.64
	WLAN 6GHz	802.11ax-HE160 MCS0	Front	0mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	0.04	0.206	0.239	4.85
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	0.05	0.163	0.193	3.75
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	0.05	0.379	0.440	9.04
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(4)	15	6025	6.00	7.50	1.413	86.2	1.160	0.03	0.112	0.184	2.69
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(3)	15	6025	5.60	7.50	1.549	86.2	1.160	0.03	0.024	0.043	0.58
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(4)	47	6185	5.90	7.50	1.445	86.2	1.160	0.09	0.096	0.161	2.28
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(3)	47	6185	5.60	7.50	1.549	86.2	1.160	0.09	0.035	0.063	0.84
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(4)	111	6505	11.50	11.50	1.000	86.2	1.160	-0.02	0.155	0.180	3.67
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(3)	111	6505	10.80	11.50	1.175	86.2	1.160	-0.02	0.171	0.233	4.10
41	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(4)	175	6825	10.30	11.00	1.175	86.2	1.160	-0.07	0.094	0.128	2.19
	WLAN 6GHz	802.11ax-HE160 MCS0	Back	0mm	5/6/7/8/9	Ant 4+3(3)	175	6825	9.40	11.00	1.445	86.2	1.160	-0.07	0.181	0.303	4.35
42	WLAN 6GHz	802.11ax-HE160 MCS0	Left Side	0mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	-0.1	0.001	0.001	0.00
	WLAN 6GHz	802.11ax-HE160 MCS0	Left Side	0mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	-0.1	0.208	0.241	4.99
43	WLAN 6GHz	802.11ax-HE160 MCS0	Right Side	0mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	0.08	0.069	0.082	1.57
	WLAN 6GHz	802.11ax-HE160 MCS0	Right Side	0mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	0.08	0.001	0.001	0.00
44	WLAN 6GHz	802.11ax-HE160 MCS0	Top Side	0mm	5/6/7/8/9	Ant 4+3(4)	207	6985	12.40	12.50	1.023	86.2	1.160	0.01	0.040	0.047	0.92
	WLAN 6GHz	802.11ax-HE160 MCS0	Top Side	0mm	5/6/7/8/9	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.2	1.160	0.01	0.008	0.009	0.19

15.5 6GHz PD Test result

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(4)	15	6025	6.00	0.0625	2.53	2.1842909	2.00	2.61
WLAN6GHz	802.11ax-HE160 MCS0	Back	10mm	Ant 4+3(4)	15	6025	6.00	0.25	1.53		0.528	0.57
WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(3)	207	6985	12.50	0.0625	3.26	-0.9956626	2.59	3.78
WLAN6GHz	802.11ax-HE160 MCS0	Back	8.59mm	Ant 4+3(3)	207	6985	12.50	0.25	4.10		1.62	1.80
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	15	6025	10.00	0.0625	1.94	0.6508526	3.17	3.84
WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 4+3(3)	15	6025	10.00	0.25	1.67		0.79	0.836
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	207	6985	10.60	0.0625	2.70	1.2601239	3.25	3.75
WLAN6GHz	802.11ax-HE160 MCS0	Front	8.59mm	Ant 4+3(3)	207	6985	10.60	0.25	2.02		0.831	0.933

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Grid Step (λ)	Scaling Factor for measurement uncertainty	Power Drift (dB)	Normal psPD (W/m ²)	Scaled Normal psPD (W/m ²)	Total psPD (W/m ²)	Scaled Total psPD (W/m ²)
41	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(4)	15	6025	6.00	7.50	1.413	86.20	1.160	0.0625	1.5535	-0.18	2.00	5.09	2.61	6.64
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(4)	47	6185	5.90	7.50	1.445	86.20	1.160	0.0625	1.5535	-0.19	0.96	2.49	1.16	3.02
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(4)	111	6505	11.50	11.50	1.000	86.20	1.160	0.0625	1.5535	-0.03	2.99	5.39	4.15	7.48
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(3)	175	6825	9.40	11.00	1.445	86.20	1.160	0.0625	1.5535	-0.17	2.11	5.50	2.63	6.85
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(3)	207	6985	12.50	12.50	1.000	86.20	1.160	0.0625	1.5535	-0.07	2.59	4.67	3.78	6.81
	WLAN6GHz	802.11ax-HE160 MCS0	Back	2mm	Ant 4+3(4)	111	6505	11.50	11.50	1.000	86.20	1.160	0.0625	1.5535	-0.04	2.32	4.18	3.07	5.53
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	15	6025	10.00	10.00	1.000	86.20	1.160	0.0625	1.5535	-0.19	3.17	5.71	3.84	6.92
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	47	6185	10.00	10.00	1.000	86.20	1.160	0.0625	1.5535	0.11	3.37	6.07	3.91	7.05
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	111	6505	9.40	10.00	1.148	86.20	1.160	0.0625	1.5535	0.17	3.20	6.62	3.61	7.47
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	175	6825	8.00	9.50	1.413	86.20	1.160	0.0625	1.5535	-0.11	2.12	5.40	2.43	6.19
42	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	207	6985	10.60	11.00	1.096	86.20	1.160	0.0625	1.5535	-0.14	3.25	6.42	3.75	7.41
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 4+3(3)	111	6505	9.40	10.00	1.148	86.20	1.160	0.0625	1.5535	-0.15	3.10	6.41	3.51	7.26

15.6 Repeated SAR Measurement

General Note:

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

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)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23330	793	23.94	25.20	1.337	-0.1	0.886	-	1.184
2nd	LTE Band 14_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2	23330	793	23.94	25.20	1.337	-0.1	0.871	1.02	1.164
1st	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	2/3	26865	831.5	24.55	25.20	1.161	-0.19	0.846	-	0.983
2nd	LTE Band 26_Ant 1	15M	QPSK	1	0	Right Tilted	0mm	2/3	26865	831.5	24.55	25.20	1.161	-0.08	0.831	1.02	0.965
1st	FR1 n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	518598	2592.99	20.52	21.60	1.282	-0.08	0.915	-	1.173
2nd	FR1 n41_HPUE_Ant 5	100M	BPSK	270	0	Left Cheek	0mm	2	518598	2592.99	20.52	21.60	1.282	0.15	0.852	1.07	1.093
1st	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	518598	2592.99	23.52	23.90	1.091	-0.19	0.912	-	0.995
2nd	FR1 n41_HPUE_Ant 5	100M	BPSK	135	69	Right Side	10mm	4	518598	2592.99	23.52	23.90	1.091	-0.16	0.863	1.06	0.942

No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	11	2462	18.45	18.50	1.012	93.40	1.071	-0.01	1.030	-	1.116
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	11	2462	17.95	18.50	1.135	93.40	1.071	-0.01	0.189	-	0.230
2nd	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(4)	11	2462	18.45	18.50	1.012	93.40	1.071	0.02	1.000	1.03	1.083
	WLAN2.4GHz	802.11g 6Mbps	Left Tilted	0mm	1	Ant 4+3(3)	11	2462	17.95	18.50	1.135	93.40	1.071	0.02	0.172	-	0.209
1st	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	122	5610	14.20	15.00	1.202	88.30	1.133	0	0.806	-	1.098
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	122	5610	12.80	14.00	1.318	88.30	1.133	0	0.098	-	0.146
2nd	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(4)	122	5610	14.20	15.00	1.202	88.30	1.133	-0.07	0.633	1.27	0.862
	WLAN 5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	1	Ant 4+3(3)	122	5610	12.80	14.00	1.318	88.30	1.133	-0.07	0.125	-	0.187
1st	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	165	5825	18.20	18.50	1.072	96.6	1.035	0.08	0.910	-	1.009
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	165	5825	19.90	20.00	1.023	96.6	1.035	0.08	0.397	-	0.420
2nd	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	165	5825	18.20	18.50	1.072	96.6	1.035	0.02	0.905	1.01	1.004
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	165	5825	19.90	20.00	1.023	96.6	1.035	0.02	0.389	-	0.412
1st	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	177	5885	18.40	18.50	1.023	93.6	1.068	0.14	1.030	-	1.126
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	177	5885	19.90	20.00	1.023	93.6	1.068	0.14	0.414	-	0.452
2nd	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(4)	177	5885	18.40	18.50	1.023	93.6	1.068	-0.18	0.943	1.09	1.031
	WLAN 5GHz	802.11a 6Mbps	Back	10mm	5	Ant 4+3(3)	177	5885	19.90	20.00	1.023	93.6	1.068	-0.18	0.415	-	0.454

No.	Band	Mode	Test Position	Gap (mm)	Power Index	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	WLAN5/6GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	56	5280	19.90	20.00	1.023	93.42	1.070	-0.15	1.860	-	2.037
	WLAN5/6GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	56	5280	19.30	20.00	1.175	93.42	1.070	-0.15	2.040	-	2.565
2nd	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	56	5280	19.90	20.00	1.023	93.42	1.070	-0.03	1.770	1.05	1.938
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	56	5280	19.30	20.00	1.175	93.42	1.070	-0.03	1.940	-	2.439
1st	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	173	5865	18.40	18.50	1.023	93.6	1.068	-0.17	0.806	-	0.881
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	173	5865	19.70	20.00	1.072	93.6	1.068	-0.17	2.040	-	2.335
2nd	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(4)	173	5865	18.40	18.50	1.023	93.6	1.068	-0.06	0.770	1.05	0.842
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	5	Ant 4+3(3)	173	5865	19.70	20.00	1.072	93.6	1.068	-0.06	1.940	-	2.220
1st	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	0.05	1.020	-	1.222
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	0.05	2.210	-	2.529
2nd	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(4)	144	5720	18.00	18.50	1.122	93.6	1.068	0.05	0.991	1.01	1.188
	WLAN 5GHz	802.11a 6Mbps	Front	0mm	6	Ant 4+3(3)	144	5720	19.70	20.00	1.072	93.6	1.068	0.05	2.180	-	2.495



15.7 FR1 n41 Power Class 2 and Power Class 3 Linearity

This device support Power Class 2 and Power Class 3 operations for FR1 n41. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each FR1 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required. Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%.

< FR1 n41 Linearity Data for Head >

TX0	FR1 N41	FR1 N41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	18.60	21.60
Reported 1g SAR (W/kg)	1.157	1.173
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	72.44	72.27
Linearity SAR(W/kg)	1.15	
% deviation from expected linearity		1.62%
TX1	FR1 N41	FR1 N41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	19.50	22.50
Reported 1g SAR (W/kg)	1.089	1.032
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	89.13	88.91
Linearity SAR(W/kg)	1.09	
% deviation from expected linearity		-5.01%

< FR1 n41 Linearity Data for Hotspot >

TX0	FR1 N41	FR1 N41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	20.90	23.90
Reported 1g SAR (W/kg)	0.981	0.995
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	123.03	122.74
Linearity SAR(W/kg)	0.98	
% deviation from expected linearity		1.67%
TX1	FR1 N41	FR1 N41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	23.40	26.40
Reported 1g SAR (W/kg)	0.945	0.993
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	218.78	218.26
Linearity SAR(W/kg)	0.94	
% deviation from expected linearity		5.33%



< FR1 n41 Linearity Data for Body-worn >

TX0	FR1 N41	FR1 N41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	21.70	24.70
Reported 1g SAR (W/kg)	0.646	0.619
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	147.91	147.56
Linearity SAR(W/kg)	0.64	
% deviation from expected linearity		-3.95%
TX1	FR1 N41	FR1 N41
	(Power Class 3)	(Power Class 2)
Maximum Tune up Power (dBm)	24.20	27.20
Reported 1g SAR (W/kg)	0.631	0.577
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	263.03	262.40
Linearity SAR(W/kg)	0.63	
% deviation from expected linearity		-8.34%

16. Simultaneous Transmission Analysis

Portable Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi	BT
				Power	Power
Head	WWAN standalone	WWAN	Index 2		
	WiFi standalone	WiFi 2.4G 11b SISO (Ant 4)		Index 1	Index 2 (RSDB)
		WiFi 2.4G 11b SISO (Ant 3)			
		WiFi 2.4G MIMO/CDD (Ant4+3)			
		WiFi 5G/6E MIMO (Ant4+3)			
		WiFi 2.4G 11b SISO (Ant 4) + WiFi 5G/6E MIMO (Ant4+3)			
		WiFi 2.4G 11b SISO (Ant 3) + WiFi 5G/6E MIMO (Ant4+3)			
		WiFi 2.4G 11g/n/ac/ax MIMO (Ant4+3) + WiFi 5G/6E MIMO (Ant4+3)			
	BT standalone	Bluetooth (Ant4)			Index 1
		Bluetooth (Ant3)			
		Bluetooth (Ant4+3) (BDR/EDR Only)			
	WiFi +BT	WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4)		Index 1	Index 1
		WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant3)			
		WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4+3)			
	WWAN + WiFi	WWAN + WiFi 2.4G 11b SISO (Ant 4)		Index 3 / Index 7 (Hotspot on)	Index 3
		WWAN + WiFi 2.4G 11b SISO (Ant 3)			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)			
		WWAN + WiFi 5G/6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G 11b SISO (Ant 4) + WiFi 5G/6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G 11b SISO (Ant 3) + WiFi 5G/6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G MIMO (Ant4+3) + WiFi 5G/6E MIMO (Ant4+3)			
	WWAN + BT	WWAN + Bluetooth (Ant4)		Index 3 / Index 7 (Hotspot on)	Index 1
		WWAN + Bluetooth (Ant3)			
		WWAN + Bluetooth (Ant4+3) (BDR/EDR Only)			
WWAN + WiFi + BT	WWAN + WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4)		Index 3 / Index 7 (Hotspot on)	Index 3	
	WWAN + WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant3)				
	WWAN + WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4+3)				



Portable Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi	BT
				Power	Power
Body	WWAN standalone	WWAN	Index 5		
	WiFi standalone	WiFi 2.4G 11b SISO (Ant 4)		Index 5	Index 6 (RSDB)
		WiFi 2.4G 11b SISO (Ant 3)			
		WiFi 2.4G MIMO/CDD (Ant4+3)			
		WiFi 5G/6E MIMO (Ant4+3)			
		WiFi 2.4G 11b SISO (Ant 4) + WiFi 5G/6E MIMO (Ant4+3)			
		WiFi 2.4G 11b SISO (Ant 3) + WiFi 5G/6E MIMO (Ant4+3)			
		WiFi 2.4G 11g/n/ac/ax MIMO (Ant4+3) + WiFi 5G/6E MIMO (Ant4+3)			
	BT standalone	Bluetooth (Ant4)			Index 4
		Bluetooth (Ant3)			
		Bluetooth (Ant4+3) (BDR/EDR Only)			
	WiFi +BT	WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4)		Index 5	Index 2
		WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant3)			
		WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4+3)			
	WWAN + WiFi	WWAN + WiFi 2.4G 11b SISO (Ant 4)	Index 6 / Index 4 (Hotspot on)	Index 7	Index 8 (RSDB)
		WWAN + WiFi 2.4G 11b SISO (Ant 3)			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)			
		WWAN + WiFi 5G/6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G 11b SISO (Ant 4) + WiFi 5G/6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G 11b SISO (Ant 3) + WiFi 5G/6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G MIMO (Ant4+3) + WiFi 5G/6E MIMO (Ant4+3)			
	WWAN + BT	WWAN + Bluetooth (Ant4)	Index 6 / Index 4 (Hotspot on)		Index 2
		WWAN + Bluetooth (Ant3)			
		WWAN + Bluetooth (Ant4+3) (BDR/EDR Only)			
WWAN + WiFi +BT	WWAN + WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4)	Index 6 / Index 4 (Hotspot on)	Index 9	Index 3	
	WWAN + WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant3)				
	WWAN + WiFi 5G/6E MIMO (Ant4+3) + Bluetooth (Ant4+3)				

General Note:

- Simultaneous operation at maximum power levels when the device is neither against the body nor the head (i.e. in a mobile RF exposure condition) is addressed in Sporton's RF Exposure report FA161608-03A
- The Sim-Tx configuration combination include in operation description will be match the title in the below Sum-Tx evaluation table.
- This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
- The worst case WLAN reported SAR for each configuration was used for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with WLAN.
- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation < 1.6W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
- For WWAN power, when the device is in head mode and hotspot function is enabled, the device will select power index 7 which is further lower than power index 3, as described in the operational description. In this report, standalone and simultaneous SAR compliance for the mentioned scenario was justified at power index 3 conservatively.

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

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

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

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

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

16.2 Head Exposure Conditions

<WLAN Index 1, BT Index 1>

Exposure Position	2	3	4	5	6	7	8	5+6 Summed 1g SAR (W/kg)	5+7 Summed 1g SAR (W/kg)	5+8 Summed 1g SAR (W/kg)
	WLAN2.4G Hz Ant 4 1g SAR (W/kg)	WLAN2.4G Hz Ant 3 1g SAR (W/kg)	WLAN2.4G Hz Ant 4+3 1g SAR (W/kg)	WLAN5/6G Hz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)			
Right Cheek	0.532	1.020	0.919	1.131	0.088	0.201	0.243	1.219	1.332	1.374
Right Tilted	0.607	0.142	0.501	0.368	0.105	0.046	0.117	0.473	0.414	0.485
Left Cheek	0.713	0.247	0.829	1.159	0.136	0.054	0.147	1.295	1.213	1.306
Left Tilted	0.973	0.087	1.116	0.948	0.163	0.015	0.173	1.111	0.963	1.121

<WLAN Index 2>

Exposure Position	2	3	4	5	2+5 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)			
Right Cheek	0.239	0.420	0.399	0.942	1.181	1.362	1.341
Right Tilted	0.323	0.087	0.518	0.328	0.651	0.415	0.846
Left Cheek	0.209	0.246	0.468	0.993	1.202	1.239	1.461
Left Tilted	0.332	0.059	0.596	0.844	1.176	0.903	1.440



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

Table with columns: WWAN Band, Exposure Position, 1g SAR (W/kg) for various bands (WWAN, WLAN2.4GHz, WLAN5/6GHz, Bluetooth), and Summed 1g SAR (W/kg) for combinations of bands. Rows include GSM850_Ant 0, GSM1900_Ant 2, WCDMA II_Ant 2, WCDMA IV_Ant 2, WCDMA V_Ant 0, LTE Band 7_Ant 2, LTE Band 12_Ant 0, LTE Band 13_Ant 0, LTE Band 14_Ant 0, LTE Band 25_Ant 2, LTE Band 26_Ant 0, LTE Band 30_Ant 2, and LTE Band 41_Ant 2.



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	Left Tilted	0.194	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.357	0.209	0.367	0.650	0.502	0.660	0.487	0.526	0.253	0.790
LTE Band 48_Ant 6	Right Cheek	0.126	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.214	0.327	0.369	0.574	0.687	0.729	0.486	0.365	0.546	0.525
	Right Tilted	0.093	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.198	0.139	0.210	0.514	0.455	0.526	0.409	0.416	0.180	0.611
	Left Cheek	0.219	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.355	0.273	0.366	0.771	0.689	0.782	0.635	0.428	0.465	0.687
	Left Tilted	0.069	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.232	0.084	0.242	0.525	0.377	0.535	0.362	0.401	0.128	0.665
LTE Band 66_Ant 2	Right Cheek	0.297	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.385	0.498	0.540	0.745	0.858	0.900	0.657	0.536	0.717	0.696
	Right Tilted	0.147	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.252	0.193	0.264	0.568	0.509	0.580	0.463	0.470	0.234	0.665
	Left Cheek	0.187	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.323	0.241	0.334	0.739	0.657	0.750	0.603	0.396	0.433	0.655
	Left Tilted	0.113	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.276	0.128	0.286	0.569	0.421	0.579	0.406	0.445	0.172	0.709
LTE Band 71_Ant 0	Right Cheek	0.295	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.383	0.496	0.538	0.743	0.856	0.898	0.655	0.534	0.715	0.694
	Right Tilted	0.127	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.232	0.173	0.244	0.548	0.489	0.560	0.443	0.450	0.214	0.645
	Left Cheek	0.311	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.447	0.365	0.458	0.863	0.781	0.874	0.727	0.520	0.557	0.779
	Left Tilted	0.149	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.312	0.164	0.322	0.605	0.457	0.615	0.442	0.481	0.208	0.745
FR1 n5_Ant 0	Right Cheek	0.277	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.365	0.478	0.520	0.725	0.838	0.880	0.637	0.516	0.697	0.676
	Right Tilted	0.148	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.253	0.194	0.265	0.569	0.510	0.581	0.464	0.471	0.235	0.666
	Left Cheek	0.368	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.504	0.422	0.515	0.920	0.838	0.931	0.784	0.577	0.614	0.836
	Left Tilted	0.210	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.373	0.225	0.383	0.666	0.518	0.676	0.503	0.542	0.269	0.806
FR1 n7_Ant 2	Right Cheek	0.904	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.992	1.105	1.147	1.352	1.465	1.507	1.264	1.143	1.324	1.303
	Right Tilted	0.181	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.286	0.227	0.298	0.602	0.543	0.614	0.497	0.504	0.268	0.699
	Left Cheek	0.474	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.610	0.528	0.621	1.026	0.944	1.037	0.890	0.683	0.720	0.942
	Left Tilted	0.245	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.408	0.260	0.418	0.701	0.553	0.711	0.538	0.577	0.304	0.841
FR1 n12_Ant 0	Right Cheek	0.265	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.353	0.466	0.508	0.713	0.826	0.868	0.625	0.504	0.685	0.664
	Right Tilted	0.161	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.266	0.207	0.278	0.582	0.523	0.594	0.477	0.484	0.248	0.679
	Left Cheek	0.304	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.440	0.358	0.451	0.856	0.774	0.867	0.720	0.513	0.550	0.772
	Left Tilted	0.186	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.349	0.201	0.359	0.642	0.494	0.652	0.479	0.518	0.245	0.782
FR1 n25_Ant 2	Right Cheek	0.360	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.448	0.561	0.603	0.808	0.921	0.963	0.720	0.599	0.780	0.759
	Right Tilted	0.093	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.198	0.139	0.210	0.514	0.455	0.526	0.409	0.416	0.180	0.611
	Left Cheek	0.142	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.278	0.196	0.289	0.694	0.612	0.705	0.558	0.351	0.388	0.610
	Left Tilted	0.137	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.300	0.152	0.310	0.593	0.445	0.603	0.430	0.469	0.196	0.733
FR1 n30_Ant 2	Right Cheek	0.521	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.609	0.722	0.764	0.969	1.082	1.124	0.881	0.760	0.941	0.920
	Right Tilted	0.191	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.296	0.237	0.308	0.612	0.553	0.624	0.507	0.514	0.278	0.709
	Left Cheek	0.367	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.503	0.421	0.514	0.919	0.837	0.930	0.783	0.576	0.613	0.835
	Left Tilted	0.283	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.446	0.298	0.456	0.739	0.591	0.749	0.576	0.615	0.342	0.879
FR1 n41_Ant 5	Right Cheek	0.264	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.352	0.465	0.507	0.712	0.825	0.867	0.624	0.503	0.684	0.663
	Right Tilted	0.159	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.264	0.205	0.276	0.580	0.521	0.592	0.475	0.482	0.246	0.677
	Left Cheek	0.963	0.209	0.246	0.468	0.416	0.136	0.054	0.147	1.099	1.017	1.110	1.515	1.433	1.526	1.379	1.172	1.209	1.431
	Left Tilted	0.319	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.482	0.334	0.492	0.775	0.627	0.785	0.612	0.651	0.378	0.915
FR1 n66_Ant 2	Right Cheek	0.287	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.375	0.488	0.530	0.735	0.848	0.890	0.647	0.526	0.707	0.686
	Right Tilted	0.131	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.236	0.177	0.248	0.552	0.493	0.564	0.447	0.454	0.218	0.649
	Left Cheek	0.143	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.279	0.197	0.290	0.695	0.613	0.706	0.559	0.352	0.389	0.611
	Left Tilted	0.118	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.281	0.133	0.291	0.574	0.426	0.584	0.411	0.450	0.177	0.714
FR1 n71_Ant 0	Right Cheek	0.238	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.326	0.439	0.481	0.686	0.799	0.841	0.598	0.477	0.658	0.637
	Right Tilted	0.111	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.216	0.157	0.228	0.532	0.473	0.544	0.427	0.434	0.198	0.629
	Left Cheek	0.275	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.411	0.329	0.422	0.827	0.745	0.838	0.691	0.484	0.521	0.743
	Left Tilted	0.135	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.298	0.150	0.308	0.591	0.443	0.601	0.428	0.467	0.194	0.731
FR1 n77_Ant 6	Right Cheek	0.382	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.470	0.583	0.625	0.830	0.943	0.985	0.742	0.621	0.802	0.781
	Right Tilted	0.376	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.481	0.422	0.493	0.797	0.738	0.809	0.692	0.699	0.463	0.894
	Left Cheek	0.754	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.890	0.808	0.901	1.306	1.224	1.317	1.170	0.963	1.000	1.222
	Left Tilted	0.246	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.409	0.261	0.419	0.702	0.554	0.712	0.539	0.578	0.305	0.842

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

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)										
GSM850_Ant 1	Right Cheek	0.976	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.064	1.177	1.219	1.424	1.537	1.579	1.336	1.215	1.396	1.375
	Right Tilted	0.633	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.738	0.679	0.750	1.054	0.995	1.066	0.949	0.956	0.720	1.151
	Left Cheek	0.477	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.613	0.531	0.624	1.029	0.947	1.040	0.893	0.686	0.723	0.945
	Left Tilted	0.359	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.522	0.374	0.532	0.815	0.667	0.825	0.652	0.691	0.418	0.955
GSM1900_Ant 0	Right Cheek	0.209	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.297	0.410	0.452	0.657	0.770	0.812	0.569	0.448	0.629	0.608
	Right Tilted	0.246	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.351	0.292	0.363	0.667	0.608	0.679	0.562	0.569	0.333	0.764
	Left Cheek	0.555	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.691	0.609	0.702	1.107	1.025	1.118	0.971	0.764	0.801	1.023
	Left Tilted	0.261	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.424	0.276	0.434	0.717	0.569	0.727	0.554	0.593	0.320	0.857
WCDMA II_Ant 0	Right Cheek	0.370	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.458	0.571	0.613	0.818	0.931	0.973	0.730	0.609	0.790	0.769
	Right Tilted	0.319	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.424	0.365	0.436	0.740	0.681	0.752	0.635	0.642	0.406	0.837
	Left Cheek	0.969	0.209	0.246	0.468	0.416	0.136	0.054	0.147	1.105	1.023	1.116	1.521	1.439	1.532	1.385	1.178	1.215	1.437
	Left Tilted	0.279	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.442	0.294	0.452	0.735	0.587	0.745	0.572	0.611	0.338	0.875
WCDMA IV_Ant 0	Right Cheek	0.311	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.399	0.512	0.554	0.759	0.872	0.914	0.671	0.550	0.731	0.710
	Right Tilted	0.340	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.445	0.386	0.457	0.761	0.702	0.773	0.656	0.663	0.427	0.858
	Left Cheek	0.721	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.857	0.775	0.868	1.273	1.191	1.284	1.137	0.930	0.967	1.189
	Left Tilted	0.361	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.524	0.376	0.534	0.817	0.669	0.827	0.654	0.693	0.420	0.957
WCDMA V_Ant 1	Right Cheek	0.986	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.074	1.187	1.229	1.434	1.547	1.589	1.346	1.225	1.406	1.385
	Right Tilted	0.752	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.857	0.798	0.869	1.173	1.114	1.185	1.068	1.075	0.839	1.270
	Left Cheek	0.473	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.609	0.527	0.620	1.025	0.943	1.036	0.889	0.682	0.719	0.941
	Left Tilted	0.397	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.560	0.412	0.570	0.853	0.705	0.863	0.690	0.729	0.456	0.993
LTE Band 7_Ant 0	Right Cheek	0.179	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.267	0.380	0.422	0.627	0.740	0.782	0.539	0.418	0.599	0.578
	Right Tilted	0.201	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.306	0.247	0.318	0.622	0.563	0.634	0.517	0.524	0.288	0.719
	Left Cheek	0.744	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.880	0.798	0.891	1.296	1.214	1.307	1.160	0.953	0.990	1.212
	Left Tilted	0.140	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.303	0.155	0.313	0.596	0.448	0.606	0.433	0.472	0.199	0.736
LTE Band 12_Ant 1	Right Cheek	0.991	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.079	1.192	1.234	1.439	1.552	1.594	1.351	1.230	1.411	1.390
	Right Tilted	0.885	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.990	0.931	1.002	1.306	1.247	1.318	1.201	1.208	0.972	1.403
	Left Cheek	0.394	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.530	0.448	0.541	0.946	0.864	0.957	0.810	0.603	0.640	0.862
	Left Tilted	0.395	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.558	0.410	0.568	0.851	0.703	0.861	0.688	0.727	0.454	0.991
LTE Band 13_Ant 1	Right Cheek	0.847	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.935	1.048	1.090	1.295	1.408	1.450	1.207	1.086	1.267	1.246
	Right Tilted	0.921	0.323	0.087	0.518	0.316	0.105	0.046	0.117	1.026	0.967	1.038	1.342	1.283	1.354	1.237	1.244	1.008	1.439
	Left Cheek	0.434	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.570	0.488	0.581	0.986	0.904	0.997	0.850	0.643	0.680	0.902
	Left Tilted	0.409	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.572	0.424	0.582	0.865	0.717	0.875	0.702	0.741	0.468	1.005
LTE Band 14_Ant 1	Right Cheek	0.985	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.073	1.186	1.228	1.433	1.546	1.588	1.345	1.224	1.405	1.384
	Right Tilted	0.901	0.323	0.087	0.518	0.316	0.105	0.046	0.117	1.006	0.947	1.018	1.322	1.263	1.334	1.217	1.224	0.988	1.419
	Left Cheek	0.457	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.593	0.511	0.604	1.009	0.927	1.020	0.873	0.666	0.703	0.925
	Left Tilted	0.402	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.565	0.417	0.575	0.858	0.710	0.868	0.695	0.734	0.461	0.998
LTE Band 25_Ant 0	Right Cheek	0.339	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.427	0.540	0.582	0.787	0.900	0.942	0.699	0.578	0.759	0.738
	Right Tilted	0.255	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.360	0.301	0.372	0.676	0.617	0.688	0.571	0.578	0.342	0.773
	Left Cheek	0.736	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.872	0.790	0.883	1.288	1.206	1.299	1.152	0.945	0.982	1.204
	Left Tilted	0.235	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.398	0.250	0.408	0.691	0.543	0.701	0.528	0.567	0.294	0.831
LTE Band 26_Ant 1	Right Cheek	0.918	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.006	1.119	1.161	1.366	1.479	1.521	1.278	1.157	1.338	1.317
	Right Tilted	0.983	0.323	0.087	0.518	0.316	0.105	0.046	0.117	1.088	1.029	1.100	1.404	1.345	1.416	1.299	1.306	1.070	1.501
	Left Cheek	0.549	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.685	0.603	0.696	1.101	1.019	1.112	0.965	0.758	0.795	1.017
	Left Tilted	0.510	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.673	0.525	0.683	0.966	0.818	0.976	0.803	0.842	0.569	1.106
LTE Band 30_Ant 0	Right Cheek	0.221	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.309	0.422	0.464	0.669	0.782	0.824	0.581	0.460	0.641	0.620
	Right Tilted	0.173	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.278	0.219	0.290	0.594	0.535	0.606	0.489	0.496	0.260	0.691
	Left Cheek	0.788	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.924	0.842	0.935	1.340	1.258	1.351	1.204	0.997	1.034	1.256
	Left Tilted	0.136	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.299	0.151	0.309	0.592	0.444	0.602	0.429	0.468	0.195	0.732
LTE Band 41_Ant 0	Right Cheek	0.199	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.287	0.400	0.442	0.647	0.760	0.802	0.559	0.438	0.619	0.598
	Right Tilted	0.196	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.301	0.242	0.313	0.617	0.558	0.629	0.512	0.519	0.283	0.714
	Left Cheek	0.528	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.664	0.582	0.675	1.080	0.998	1.091	0.944	0.737	0.774	0.996



FCC SAR TEST REPORT

Report No. : FA161608-05C

	Left Tilted	0.143	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.306	0.158	0.316	0.599	0.451	0.609	0.436	0.475	0.202	0.739
LTE Band 48_Ant 2	Right Cheek	0.165	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.253	0.366	0.408	0.613	0.726	0.768	0.525	0.404	0.585	0.564
	Right Tilted	0.100	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.205	0.146	0.217	0.521	0.462	0.533	0.416	0.423	0.187	0.618
	Left Cheek	0.109	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.245	0.163	0.256	0.661	0.579	0.672	0.525	0.318	0.355	0.577
	Left Tilted	0.105	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.268	0.120	0.278	0.561	0.413	0.571	0.398	0.437	0.164	0.701
LTE Band 66_Ant 0	Right Cheek	0.292	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.380	0.493	0.535	0.740	0.853	0.895	0.652	0.531	0.712	0.691
	Right Tilted	0.335	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.440	0.381	0.452	0.756	0.697	0.768	0.651	0.658	0.422	0.853
	Left Cheek	0.676	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.812	0.730	0.823	1.228	1.146	1.239	1.092	0.885	0.922	1.144
	Left Tilted	0.348	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.511	0.363	0.521	0.804	0.656	0.814	0.641	0.680	0.407	0.944
LTE Band 71_Ant 1	Right Cheek	0.843	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.931	1.044	1.086	1.291	1.404	1.446	1.203	1.082	1.263	1.242
	Right Tilted	0.835	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.940	0.881	0.952	1.256	1.197	1.268	1.151	1.158	0.922	1.353
	Left Cheek	0.371	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.507	0.425	0.518	0.923	0.841	0.934	0.787	0.580	0.617	0.839
	Left Tilted	0.348	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.511	0.363	0.521	0.804	0.656	0.814	0.641	0.680	0.407	0.944
FR1 n5_Ant 1	Right Cheek	0.963	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.051	1.164	1.206	1.411	1.524	1.566	1.323	1.202	1.383	1.362
	Right Tilted	0.694	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.799	0.740	0.811	1.115	1.056	1.127	1.010	1.017	0.781	1.212
	Left Cheek	0.488	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.624	0.542	0.635	1.040	0.958	1.051	0.904	0.697	0.734	0.956
	Left Tilted	0.399	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.562	0.414	0.572	0.855	0.707	0.865	0.692	0.731	0.458	0.995
FR1 n7_Ant 0	Right Cheek	0.314	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.402	0.515	0.557	0.762	0.875	0.917	0.674	0.553	0.734	0.713
	Right Tilted	0.228	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.333	0.274	0.345	0.649	0.590	0.661	0.544	0.551	0.315	0.746
	Left Cheek	0.754	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.890	0.808	0.901	1.306	1.224	1.317	1.170	0.963	1.000	1.222
	Left Tilted	0.157	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.320	0.172	0.330	0.613	0.465	0.623	0.450	0.489	0.216	0.753
FR1 n12_Ant 1	Right Cheek	0.981	0.239	0.420	0.399	0.360	0.088	0.201	0.243	1.069	1.182	1.224	1.429	1.542	1.584	1.341	1.220	1.401	1.380
	Right Tilted	0.693	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.798	0.739	0.810	1.114	1.055	1.126	1.009	1.016	0.780	1.211
	Left Cheek	0.353	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.489	0.407	0.500	0.905	0.823	0.916	0.769	0.562	0.599	0.821
	Left Tilted	0.285	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.448	0.300	0.458	0.741	0.593	0.751	0.578	0.617	0.344	0.881
FR1 n25_Ant 0	Right Cheek	0.349	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.437	0.550	0.592	0.797	0.910	0.952	0.709	0.588	0.769	0.748
	Right Tilted	0.283	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.388	0.329	0.400	0.704	0.645	0.716	0.599	0.606	0.370	0.801
	Left Cheek	0.829	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.965	0.883	0.976	1.381	1.299	1.392	1.245	1.038	1.075	1.297
	Left Tilted	0.251	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.414	0.266	0.424	0.707	0.559	0.717	0.544	0.583	0.310	0.847
FR1 n30_Ant 0	Right Cheek	0.296	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.384	0.497	0.539	0.744	0.857	0.899	0.656	0.535	0.716	0.695
	Right Tilted	0.228	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.333	0.274	0.345	0.649	0.590	0.661	0.544	0.551	0.315	0.746
	Left Cheek	0.681	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.817	0.735	0.828	1.233	1.151	1.244	1.097	0.890	0.927	1.149
	Left Tilted	0.209	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.372	0.224	0.382	0.665	0.517	0.675	0.502	0.541	0.268	0.805
FR1 n41_Ant 1	Right Cheek	0.889	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.977	1.090	1.132	1.337	1.450	1.492	1.249	1.128	1.309	1.288
	Right Tilted	0.906	0.323	0.087	0.518	0.316	0.105	0.046	0.117	1.011	0.952	1.023	1.327	1.268	1.339	1.222	1.229	0.993	1.424
	Left Cheek	0.566	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.702	0.620	0.713	1.118	1.036	1.129	0.982	0.775	0.812	1.034
	Left Tilted	0.579	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.742	0.594	0.752	1.035	0.887	1.045	0.872	0.911	0.638	1.175
FR1 n66_Ant 0	Right Cheek	0.260	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.348	0.461	0.503	0.708	0.821	0.863	0.620	0.499	0.680	0.659
	Right Tilted	0.292	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.397	0.338	0.409	0.713	0.654	0.725	0.608	0.615	0.379	0.810
	Left Cheek	0.615	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.751	0.669	0.762	1.167	1.085	1.178	1.031	0.824	0.861	1.083
	Left Tilted	0.305	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.468	0.320	0.478	0.761	0.613	0.771	0.598	0.637	0.364	0.901
FR1 n71_Ant 1	Right Cheek	0.703	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.791	0.904	0.946	1.151	1.264	1.306	1.063	0.942	1.123	1.102
	Right Tilted	0.652	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.757	0.698	0.769	1.073	1.014	1.085	0.968	0.975	0.739	1.170
	Left Cheek	0.343	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.479	0.397	0.490	0.895	0.813	0.906	0.759	0.552	0.589	0.811
	Left Tilted	0.308	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.471	0.323	0.481	0.764	0.616	0.774	0.601	0.640	0.367	0.904
FR1 n77_Ant 2	Right Cheek	0.616	0.239	0.420	0.399	0.360	0.088	0.201	0.243	0.704	0.817	0.859	1.064	1.177	1.219	0.976	0.855	1.036	1.015
	Right Tilted	0.196	0.323	0.087	0.518	0.316	0.105	0.046	0.117	0.301	0.242	0.313	0.617	0.558	0.629	0.512	0.519	0.283	0.714
	Left Cheek	0.325	0.209	0.246	0.468	0.416	0.136	0.054	0.147	0.461	0.379	0.472	0.877	0.795	0.888	0.741	0.534	0.571	0.793
	Left Tilted	0.279	0.332	0.059	0.596	0.293	0.163	0.015	0.173	0.442	0.294	0.452	0.735	0.587	0.745	0.572	0.611	0.338	0.875



<WWAN Index 3, WLAN Index 4>

WWAN Band	Exposure Position	1	2	3	4	5	1+5	1+2	1+3	1+4	1+2+5	1+3+5	1+4+5
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
GSM850_Ant 0	Right Cheek	0.405	0.060	0.130	0.128	0.360	0.765	0.465	0.535	0.533	0.825	0.895	0.893
	Right Tilted	0.231	0.081	0.036	0.074	0.281	0.512	0.312	0.267	0.305	0.593	0.548	0.586
	Left Cheek	0.643	0.064	0.089	0.043	0.416	1.059	0.707	0.732	0.686	1.123	1.148	1.102
	Left Tilted	0.310	0.083	0.017	0.101	0.293	0.603	0.393	0.327	0.411	0.686	0.620	0.704
GSM1900_Ant 2	Right Cheek	0.242	0.060	0.130	0.128	0.360	0.602	0.302	0.372	0.370	0.662	0.732	0.730
	Right Tilted	0.071	0.081	0.036	0.074	0.281	0.352	0.152	0.107	0.145	0.433	0.388	0.426
	Left Cheek	0.100	0.064	0.089	0.043	0.416	0.516	0.164	0.189	0.143	0.580	0.605	0.559
	Left Tilted	0.090	0.083	0.017	0.101	0.293	0.383	0.173	0.107	0.191	0.466	0.400	0.484
WCDMA II_Ant 2	Right Cheek	0.353	0.060	0.130	0.128	0.360	0.713	0.413	0.483	0.481	0.773	0.843	0.841
	Right Tilted	0.124	0.081	0.036	0.074	0.281	0.405	0.205	0.160	0.198	0.486	0.441	0.479
	Left Cheek	0.175	0.064	0.089	0.043	0.416	0.591	0.239	0.264	0.218	0.655	0.680	0.634
	Left Tilted	0.162	0.083	0.017	0.101	0.293	0.455	0.245	0.179	0.263	0.538	0.472	0.556
WCDMA IV_Ant 2	Right Cheek	0.372	0.060	0.130	0.128	0.360	0.732	0.432	0.502	0.500	0.792	0.862	0.860
	Right Tilted	0.148	0.081	0.036	0.074	0.281	0.429	0.229	0.184	0.222	0.510	0.465	0.503
	Left Cheek	0.238	0.064	0.089	0.043	0.416	0.654	0.302	0.327	0.281	0.718	0.743	0.697
	Left Tilted	0.135	0.083	0.017	0.101	0.293	0.428	0.218	0.152	0.236	0.511	0.445	0.529
WCDMA V_Ant 0	Right Cheek	0.242	0.060	0.130	0.128	0.360	0.602	0.302	0.372	0.370	0.662	0.732	0.730
	Right Tilted	0.120	0.081	0.036	0.074	0.281	0.401	0.201	0.156	0.194	0.482	0.437	0.475
	Left Cheek	0.370	0.064	0.089	0.043	0.416	0.786	0.434	0.459	0.413	0.850	0.875	0.829
	Left Tilted	0.193	0.083	0.017	0.101	0.293	0.486	0.276	0.210	0.294	0.569	0.503	0.587
LTE Band 7_Ant 2	Right Cheek	0.991	0.060	0.130	0.128	0.360	1.351	1.051	1.121	1.119	1.411	1.481	1.479
	Right Tilted	0.194	0.081	0.036	0.074	0.281	0.475	0.275	0.230	0.268	0.556	0.511	0.549
	Left Cheek	0.404	0.064	0.089	0.043	0.416	0.820	0.468	0.493	0.447	0.884	0.909	0.863
	Left Tilted	0.211	0.083	0.017	0.101	0.293	0.504	0.294	0.228	0.312	0.587	0.521	0.605
LTE Band 12_Ant 0	Right Cheek	0.205	0.060	0.130	0.128	0.360	0.565	0.265	0.335	0.333	0.625	0.695	0.693
	Right Tilted	0.143	0.081	0.036	0.074	0.281	0.424	0.224	0.179	0.217	0.505	0.460	0.498
	Left Cheek	0.299	0.064	0.089	0.043	0.416	0.715	0.363	0.388	0.342	0.779	0.804	0.758
	Left Tilted	0.176	0.083	0.017	0.101	0.293	0.469	0.259	0.193	0.277	0.552	0.486	0.570
LTE Band 13_Ant 0	Right Cheek	0.266	0.060	0.130	0.128	0.360	0.626	0.326	0.396	0.394	0.686	0.756	0.754
	Right Tilted	0.149	0.081	0.036	0.074	0.281	0.430	0.230	0.185	0.223	0.511	0.466	0.504
	Left Cheek	0.356	0.064	0.089	0.043	0.416	0.772	0.420	0.445	0.399	0.836	0.861	0.815
	Left Tilted	0.234	0.083	0.017	0.101	0.293	0.527	0.317	0.251	0.335	0.610	0.544	0.628
LTE Band 14_Ant 0	Right Cheek	0.273	0.060	0.130	0.128	0.360	0.633	0.333	0.403	0.401	0.693	0.763	0.761
	Right Tilted	0.139	0.081	0.036	0.074	0.281	0.420	0.220	0.175	0.213	0.501	0.456	0.494
	Left Cheek	0.366	0.064	0.089	0.043	0.416	0.782	0.430	0.455	0.409	0.846	0.871	0.825
	Left Tilted	0.225	0.083	0.017	0.101	0.293	0.518	0.308	0.242	0.326	0.601	0.535	0.619
LTE Band 25_Ant 2	Right Cheek	0.341	0.060	0.130	0.128	0.360	0.701	0.401	0.471	0.469	0.761	0.831	0.829
	Right Tilted	0.114	0.081	0.036	0.074	0.281	0.395	0.195	0.150	0.188	0.476	0.431	0.469
	Left Cheek	0.161	0.064	0.089	0.043	0.416	0.577	0.225	0.250	0.204	0.641	0.666	0.620
	Left Tilted	0.140	0.083	0.017	0.101	0.293	0.433	0.223	0.157	0.241	0.516	0.450	0.534
LTE Band 26_Ant 0	Right Cheek	0.217	0.060	0.130	0.128	0.360	0.577	0.277	0.347	0.345	0.637	0.707	0.705
	Right Tilted	0.119	0.081	0.036	0.074	0.281	0.400	0.200	0.155	0.193	0.481	0.436	0.474
	Left Cheek	0.343	0.064	0.089	0.043	0.416	0.759	0.407	0.432	0.386	0.823	0.848	0.802
	Left Tilted	0.185	0.083	0.017	0.101	0.293	0.478	0.268	0.202	0.286	0.561	0.495	0.579
LTE Band 30_Ant 2	Right Cheek	0.530	0.060	0.130	0.128	0.360	0.890	0.590	0.660	0.658	0.950	1.020	1.018
	Right Tilted	0.192	0.081	0.036	0.074	0.281	0.473	0.273	0.228	0.266	0.554	0.509	0.547
	Left Cheek	0.376	0.064	0.089	0.043	0.416	0.792	0.440	0.465	0.419	0.856	0.881	0.835
	Left Tilted	0.288	0.083	0.017	0.101	0.293	0.581	0.371	0.305	0.389	0.664	0.598	0.682
LTE Band 41_Ant 2	Right Cheek	0.690	0.060	0.130	0.128	0.360	1.050	0.750	0.820	0.818	1.110	1.180	1.178
	Right Tilted	0.234	0.081	0.036	0.074	0.281	0.515	0.315	0.270	0.308	0.596	0.551	0.589



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	Left Cheek	0.338	0.064	0.089	0.043	0.416	0.754	0.402	0.427	0.381	0.818	0.843	0.797
	Left Tilted	0.194	0.083	0.017	0.101	0.293	0.487	0.277	0.211	0.295	0.570	0.504	0.588
LTE Band 48_Ant 6	Right Cheek	0.126	0.060	0.130	0.128	0.360	0.486	0.186	0.256	0.254	0.546	0.616	0.614
	Right Tilted	0.093	0.081	0.036	0.074	0.281	0.374	0.174	0.129	0.167	0.455	0.410	0.448
	Left Cheek	0.219	0.064	0.089	0.043	0.416	0.635	0.283	0.308	0.262	0.699	0.724	0.678
	Left Tilted	0.069	0.083	0.017	0.101	0.293	0.362	0.152	0.086	0.170	0.445	0.379	0.463
LTE Band 66_Ant 2	Right Cheek	0.297	0.060	0.130	0.128	0.360	0.657	0.357	0.427	0.425	0.717	0.787	0.785
	Right Tilted	0.147	0.081	0.036	0.074	0.281	0.428	0.228	0.183	0.221	0.509	0.464	0.502
	Left Cheek	0.187	0.064	0.089	0.043	0.416	0.603	0.251	0.276	0.230	0.667	0.692	0.646
	Left Tilted	0.113	0.083	0.017	0.101	0.293	0.406	0.196	0.130	0.214	0.489	0.423	0.507
LTE Band 71_Ant 0	Right Cheek	0.295	0.060	0.130	0.128	0.360	0.655	0.355	0.425	0.423	0.715	0.785	0.783
	Right Tilted	0.127	0.081	0.036	0.074	0.281	0.408	0.208	0.163	0.201	0.489	0.444	0.482
	Left Cheek	0.311	0.064	0.089	0.043	0.416	0.727	0.375	0.400	0.354	0.791	0.816	0.770
	Left Tilted	0.149	0.083	0.017	0.101	0.293	0.442	0.232	0.166	0.250	0.525	0.459	0.543
FR1 n5_Ant 0	Right Cheek	0.277	0.060	0.130	0.128	0.360	0.637	0.337	0.407	0.405	0.697	0.767	0.765
	Right Tilted	0.148	0.081	0.036	0.074	0.281	0.429	0.229	0.184	0.222	0.510	0.465	0.503
	Left Cheek	0.368	0.064	0.089	0.043	0.416	0.784	0.432	0.457	0.411	0.848	0.873	0.827
	Left Tilted	0.210	0.083	0.017	0.101	0.293	0.503	0.293	0.227	0.311	0.586	0.520	0.604
FR1 n7_Ant 2	Right Cheek	0.904	0.060	0.130	0.128	0.360	1.264	0.964	1.034	1.032	1.324	1.394	1.392
	Right Tilted	0.181	0.081	0.036	0.074	0.281	0.462	0.262	0.217	0.255	0.543	0.498	0.536
	Left Cheek	0.474	0.064	0.089	0.043	0.416	0.890	0.538	0.563	0.517	0.954	0.979	0.933
	Left Tilted	0.245	0.083	0.017	0.101	0.293	0.538	0.328	0.262	0.346	0.621	0.555	0.639
FR1 n12_Ant 0	Right Cheek	0.265	0.060	0.130	0.128	0.360	0.625	0.325	0.395	0.393	0.685	0.755	0.753
	Right Tilted	0.161	0.081	0.036	0.074	0.281	0.442	0.242	0.197	0.235	0.523	0.478	0.516
	Left Cheek	0.304	0.064	0.089	0.043	0.416	0.720	0.368	0.393	0.347	0.784	0.809	0.763
	Left Tilted	0.186	0.083	0.017	0.101	0.293	0.479	0.269	0.203	0.287	0.562	0.496	0.580
FR1 n25_Ant 2	Right Cheek	0.360	0.060	0.130	0.128	0.360	0.720	0.420	0.490	0.488	0.780	0.850	0.848
	Right Tilted	0.093	0.081	0.036	0.074	0.281	0.374	0.174	0.129	0.167	0.455	0.410	0.448
	Left Cheek	0.142	0.064	0.089	0.043	0.416	0.558	0.206	0.231	0.185	0.622	0.647	0.601
	Left Tilted	0.137	0.083	0.017	0.101	0.293	0.430	0.220	0.154	0.238	0.513	0.447	0.531
FR1 n30_Ant 2	Right Cheek	0.521	0.060	0.130	0.128	0.360	0.881	0.581	0.651	0.649	0.941	1.011	1.009
	Right Tilted	0.191	0.081	0.036	0.074	0.281	0.472	0.272	0.227	0.265	0.553	0.508	0.546
	Left Cheek	0.367	0.064	0.089	0.043	0.416	0.783	0.431	0.456	0.410	0.847	0.872	0.826
	Left Tilted	0.283	0.083	0.017	0.101	0.293	0.576	0.366	0.300	0.384	0.659	0.593	0.677
FR1 n41_Ant 5	Right Cheek	0.264	0.060	0.130	0.128	0.360	0.624	0.324	0.394	0.392	0.684	0.754	0.752
	Right Tilted	0.159	0.081	0.036	0.074	0.281	0.440	0.240	0.195	0.233	0.521	0.476	0.514
	Left Cheek	0.963	0.064	0.089	0.043	0.416	1.379	1.027	1.052	1.006	1.443	1.468	1.422
	Left Tilted	0.319	0.083	0.017	0.101	0.293	0.612	0.402	0.336	0.420	0.695	0.629	0.713
FR1 n66_Ant 2	Right Cheek	0.287	0.060	0.130	0.128	0.360	0.647	0.347	0.417	0.415	0.707	0.777	0.775
	Right Tilted	0.131	0.081	0.036	0.074	0.281	0.412	0.212	0.167	0.205	0.493	0.448	0.486
	Left Cheek	0.143	0.064	0.089	0.043	0.416	0.559	0.207	0.232	0.186	0.623	0.648	0.602
	Left Tilted	0.118	0.083	0.017	0.101	0.293	0.411	0.201	0.135	0.219	0.494	0.428	0.512
FR1 n71_Ant 0	Right Cheek	0.238	0.060	0.130	0.128	0.360	0.598	0.298	0.368	0.366	0.658	0.728	0.726
	Right Tilted	0.111	0.081	0.036	0.074	0.281	0.392	0.192	0.147	0.185	0.473	0.428	0.466
	Left Cheek	0.275	0.064	0.089	0.043	0.416	0.691	0.339	0.364	0.318	0.755	0.780	0.734
	Left Tilted	0.135	0.083	0.017	0.101	0.293	0.428	0.218	0.152	0.236	0.511	0.445	0.529
FR1 n77_Ant 6	Right Cheek	0.382	0.060	0.130	0.128	0.360	0.742	0.442	0.512	0.510	0.802	0.872	0.870
	Right Tilted	0.376	0.081	0.036	0.074	0.281	0.657	0.457	0.412	0.450	0.738	0.693	0.731
	Left Cheek	0.754	0.064	0.089	0.043	0.416	1.170	0.818	0.843	0.797	1.234	1.259	1.213
	Left Tilted	0.246	0.083	0.017	0.101	0.293	0.539	0.329	0.263	0.347	0.622	0.556	0.640



<WWAN Index 3, WLAN Index 4>

Table with columns: WWAN Band, Exposure Position, 1 (WWAN), 2 (WLAN2.4GHz Ant 4), 3 (WLAN2.4GHz Ant 3), 4 (WLAN2.4GHz Ant 4+3), 5 (WLAN5/6GHz Ant 4+3), Summed 1g SAR (W/kg) for combinations 1+5, 1+2, 1+3, 1+4, 1+2+5, 1+3+5, and 1+4+5. Rows include GSM850_Ant 1, GSM1900_Ant 0, WCDMA II_Ant 0, WCDMA IV_Ant 0, WCDMA V_Ant 1, LTE Band 7_Ant 0, LTE Band 12_Ant 1, LTE Band 13_Ant 1, LTE Band 14_Ant 1, LTE Band 25_Ant 0, LTE Band 26_Ant 1, LTE Band 30_Ant 0, and LTE Band 41_Ant 0.



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	Left Tilted	0.143	0.083	0.017	0.101	0.293	0.436	0.226	0.160	0.244	0.519	0.453	0.537
LTE Band 48_Ant 2	Right Cheek	0.165	0.060	0.130	0.128	0.360	0.525	0.225	0.295	0.293	0.585	0.655	0.653
	Right Tilted	0.100	0.081	0.036	0.074	0.281	0.381	0.181	0.136	0.174	0.462	0.417	0.455
	Left Cheek	0.109	0.064	0.089	0.043	0.416	0.525	0.173	0.198	0.152	0.589	0.614	0.568
	Left Tilted	0.105	0.083	0.017	0.101	0.293	0.398	0.188	0.122	0.206	0.481	0.415	0.499
LTE Band 66_Ant 0	Right Cheek	0.292	0.060	0.130	0.128	0.360	0.652	0.352	0.422	0.420	0.712	0.782	0.780
	Right Tilted	0.335	0.081	0.036	0.074	0.281	0.616	0.416	0.371	0.409	0.697	0.652	0.690
	Left Cheek	0.676	0.064	0.089	0.043	0.416	1.092	0.740	0.765	0.719	1.156	1.181	1.135
	Left Tilted	0.348	0.083	0.017	0.101	0.293	0.641	0.431	0.365	0.449	0.724	0.658	0.742
LTE Band 71_Ant 1	Right Cheek	0.843	0.060	0.130	0.128	0.360	1.203	0.903	0.973	0.971	1.263	1.333	1.331
	Right Tilted	0.835	0.081	0.036	0.074	0.281	1.116	0.916	0.871	0.909	1.197	1.152	1.190
	Left Cheek	0.371	0.064	0.089	0.043	0.416	0.787	0.435	0.460	0.414	0.851	0.876	0.830
	Left Tilted	0.348	0.083	0.017	0.101	0.293	0.641	0.431	0.365	0.449	0.724	0.658	0.742
FR1 n5_Ant 1	Right Cheek	0.963	0.060	0.130	0.128	0.360	1.323	1.023	1.093	1.091	1.383	1.453	1.451
	Right Tilted	0.694	0.081	0.036	0.074	0.281	0.975	0.775	0.730	0.768	1.056	1.011	1.049
	Left Cheek	0.488	0.064	0.089	0.043	0.416	0.904	0.552	0.577	0.531	0.968	0.993	0.947
	Left Tilted	0.399	0.083	0.017	0.101	0.293	0.692	0.482	0.416	0.500	0.775	0.709	0.793
FR1 n7_Ant 0	Right Cheek	0.314	0.060	0.130	0.128	0.360	0.674	0.374	0.444	0.442	0.734	0.804	0.802
	Right Tilted	0.228	0.081	0.036	0.074	0.281	0.509	0.309	0.264	0.302	0.590	0.545	0.583
	Left Cheek	0.754	0.064	0.089	0.043	0.416	1.170	0.818	0.843	0.797	1.234	1.259	1.213
	Left Tilted	0.157	0.083	0.017	0.101	0.293	0.450	0.240	0.174	0.258	0.533	0.467	0.551
FR1 n12_Ant 1	Right Cheek	0.981	0.060	0.130	0.128	0.360	1.341	1.041	1.111	1.109	1.401	1.471	1.469
	Right Tilted	0.693	0.081	0.036	0.074	0.281	0.974	0.774	0.729	0.767	1.055	1.010	1.048
	Left Cheek	0.353	0.064	0.089	0.043	0.416	0.769	0.417	0.442	0.396	0.833	0.858	0.812
	Left Tilted	0.285	0.083	0.017	0.101	0.293	0.578	0.368	0.302	0.386	0.661	0.595	0.679
FR1 n25_Ant 0	Right Cheek	0.349	0.060	0.130	0.128	0.360	0.709	0.409	0.479	0.477	0.769	0.839	0.837
	Right Tilted	0.283	0.081	0.036	0.074	0.281	0.564	0.364	0.319	0.357	0.645	0.600	0.638
	Left Cheek	0.829	0.064	0.089	0.043	0.416	1.245	0.893	0.918	0.872	1.309	1.334	1.288
	Left Tilted	0.251	0.083	0.017	0.101	0.293	0.544	0.334	0.268	0.352	0.627	0.561	0.645
FR1 n30_Ant 0	Right Cheek	0.296	0.060	0.130	0.128	0.360	0.656	0.356	0.426	0.424	0.716	0.786	0.784
	Right Tilted	0.228	0.081	0.036	0.074	0.281	0.509	0.309	0.264	0.302	0.590	0.545	0.583
	Left Cheek	0.681	0.064	0.089	0.043	0.416	1.097	0.745	0.770	0.724	1.161	1.186	1.140
	Left Tilted	0.209	0.083	0.017	0.101	0.293	0.502	0.292	0.226	0.310	0.585	0.519	0.603
FR1 n41_Ant 1	Right Cheek	0.889	0.060	0.130	0.128	0.360	1.249	0.949	1.019	1.017	1.309	1.379	1.377
	Right Tilted	0.906	0.081	0.036	0.074	0.281	1.187	0.987	0.942	0.980	1.268	1.223	1.261
	Left Cheek	0.566	0.064	0.089	0.043	0.416	0.982	0.630	0.655	0.609	1.046	1.071	1.025
	Left Tilted	0.579	0.083	0.017	0.101	0.293	0.872	0.662	0.596	0.680	0.955	0.889	0.973
FR1 n66_Ant 0	Right Cheek	0.260	0.060	0.130	0.128	0.360	0.620	0.320	0.390	0.388	0.680	0.750	0.748
	Right Tilted	0.292	0.081	0.036	0.074	0.281	0.573	0.373	0.328	0.366	0.654	0.609	0.647
	Left Cheek	0.615	0.064	0.089	0.043	0.416	1.031	0.679	0.704	0.658	1.095	1.120	1.074
	Left Tilted	0.305	0.083	0.017	0.101	0.293	0.598	0.388	0.322	0.406	0.681	0.615	0.699
FR1 n71_Ant 1	Right Cheek	0.703	0.060	0.130	0.128	0.360	1.063	0.763	0.833	0.831	1.123	1.193	1.191
	Right Tilted	0.652	0.081	0.036	0.074	0.281	0.933	0.733	0.688	0.726	1.014	0.969	1.007
	Left Cheek	0.343	0.064	0.089	0.043	0.416	0.759	0.407	0.432	0.386	0.823	0.848	0.802
	Left Tilted	0.308	0.083	0.017	0.101	0.293	0.601	0.391	0.325	0.409	0.684	0.618	0.702
FR1 n77_Ant 2	Right Cheek	0.616	0.060	0.130	0.128	0.360	0.976	0.676	0.746	0.744	1.036	1.106	1.104
	Right Tilted	0.196	0.081	0.036	0.074	0.281	0.477	0.277	0.232	0.270	0.558	0.513	0.551
	Left Cheek	0.325	0.064	0.089	0.043	0.416	0.741	0.389	0.414	0.368	0.805	0.830	0.784
	Left Tilted	0.279	0.083	0.017	0.101	0.293	0.572	0.362	0.296	0.380	0.655	0.589	0.673



16.3 Hotspot Exposure Conditions

<WWAN Index 4, WLAN Index 7>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)				
GSM850_Ant 0	Front	0.476	0.236	0.303	0.212	0.488	0.964	0.712	0.779	0.688
	Back	0.560	0.330	0.396	0.334	0.382	0.942	0.890	0.956	0.894
	Left side	0.865	0.022	0.564	0.468	0.310	1.175	0.887	1.429	1.333
	Right side	0.464	0.083	0.003	0.066	0.270	0.734	0.547	0.467	0.530
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.260					0.260	0.260	0.260	0.260
GSM1900_Ant 2	Front	0.591	0.236	0.303	0.212	0.488	1.079	0.827	0.894	0.803
	Back	0.716	0.330	0.396	0.334	0.382	1.098	1.046	1.112	1.050
	Left side	0.052	0.022	0.564	0.468	0.310	0.362	0.074	0.616	0.520
	Right side	0.539	0.083	0.003	0.066	0.270	0.809	0.622	0.542	0.605
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.953					0.953	0.953	0.953	0.953
WCDMA II_Ant 2	Front	0.567	0.236	0.303	0.212	0.488	1.055	0.803	0.870	0.779
	Back	0.743	0.330	0.396	0.334	0.382	1.125	1.073	1.139	1.077
	Left side	0.059	0.022	0.564	0.468	0.310	0.369	0.081	0.623	0.527
	Right side	0.490	0.083	0.003	0.066	0.270	0.760	0.573	0.493	0.556
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.943					0.943	0.943	0.943	0.943
WCDMA IV_Ant 2	Front	0.595	0.236	0.303	0.212	0.488	1.083	0.831	0.898	0.807
	Back	0.867	0.330	0.396	0.334	0.382	1.249	1.197	1.263	1.201
	Left side	0.070	0.022	0.564	0.468	0.310	0.380	0.092	0.634	0.538
	Right side	0.693	0.083	0.003	0.066	0.270	0.963	0.776	0.696	0.759
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.952					0.952	0.952	0.952	0.952
WCDMA V_Ant 0	Front	0.391	0.236	0.303	0.212	0.488	0.879	0.627	0.694	0.603
	Back	0.426	0.330	0.396	0.334	0.382	0.808	0.756	0.822	0.760
	Left side	0.520	0.022	0.564	0.468	0.310	0.830	0.542	1.084	0.988
	Right side	0.311	0.083	0.003	0.066	0.270	0.581	0.394	0.314	0.377
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.224					0.224	0.224	0.224	0.224
LTE Band 7_Ant 2	Front	0.343	0.236	0.303	0.212	0.488	0.831	0.579	0.646	0.555
	Back	0.607	0.330	0.396	0.334	0.382	0.989	0.937	1.003	0.941
	Left side	0.010	0.022	0.564	0.468	0.310	0.320	0.032	0.574	0.478
	Right side	0.822	0.083	0.003	0.066	0.270	1.092	0.905	0.825	0.888
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.329					0.329	0.329	0.329	0.329
LTE Band 12_Ant 0	Front	0.307	0.236	0.303	0.212	0.488	0.795	0.543	0.610	0.519
	Back	0.425	0.330	0.396	0.334	0.382	0.807	0.755	0.821	0.759
	Left side	0.505	0.022	0.564	0.468	0.310	0.815	0.527	1.069	0.973
	Right side	0.331	0.083	0.003	0.066	0.270	0.601	0.414	0.334	0.397
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.073					0.073	0.073	0.073	0.073
LTE Band 13_Ant 0	Front	0.446	0.236	0.303	0.212	0.488	0.934	0.682	0.749	0.658
	Back	0.483	0.330	0.396	0.334	0.382	0.865	0.813	0.879	0.817
	Left side	0.668	0.022	0.564	0.468	0.310	0.978	0.690	1.232	1.136
	Right side	0.483	0.083	0.003	0.066	0.270	0.753	0.566	0.486	0.549
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.146					0.146	0.146	0.146	0.146
LTE Band 14_Ant 0	Front	0.412	0.236	0.303	0.212	0.488	0.900	0.648	0.715	0.624
	Back	0.508	0.330	0.396	0.334	0.382	0.890	0.838	0.904	0.842



	Left side	0.793	0.022	0.564	0.468	0.310	1.103	0.815	1.357	1.261
	Right side	0.499	0.083	0.003	0.066	0.270	0.769	0.582	0.502	0.565
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.175					0.175	0.175	0.175	0.175
LTE Band 25_Ant 2	Front	0.645	0.236	0.303	0.212	0.488	1.133	0.881	0.948	0.857
	Back	0.747	0.330	0.396	0.334	0.382	1.129	1.077	1.143	1.081
	Left side	0.045	0.022	0.564	0.468	0.310	0.355	0.067	0.609	0.513
	Right side	0.543	0.083	0.003	0.066	0.270	0.813	0.626	0.546	0.609
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.986					0.986	0.986	0.986	0.986
LTE Band 26_Ant 0	Front	0.408	0.236	0.303	0.212	0.488	0.896	0.644	0.711	0.620
	Back	0.438	0.330	0.396	0.334	0.382	0.820	0.768	0.834	0.772
	Left side	0.599	0.022	0.564	0.468	0.310	0.909	0.621	1.163	1.067
	Right side	0.353	0.083	0.003	0.066	0.270	0.623	0.436	0.356	0.419
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.252					0.252	0.252	0.252	0.252
LTE Band 30_Ant 2	Front	0.617	0.236	0.303	0.212	0.488	1.105	0.853	0.920	0.829
	Back	0.936	0.330	0.396	0.334	0.382	1.318	1.266	1.332	1.270
	Left side	0.013	0.022	0.564	0.468	0.310	0.323	0.035	0.577	0.481
	Right side	0.923	0.083	0.003	0.066	0.270	1.193	1.006	0.926	0.989
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.840					0.840	0.840	0.840	0.840
LTE Band 41_Ant 2	Front	0.426	0.236	0.303	0.212	0.488	0.914	0.662	0.729	0.638
	Back	0.546	0.330	0.396	0.334	0.382	0.928	0.876	0.942	0.880
	Left side	0.015	0.022	0.564	0.468	0.310	0.325	0.037	0.579	0.483
	Right side	0.991	0.083	0.003	0.066	0.270	1.261	1.074	0.994	1.057
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.363					0.363	0.363	0.363	0.363
LTE Band 48_Ant 6	Front	0.887	0.236	0.303	0.212	0.488	1.375	1.123	1.190	1.099
	Back	0.439	0.330	0.396	0.334	0.382	0.821	0.769	0.835	0.773
	Left side	0.616	0.022	0.564	0.468	0.310	0.926	0.638	1.180	1.084
	Right side	0.051	0.083	0.003	0.066	0.270	0.321	0.134	0.054	0.117
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.460					0.460	0.460	0.460	0.460
LTE Band 66_Ant 2	Front	0.737	0.236	0.303	0.212	0.488	1.225	0.973	1.040	0.949
	Back	0.831	0.330	0.396	0.334	0.382	1.213	1.161	1.227	1.165
	Left side	0.076	0.022	0.564	0.468	0.310	0.386	0.098	0.640	0.544
	Right side	0.711	0.083	0.003	0.066	0.270	0.981	0.794	0.714	0.777
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.944					0.944	0.944	0.944	0.944
LTE Band 71_Ant 0	Front	0.347	0.236	0.303	0.212	0.488	0.835	0.583	0.650	0.559
	Back	0.483	0.330	0.396	0.334	0.382	0.865	0.813	0.879	0.817
	Left side	0.462	0.022	0.564	0.468	0.310	0.772	0.484	1.026	0.930
	Right side	0.308	0.083	0.003	0.066	0.270	0.578	0.391	0.311	0.374
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.081					0.081	0.081	0.081	0.081
FR1 n5_Ant 0	Front	0.325	0.236	0.303	0.212	0.488	0.813	0.561	0.628	0.537
	Back	0.428	0.330	0.396	0.334	0.382	0.810	0.758	0.824	0.762
	Left side	0.529	0.022	0.564	0.468	0.310	0.839	0.551	1.093	0.997
	Right side	0.316	0.083	0.003	0.066	0.270	0.586	0.399	0.319	0.382
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.221					0.221	0.221	0.221	0.221
FR1 n7_Ant 2	Front	0.417	0.236	0.303	0.212	0.488	0.905	0.653	0.720	0.629
	Back	0.585	0.330	0.396	0.334	0.382	0.967	0.915	0.981	0.919
	Left side	0.010	0.022	0.564	0.468	0.310	0.320	0.032	0.574	0.478
	Right side	0.853	0.083	0.003	0.066	0.270	1.123	0.936	0.856	0.919



	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.374					0.374	0.374	0.374	0.374
FR1 n12_Ant 0	Front	0.401	0.236	0.303	0.212	0.488	0.889	0.637	0.704	0.613
	Back	0.462	0.330	0.396	0.334	0.382	0.844	0.792	0.858	0.796
	Left side	0.473	0.022	0.564	0.468	0.310	0.783	0.495	1.037	0.941
	Right side	0.326	0.083	0.003	0.066	0.270	0.596	0.409	0.329	0.392
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.078					0.078	0.078	0.078	0.078
FR1 n25_Ant 2	Front	0.670	0.236	0.303	0.212	0.488	1.158	0.906	0.973	0.882
	Back	0.842	0.330	0.396	0.334	0.382	1.224	1.172	1.238	1.176
	Left side	0.055	0.022	0.564	0.468	0.310	0.365	0.077	0.619	0.523
	Right side	0.648	0.083	0.003	0.066	0.270	0.918	0.731	0.651	0.714
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.982					0.982	0.982	0.982	0.982
FR1 n30_Ant 2	Front	0.727	0.236	0.303	0.212	0.488	1.215	0.963	1.030	0.939
	Back	0.991	0.330	0.396	0.334	0.382	1.373	1.321	1.387	1.325
	Left side	0.015	0.022	0.564	0.468	0.310	0.325	0.037	0.579	0.483
	Right side	0.988	0.083	0.003	0.066	0.270	1.258	1.071	0.991	1.054
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.934					0.934	0.934	0.934	0.934
FR1 n41_Ant 5	Front	0.353	0.236	0.303	0.212	0.488	0.841	0.589	0.656	0.565
	Back	0.537	0.330	0.396	0.334	0.382	0.919	0.867	0.933	0.871
	Left side	0.018	0.022	0.564	0.468	0.310	0.328	0.040	0.582	0.486
	Right side	0.981	0.083	0.003	0.066	0.270	1.251	1.064	0.984	1.047
	Top side	0.230	0.498	0.046	0.542	0.212	0.442	0.728	0.276	0.772
	Bottom side						0.000	0.000	0.000	0.000
FR1 n66_Ant 2	Front	0.713	0.236	0.303	0.212	0.488	1.201	0.949	1.016	0.925
	Back	0.901	0.330	0.396	0.334	0.382	1.283	1.231	1.297	1.235
	Left side	0.043	0.022	0.564	0.468	0.310	0.353	0.065	0.607	0.511
	Right side	0.704	0.083	0.003	0.066	0.270	0.974	0.787	0.707	0.770
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.997					0.997	0.997	0.997	0.997
FR1 n71_Ant 0	Front	0.363	0.236	0.303	0.212	0.488	0.851	0.599	0.666	0.575
	Back	0.447	0.330	0.396	0.334	0.382	0.829	0.777	0.843	0.781
	Left side	0.498	0.022	0.564	0.468	0.310	0.808	0.520	1.062	0.966
	Right side	0.353	0.083	0.003	0.066	0.270	0.623	0.436	0.356	0.419
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.093					0.093	0.093	0.093	0.093
FR1 n77_Ant 6	Front	0.993	0.236	0.303	0.212	0.488	1.481	1.229	1.296	1.205
	Back	0.577	0.330	0.396	0.334	0.382	0.959	0.907	0.973	0.911
	Left side	0.826	0.022	0.564	0.468	0.310	1.136	0.848	1.390	1.294
	Right side	0.092	0.083	0.003	0.066	0.270	0.362	0.175	0.095	0.158
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.433					0.433	0.433	0.433	0.433



<WWAN Index 4, WLAN Index 7>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 4	WLAN2.4GHz Ant 3	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
GSM850_Ant 1	Front	0.392	0.236	0.303	0.212	0.488	0.880	0.628	0.695	0.604
	Back	0.542	0.330	0.396	0.334	0.382	0.924	0.872	0.938	0.876
	Left side	0.335	0.022	0.564	0.468	0.310	0.645	0.357	0.899	0.803
	Right side	0.259	0.083	0.003	0.066	0.270	0.529	0.342	0.262	0.325
	Top side	0.375	0.498	0.046	0.542	0.212	0.587	0.873	0.421	0.917
	Bottom side						0.000	0.000	0.000	0.000
GSM1900_Ant 0	Front	0.506	0.236	0.303	0.212	0.488	0.994	0.742	0.809	0.718
	Back	0.994	0.330	0.396	0.334	0.382	1.376	1.324	1.390	1.328
	Left side	0.993	0.022	0.564	0.468	0.310	1.303	1.015	1.557	1.461
	Right side	0.038	0.083	0.003	0.066	0.270	0.308	0.121	0.041	0.104
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.837					0.837	0.837	0.837	0.837
WCDMA II_Ant 0	Front	0.445	0.236	0.303	0.212	0.488	0.933	0.681	0.748	0.657
	Back	0.692	0.330	0.396	0.334	0.382	1.074	1.022	1.088	1.026
	Left side	0.947	0.022	0.564	0.468	0.310	1.257	0.969	1.511	1.415
	Right side	0.034	0.083	0.003	0.066	0.270	0.304	0.117	0.037	0.100
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.635					0.635	0.635	0.635	0.635
WCDMA IV_Ant 0	Front	0.448	0.236	0.303	0.212	0.488	0.936	0.684	0.751	0.660
	Back	0.764	0.330	0.396	0.334	0.382	1.146	1.094	1.160	1.098
	Left side	0.692	0.022	0.564	0.468	0.310	1.002	0.714	1.256	1.160
	Right side	0.065	0.083	0.003	0.066	0.270	0.335	0.148	0.068	0.131
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.992					0.992	0.992	0.992	0.992
WCDMA V_Ant 1	Front	0.246	0.236	0.303	0.212	0.488	0.734	0.482	0.549	0.458
	Back	0.395	0.330	0.396	0.334	0.382	0.777	0.725	0.791	0.729
	Left side	0.242	0.022	0.564	0.468	0.310	0.552	0.264	0.806	0.710
	Right side	0.235	0.083	0.003	0.066	0.270	0.505	0.318	0.238	0.301
	Top side	0.233	0.498	0.046	0.542	0.212	0.445	0.731	0.279	0.775
	Bottom side						0.000	0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.364	0.236	0.303	0.212	0.488	0.852	0.600	0.667	0.576
	Back	0.560	0.330	0.396	0.334	0.382	0.942	0.890	0.956	0.894
	Left side	0.901	0.022	0.564	0.468	0.310	1.211	0.923	1.465	1.369
	Right side	0.020	0.083	0.003	0.066	0.270	0.290	0.103	0.023	0.086
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.193					0.193	0.193	0.193	0.193
LTE Band 12_Ant 1	Front	0.190	0.236	0.303	0.212	0.488	0.678	0.426	0.493	0.402
	Back	0.277	0.330	0.396	0.334	0.382	0.659	0.607	0.673	0.611
	Left side	0.263	0.022	0.564	0.468	0.310	0.573	0.285	0.827	0.731
	Right side	0.127	0.083	0.003	0.066	0.270	0.397	0.210	0.130	0.193
	Top side	0.257	0.498	0.046	0.542	0.212	0.469	0.755	0.303	0.799
	Bottom side						0.000	0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.217	0.236	0.303	0.212	0.488	0.705	0.453	0.520	0.429
	Back	0.289	0.330	0.396	0.334	0.382	0.671	0.619	0.685	0.623
	Left side	0.184	0.022	0.564	0.468	0.310	0.494	0.206	0.748	0.652
	Right side	0.123	0.083	0.003	0.066	0.270	0.393	0.206	0.126	0.189
	Top side	0.192	0.498	0.046	0.542	0.212	0.404	0.690	0.238	0.734
	Bottom side						0.000	0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.233	0.236	0.303	0.212	0.488	0.721	0.469	0.536	0.445
	Back	0.349	0.330	0.396	0.334	0.382	0.731	0.679	0.745	0.683
	Left side	0.210	0.022	0.564	0.468	0.310	0.520	0.232	0.774	0.678



	Right side	0.120	0.083	0.003	0.066	0.270	0.390	0.203	0.123	0.186
	Top side	0.217	0.498	0.046	0.542	0.212	0.429	0.715	0.263	0.759
	Bottom side						0.000	0.000	0.000	0.000
LTE Band 25_Ant 0	Front	0.424	0.236	0.303	0.212	0.488	0.912	0.660	0.727	0.636
	Back	0.696	0.330	0.396	0.334	0.382	1.078	1.026	1.092	1.030
	Left side	0.935	0.022	0.564	0.468	0.310	1.245	0.957	1.499	1.403
	Right side	0.034	0.083	0.003	0.066	0.270	0.304	0.117	0.037	0.100
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.641					0.641	0.641	0.641	0.641
LTE Band 26_Ant 1	Front	0.210	0.236	0.303	0.212	0.488	0.698	0.446	0.513	0.422
	Back	0.301	0.330	0.396	0.334	0.382	0.683	0.631	0.697	0.635
	Left side	0.179	0.022	0.564	0.468	0.310	0.489	0.201	0.743	0.647
	Right side	0.123	0.083	0.003	0.066	0.270	0.393	0.206	0.126	0.189
	Top side	0.230	0.498	0.046	0.542	0.212	0.442	0.728	0.276	0.772
	Bottom side						0.000	0.000	0.000	0.000
LTE Band 30_Ant 0	Front	0.435	0.236	0.303	0.212	0.488	0.923	0.671	0.738	0.647
	Back	0.588	0.330	0.396	0.334	0.382	0.970	0.918	0.984	0.922
	Left side	0.872	0.022	0.564	0.468	0.310	1.182	0.894	1.436	1.340
	Right side	0.029	0.083	0.003	0.066	0.270	0.299	0.112	0.032	0.095
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.133					0.133	0.133	0.133	0.133
LTE Band 41_Ant 0	Front	0.414	0.236	0.303	0.212	0.488	0.902	0.650	0.717	0.626
	Back	0.682	0.330	0.396	0.334	0.382	1.064	1.012	1.078	1.016
	Left side	0.523	0.022	0.564	0.468	0.310	0.833	0.545	1.087	0.991
	Right side	0.087	0.083	0.003	0.066	0.270	0.357	0.170	0.090	0.153
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.254					0.254	0.254	0.254	0.254
LTE Band 48_Ant 2	Front	0.336	0.236	0.303	0.212	0.488	0.824	0.572	0.639	0.548
	Back	0.410	0.330	0.396	0.334	0.382	0.792	0.740	0.806	0.744
	Left side	0.133	0.022	0.564	0.468	0.310	0.443	0.155	0.697	0.601
	Right side	0.256	0.083	0.003	0.066	0.270	0.526	0.339	0.259	0.322
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.467					0.467	0.467	0.467	0.467
LTE Band 66_Ant 0	Front	0.460	0.236	0.303	0.212	0.488	0.948	0.696	0.763	0.672
	Back	0.740	0.330	0.396	0.334	0.382	1.122	1.070	1.136	1.074
	Left side	0.643	0.022	0.564	0.468	0.310	0.953	0.665	1.207	1.111
	Right side	0.066	0.083	0.003	0.066	0.270	0.336	0.149	0.069	0.132
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.908					0.908	0.908	0.908	0.908
LTE Band 71_Ant 1	Front	0.180	0.236	0.303	0.212	0.488	0.668	0.416	0.483	0.392
	Back	0.243	0.330	0.396	0.334	0.382	0.625	0.573	0.639	0.577
	Left side	0.287	0.022	0.564	0.468	0.310	0.597	0.309	0.851	0.755
	Right side	0.104	0.083	0.003	0.066	0.270	0.374	0.187	0.107	0.170
	Top side	0.176	0.498	0.046	0.542	0.212	0.388	0.674	0.222	0.718
	Bottom side						0.000	0.000	0.000	0.000
FR1 n5_Ant 1	Front	0.193	0.236	0.303	0.212	0.488	0.681	0.429	0.496	0.405
	Back	0.322	0.330	0.396	0.334	0.382	0.704	0.652	0.718	0.656
	Left side	0.110	0.022	0.564	0.468	0.310	0.420	0.132	0.674	0.578
	Right side	0.094	0.083	0.003	0.066	0.270	0.364	0.177	0.097	0.160
	Top side	0.142	0.498	0.046	0.542	0.212	0.354	0.640	0.188	0.684
	Bottom side						0.000	0.000	0.000	0.000
FR1 n7_Ant 0	Front	0.439	0.236	0.303	0.212	0.488	0.927	0.675	0.742	0.651
	Back	0.611	0.330	0.396	0.334	0.382	0.993	0.941	1.007	0.945
	Left side	0.932	0.022	0.564	0.468	0.310	1.242	0.954	1.496	1.400
	Right side	0.017	0.083	0.003	0.066	0.270	0.287	0.100	0.020	0.083
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542



	Bottom side	0.203					0.203	0.203	0.203	0.203
FR1 n12_Ant 1	Front	0.153	0.236	0.303	0.212	0.488	0.641	0.389	0.456	0.365
	Back	0.249	0.330	0.396	0.334	0.382	0.631	0.579	0.645	0.583
	Left side	0.238	0.022	0.564	0.468	0.310	0.548	0.260	0.802	0.706
	Right side	0.127	0.083	0.003	0.066	0.270	0.397	0.210	0.130	0.193
	Top side	0.166	0.498	0.046	0.542	0.212	0.378	0.664	0.212	0.708
	Bottom side						0.000	0.000	0.000	0.000
FR1 n25_Ant 0	Front	0.457	0.236	0.303	0.212	0.488	0.945	0.693	0.760	0.669
	Back	0.808	0.330	0.396	0.334	0.382	1.190	1.138	1.204	1.142
	Left side	0.976	0.022	0.564	0.468	0.310	1.286	0.998	1.540	1.444
	Right side	0.025	0.083	0.003	0.066	0.270	0.295	0.108	0.028	0.091
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.619					0.619	0.619	0.619	0.619
FR1 n30_Ant 0	Front	0.417	0.236	0.303	0.212	0.488	0.905	0.653	0.720	0.629
	Back	0.637	0.330	0.396	0.334	0.382	1.019	0.967	1.033	0.971
	Left side	0.891	0.022	0.564	0.468	0.310	1.201	0.913	1.455	1.359
	Right side	0.034	0.083	0.003	0.066	0.270	0.304	0.117	0.037	0.100
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.147					0.147	0.147	0.147	0.147
FR1 n41_Ant 1	Front	0.525	0.236	0.303	0.212	0.488	1.013	0.761	0.828	0.737
	Back	0.499	0.330	0.396	0.334	0.382	0.881	0.829	0.895	0.833
	Left side	0.119	0.022	0.564	0.468	0.310	0.429	0.141	0.683	0.587
	Right side	0.043	0.083	0.003	0.066	0.270	0.313	0.126	0.046	0.109
	Top side	0.945	0.498	0.046	0.542	0.212	1.157	1.443	0.991	1.487
	Bottom side						0.000	0.000	0.000	0.000
FR1 n66_Ant 0	Front	0.473	0.236	0.303	0.212	0.488	0.961	0.709	0.776	0.685
	Back	0.827	0.330	0.396	0.334	0.382	1.209	1.157	1.223	1.161
	Left side	0.709	0.022	0.564	0.468	0.310	1.019	0.731	1.273	1.177
	Right side	0.074	0.083	0.003	0.066	0.270	0.344	0.157	0.077	0.140
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.990					0.990	0.990	0.990	0.990
FR1 n71_Ant 1	Front	0.147	0.236	0.303	0.212	0.488	0.635	0.383	0.450	0.359
	Back	0.193	0.330	0.396	0.334	0.382	0.575	0.523	0.589	0.527
	Left side	0.233	0.022	0.564	0.468	0.310	0.543	0.255	0.797	0.701
	Right side	0.094	0.083	0.003	0.066	0.270	0.364	0.177	0.097	0.160
	Top side	0.114	0.498	0.046	0.542	0.212	0.326	0.612	0.160	0.656
	Bottom side						0.000	0.000	0.000	0.000
FR1 n77_Ant 2	Front	0.754	0.236	0.303	0.212	0.488	1.242	0.990	1.057	0.966
	Back	0.980	0.330	0.396	0.334	0.382	1.362	1.310	1.376	1.314
	Left side	0.209	0.022	0.564	0.468	0.310	0.519	0.231	0.773	0.677
	Right side	0.786	0.083	0.003	0.066	0.270	1.056	0.869	0.789	0.852
	Top side		0.498	0.046	0.542	0.212	0.212	0.498	0.046	0.542
	Bottom side	0.940					0.940	0.940	0.940	0.940



<WWAN Index 4, WLAN Index 8>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 0	Front	0.476	0.088	0.122	0.196	0.291	0.767	0.564	0.598	0.672	0.855	0.889	0.963
	Back	0.560	0.136	0.170	0.251	0.199	0.759	0.696	0.730	0.811	0.895	0.929	1.010
	Left side	0.865	0.008	0.275	0.369	0.146	1.011	0.873	1.140	1.234	1.019	1.286	1.380
	Right side	0.464	0.038	0.001	0.054	0.131	0.595	0.502	0.465	0.518	0.633	0.596	0.649
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.260						0.260	0.260	0.260	0.260	0.260	0.260
GSM1900_Ant 2	Front	0.591	0.088	0.122	0.196	0.291	0.882	0.679	0.713	0.787	0.970	1.004	1.078
	Back	0.716	0.136	0.170	0.251	0.199	0.915	0.852	0.886	0.967	1.051	1.085	1.166
	Left side	0.052	0.008	0.275	0.369	0.146	0.198	0.060	0.327	0.421	0.206	0.473	0.567
	Right side	0.539	0.038	0.001	0.054	0.131	0.670	0.577	0.540	0.593	0.708	0.671	0.724
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.953						0.953	0.953	0.953	0.953	0.953	0.953
WCDMA II_Ant 2	Front	0.567	0.088	0.122	0.196	0.291	0.858	0.655	0.689	0.763	0.946	0.980	1.054
	Back	0.743	0.136	0.170	0.251	0.199	0.942	0.879	0.913	0.994	1.078	1.112	1.193
	Left side	0.059	0.008	0.275	0.369	0.146	0.205	0.067	0.334	0.428	0.213	0.480	0.574
	Right side	0.490	0.038	0.001	0.054	0.131	0.621	0.528	0.491	0.544	0.659	0.622	0.675
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.943						0.943	0.943	0.943	0.943	0.943	0.943
WCDMA IV_Ant 2	Front	0.595	0.088	0.122	0.196	0.291	0.886	0.683	0.717	0.791	0.974	1.008	1.082
	Back	0.867	0.136	0.170	0.251	0.199	1.066	1.003	1.037	1.118	1.202	1.236	1.317
	Left side	0.070	0.008	0.275	0.369	0.146	0.216	0.078	0.345	0.439	0.224	0.491	0.585
	Right side	0.693	0.038	0.001	0.054	0.131	0.824	0.731	0.694	0.747	0.862	0.825	0.878
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.952						0.952	0.952	0.952	0.952	0.952	0.952
WCDMA V_Ant 0	Front	0.391	0.088	0.122	0.196	0.291	0.682	0.479	0.513	0.587	0.770	0.804	0.878
	Back	0.426	0.136	0.170	0.251	0.199	0.625	0.562	0.596	0.677	0.761	0.795	0.876
	Left side	0.520	0.008	0.275	0.369	0.146	0.666	0.528	0.795	0.889	0.674	0.941	1.035
	Right side	0.311	0.038	0.001	0.054	0.131	0.442	0.349	0.312	0.365	0.480	0.443	0.496
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.224						0.224	0.224	0.224	0.224	0.224	0.224
LTE Band 7_Ant 2	Front	0.343	0.088	0.122	0.196	0.291	0.634	0.431	0.465	0.539	0.722	0.756	0.830
	Back	0.607	0.136	0.170	0.251	0.199	0.806	0.743	0.777	0.858	0.942	0.976	1.057
	Left side	0.010	0.008	0.275	0.369	0.146	0.156	0.018	0.285	0.379	0.164	0.431	0.525
	Right side	0.822	0.038	0.001	0.054	0.131	0.953	0.860	0.823	0.876	0.991	0.954	1.007
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.329						0.329	0.329	0.329	0.329	0.329	0.329
LTE Band 12_Ant 0	Front	0.307	0.088	0.122	0.196	0.291	0.598	0.395	0.429	0.503	0.686	0.720	0.794
	Back	0.425	0.136	0.170	0.251	0.199	0.624	0.561	0.595	0.676	0.760	0.794	0.875
	Left side	0.505	0.008	0.275	0.369	0.146	0.651	0.513	0.780	0.874	0.659	0.926	1.020
	Right side	0.331	0.038	0.001	0.054	0.131	0.462	0.369	0.332	0.385	0.500	0.463	0.516
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.073						0.073	0.073	0.073	0.073	0.073	0.073
LTE Band 13_Ant 0	Front	0.446	0.088	0.122	0.196	0.291	0.737	0.534	0.568	0.642	0.825	0.859	0.933
	Back	0.483	0.136	0.170	0.251	0.199	0.682	0.619	0.653	0.734	0.818	0.852	0.933
	Left side	0.668	0.008	0.275	0.369	0.146	0.814	0.676	0.943	1.037	0.822	1.089	1.183
	Right side	0.483	0.038	0.001	0.054	0.131	0.614	0.521	0.484	0.537	0.652	0.615	0.668
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.146						0.146	0.146	0.146	0.146	0.146	0.146
LTE Band 14_Ant 0	Front	0.412	0.088	0.122	0.196	0.291	0.703	0.500	0.534	0.608	0.791	0.825	0.899
	Back	0.508	0.136	0.170	0.251	0.199	0.707	0.644	0.678	0.759	0.843	0.877	0.958
	Left side	0.793	0.008	0.275	0.369	0.146	0.939	0.801	1.068	1.162	0.947	1.214	1.308



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	Right side	0.499	0.038	0.001	0.054	0.131	0.630	0.537	0.500	0.553	0.668	0.631	0.684
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.175					0.175	0.175	0.175	0.175	0.175	0.175	0.175
LTE Band 25_Ant 2	Front	0.645	0.088	0.122	0.196	0.291	0.936	0.733	0.767	0.841	1.024	1.058	1.132
	Back	0.747	0.136	0.170	0.251	0.199	0.946	0.883	0.917	0.998	1.082	1.116	1.197
	Left side	0.045	0.008	0.275	0.369	0.146	0.191	0.053	0.320	0.414	0.199	0.466	0.560
	Right side	0.543	0.038	0.001	0.054	0.131	0.674	0.581	0.544	0.597	0.712	0.675	0.728
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.986					0.986	0.986	0.986	0.986	0.986	0.986	0.986
LTE Band 26_Ant 0	Front	0.408	0.088	0.122	0.196	0.291	0.699	0.496	0.530	0.604	0.787	0.821	0.895
	Back	0.438	0.136	0.170	0.251	0.199	0.637	0.574	0.608	0.689	0.773	0.807	0.888
	Left side	0.599	0.008	0.275	0.369	0.146	0.745	0.607	0.874	0.968	0.753	1.020	1.114
	Right side	0.353	0.038	0.001	0.054	0.131	0.484	0.391	0.354	0.407	0.522	0.485	0.538
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.252					0.252	0.252	0.252	0.252	0.252	0.252	0.252
LTE Band 30_Ant 2	Front	0.617	0.088	0.122	0.196	0.291	0.908	0.705	0.739	0.813	0.996	1.030	1.104
	Back	0.936	0.136	0.170	0.251	0.199	1.135	1.072	1.106	1.187	1.271	1.305	1.386
	Left side	0.013	0.008	0.275	0.369	0.146	0.159	0.021	0.288	0.382	0.167	0.434	0.528
	Right side	0.923	0.038	0.001	0.054	0.131	1.054	0.961	0.924	0.977	1.092	1.055	1.108
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.840					0.840	0.840	0.840	0.840	0.840	0.840	0.840
LTE Band 41_Ant 2	Front	0.426	0.088	0.122	0.196	0.291	0.717	0.514	0.548	0.622	0.805	0.839	0.913
	Back	0.546	0.136	0.170	0.251	0.199	0.745	0.682	0.716	0.797	0.881	0.915	0.996
	Left side	0.015	0.008	0.275	0.369	0.146	0.161	0.023	0.290	0.384	0.169	0.436	0.530
	Right side	0.991	0.038	0.001	0.054	0.131	1.122	1.029	0.992	1.045	1.160	1.123	1.176
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.363					0.363	0.363	0.363	0.363	0.363	0.363	0.363
LTE Band 48_Ant 6	Front	0.887	0.088	0.122	0.196	0.291	1.178	0.975	1.009	1.083	1.266	1.300	1.374
	Back	0.439	0.136	0.170	0.251	0.199	0.638	0.575	0.609	0.690	0.774	0.808	0.889
	Left side	0.616	0.008	0.275	0.369	0.146	0.762	0.624	0.891	0.985	0.770	1.037	1.131
	Right side	0.051	0.038	0.001	0.054	0.131	0.182	0.089	0.052	0.105	0.220	0.183	0.236
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.460					0.460	0.460	0.460	0.460	0.460	0.460	0.460
LTE Band 66_Ant 2	Front	0.737	0.088	0.122	0.196	0.291	1.028	0.825	0.859	0.933	1.116	1.150	1.224
	Back	0.831	0.136	0.170	0.251	0.199	1.030	0.967	1.001	1.082	1.166	1.200	1.281
	Left side	0.076	0.008	0.275	0.369	0.146	0.222	0.084	0.351	0.445	0.230	0.497	0.591
	Right side	0.711	0.038	0.001	0.054	0.131	0.842	0.749	0.712	0.765	0.880	0.843	0.896
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.944					0.944	0.944	0.944	0.944	0.944	0.944	0.944
LTE Band 71_Ant 0	Front	0.347	0.088	0.122	0.196	0.291	0.638	0.435	0.469	0.543	0.726	0.760	0.834
	Back	0.483	0.136	0.170	0.251	0.199	0.682	0.619	0.653	0.734	0.818	0.852	0.933
	Left side	0.462	0.008	0.275	0.369	0.146	0.608	0.470	0.737	0.831	0.616	0.883	0.977
	Right side	0.308	0.038	0.001	0.054	0.131	0.439	0.346	0.309	0.362	0.477	0.440	0.493
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.081					0.081	0.081	0.081	0.081	0.081	0.081	0.081
FR1 n5_Ant 0	Front	0.325	0.088	0.122	0.196	0.291	0.616	0.413	0.447	0.521	0.704	0.738	0.812
	Back	0.428	0.136	0.170	0.251	0.199	0.627	0.564	0.598	0.679	0.763	0.797	0.878
	Left side	0.529	0.008	0.275	0.369	0.146	0.675	0.537	0.804	0.898	0.683	0.950	1.044
	Right side	0.316	0.038	0.001	0.054	0.131	0.447	0.354	0.317	0.370	0.485	0.448	0.501
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.221					0.221	0.221	0.221	0.221	0.221	0.221	0.221
FR1 n7_Ant 2	Front	0.417	0.088	0.122	0.196	0.291	0.708	0.505	0.539	0.613	0.796	0.830	0.904
	Back	0.585	0.136	0.170	0.251	0.199	0.784	0.721	0.755	0.836	0.920	0.954	1.035
	Left side	0.010	0.008	0.275	0.369	0.146	0.156	0.018	0.285	0.379	0.164	0.431	0.525
	Right side	0.853	0.038	0.001	0.054	0.131	0.984	0.891	0.854	0.907	1.022	0.985	1.038
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342



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	Bottom side	0.374					0.374	0.374	0.374	0.374	0.374	0.374	0.374
FR1 n12_Ant 0	Front	0.401	0.088	0.122	0.196	0.291	0.692	0.489	0.523	0.597	0.780	0.814	0.888
	Back	0.462	0.136	0.170	0.251	0.199	0.661	0.598	0.632	0.713	0.797	0.831	0.912
	Left side	0.473	0.008	0.275	0.369	0.146	0.619	0.481	0.748	0.842	0.627	0.894	0.988
	Right side	0.326	0.038	0.001	0.054	0.131	0.457	0.364	0.327	0.380	0.495	0.458	0.511
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.078					0.078	0.078	0.078	0.078	0.078	0.078	0.078
FR1 n25_Ant 2	Front	0.670	0.088	0.122	0.196	0.291	0.961	0.758	0.792	0.866	1.049	1.083	1.157
	Back	0.842	0.136	0.170	0.251	0.199	1.041	0.978	1.012	1.093	1.177	1.211	1.292
	Left side	0.055	0.008	0.275	0.369	0.146	0.201	0.063	0.330	0.424	0.209	0.476	0.570
	Right side	0.648	0.038	0.001	0.054	0.131	0.779	0.686	0.649	0.702	0.817	0.780	0.833
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.982					0.982	0.982	0.982	0.982	0.982	0.982	0.982
FR1 n30_Ant 2	Front	0.727	0.088	0.122	0.196	0.291	1.018	0.815	0.849	0.923	1.106	1.140	1.214
	Back	0.991	0.136	0.170	0.251	0.199	1.190	1.127	1.161	1.242	1.326	1.360	1.441
	Left side	0.015	0.008	0.275	0.369	0.146	0.161	0.023	0.290	0.384	0.169	0.436	0.530
	Right side	0.988	0.038	0.001	0.054	0.131	1.119	1.026	0.989	1.042	1.157	1.120	1.173
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.934					0.934	0.934	0.934	0.934	0.934	0.934	0.934
FR1 n41_Ant 5	Front	0.353	0.088	0.122	0.196	0.291	0.644	0.441	0.475	0.549	0.732	0.766	0.840
	Back	0.537	0.136	0.170	0.251	0.199	0.736	0.673	0.707	0.788	0.872	0.906	0.987
	Left side	0.018	0.008	0.275	0.369	0.146	0.164	0.026	0.293	0.387	0.172	0.439	0.533
	Right side	0.981	0.038	0.001	0.054	0.131	1.112	1.019	0.982	1.035	1.150	1.113	1.166
	Top side	0.230	0.267	0.011	0.239	0.103	0.333	0.497	0.241	0.469	0.600	0.344	0.572
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n66_Ant 2	Front	0.713	0.088	0.122	0.196	0.291	1.004	0.801	0.835	0.909	1.092	1.126	1.200
	Back	0.901	0.136	0.170	0.251	0.199	1.100	1.037	1.071	1.152	1.236	1.270	1.351
	Left side	0.043	0.008	0.275	0.369	0.146	0.189	0.051	0.318	0.412	0.197	0.464	0.558
	Right side	0.704	0.038	0.001	0.054	0.131	0.835	0.742	0.705	0.758	0.873	0.836	0.889
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.997					0.997	0.997	0.997	0.997	0.997	0.997	0.997
FR1 n71_Ant 0	Front	0.363	0.088	0.122	0.196	0.291	0.654	0.451	0.485	0.559	0.742	0.776	0.850
	Back	0.447	0.136	0.170	0.251	0.199	0.646	0.583	0.617	0.698	0.782	0.816	0.897
	Left side	0.498	0.008	0.275	0.369	0.146	0.644	0.506	0.773	0.867	0.652	0.919	1.013
	Right side	0.353	0.038	0.001	0.054	0.131	0.484	0.391	0.354	0.407	0.522	0.485	0.538
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.093					0.093	0.093	0.093	0.093	0.093	0.093	0.093
FR1 n77_Ant 6	Front	0.993	0.088	0.122	0.196	0.291	1.284	1.081	1.115	1.189	1.372	1.406	1.480
	Back	0.577	0.136	0.170	0.251	0.199	0.776	0.713	0.747	0.828	0.912	0.946	1.027
	Left side	0.826	0.008	0.275	0.369	0.146	0.972	0.834	1.101	1.195	0.980	1.247	1.341
	Right side	0.092	0.038	0.001	0.054	0.131	0.223	0.130	0.093	0.146	0.261	0.224	0.277
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.433					0.433	0.433	0.433	0.433	0.433	0.433	0.433



<WWAN Index 4, WLAN Index 8>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 1	Front	0.392	0.088	0.122	0.196	0.291	0.683	0.480	0.514	0.588	0.771	0.805	0.879
	Back	0.542	0.136	0.170	0.251	0.199	0.741	0.678	0.712	0.793	0.877	0.911	0.992
	Left side	0.335	0.008	0.275	0.369	0.146	0.481	0.343	0.610	0.704	0.489	0.756	0.850
	Right side	0.259	0.038	0.001	0.054	0.131	0.390	0.297	0.260	0.313	0.428	0.391	0.444
	Top side	0.375	0.267	0.011	0.239	0.103	0.478	0.642	0.386	0.614	0.745	0.489	0.717
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
GSM1900_Ant 0	Front	0.506	0.088	0.122	0.196	0.291	0.797	0.594	0.628	0.702	0.885	0.919	0.993
	Back	0.994	0.136	0.170	0.251	0.199	1.193	1.130	1.164	1.245	1.329	1.363	1.444
	Left side	0.993	0.008	0.275	0.369	0.146	1.139	1.001	1.268	1.362	1.147	1.414	1.508
	Right side	0.038	0.038	0.001	0.054	0.131	0.169	0.076	0.039	0.092	0.207	0.170	0.223
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.837					0.837	0.837	0.837	0.837	0.837	0.837	0.837
WCDMA II_Ant 0	Front	0.445	0.088	0.122	0.196	0.291	0.736	0.533	0.567	0.641	0.824	0.858	0.932
	Back	0.692	0.136	0.170	0.251	0.199	0.891	0.828	0.862	0.943	1.027	1.061	1.142
	Left side	0.947	0.008	0.275	0.369	0.146	1.093	0.955	1.222	1.316	1.101	1.368	1.462
	Right side	0.034	0.038	0.001	0.054	0.131	0.165	0.072	0.035	0.088	0.203	0.166	0.219
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.635					0.635	0.635	0.635	0.635	0.635	0.635	0.635
WCDMA IV_Ant 0	Front	0.448	0.088	0.122	0.196	0.291	0.739	0.536	0.570	0.644	0.827	0.861	0.935
	Back	0.764	0.136	0.170	0.251	0.199	0.963	0.900	0.934	1.015	1.099	1.133	1.214
	Left side	0.692	0.008	0.275	0.369	0.146	0.838	0.700	0.967	1.061	0.846	1.113	1.207
	Right side	0.065	0.038	0.001	0.054	0.131	0.196	0.103	0.066	0.119	0.234	0.197	0.250
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.992					0.992	0.992	0.992	0.992	0.992	0.992	0.992
WCDMA V_Ant 1	Front	0.246	0.088	0.122	0.196	0.291	0.537	0.334	0.368	0.442	0.625	0.659	0.733
	Back	0.395	0.136	0.170	0.251	0.199	0.594	0.531	0.565	0.646	0.730	0.764	0.845
	Left side	0.242	0.008	0.275	0.369	0.146	0.388	0.250	0.517	0.611	0.396	0.663	0.757
	Right side	0.235	0.038	0.001	0.054	0.131	0.366	0.273	0.236	0.289	0.404	0.367	0.420
	Top side	0.233	0.267	0.011	0.239	0.103	0.336	0.500	0.244	0.472	0.603	0.347	0.575
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.364	0.088	0.122	0.196	0.291	0.655	0.452	0.486	0.560	0.743	0.777	0.851
	Back	0.560	0.136	0.170	0.251	0.199	0.759	0.696	0.730	0.811	0.895	0.929	1.010
	Left side	0.901	0.008	0.275	0.369	0.146	1.047	0.909	1.176	1.270	1.055	1.322	1.416
	Right side	0.020	0.038	0.001	0.054	0.131	0.151	0.058	0.021	0.074	0.189	0.152	0.205
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.193					0.193	0.193	0.193	0.193	0.193	0.193	0.193
LTE Band 12_Ant 1	Front	0.190	0.088	0.122	0.196	0.291	0.481	0.278	0.312	0.386	0.569	0.603	0.677
	Back	0.277	0.136	0.170	0.251	0.199	0.476	0.413	0.447	0.528	0.612	0.646	0.727
	Left side	0.263	0.008	0.275	0.369	0.146	0.409	0.271	0.538	0.632	0.417	0.684	0.778
	Right side	0.127	0.038	0.001	0.054	0.131	0.258	0.165	0.128	0.181	0.296	0.259	0.312
	Top side	0.257	0.267	0.011	0.239	0.103	0.360	0.524	0.268	0.496	0.627	0.371	0.599
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.217	0.088	0.122	0.196	0.291	0.508	0.305	0.339	0.413	0.596	0.630	0.704
	Back	0.289	0.136	0.170	0.251	0.199	0.488	0.425	0.459	0.540	0.624	0.658	0.739
	Left side	0.184	0.008	0.275	0.369	0.146	0.330	0.192	0.459	0.553	0.338	0.605	0.699
	Right side	0.123	0.038	0.001	0.054	0.131	0.254	0.161	0.124	0.177	0.292	0.255	0.308
	Top side	0.192	0.267	0.011	0.239	0.103	0.295	0.459	0.203	0.431	0.562	0.306	0.534
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.233	0.088	0.122	0.196	0.291	0.524	0.321	0.355	0.429	0.612	0.646	0.720
	Back	0.349	0.136	0.170	0.251	0.199	0.548	0.485	0.519	0.600	0.684	0.718	0.799
	Left side	0.210	0.008	0.275	0.369	0.146	0.356	0.218	0.485	0.579	0.364	0.631	0.725



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	Right side	0.120	0.038	0.001	0.054	0.131	0.251	0.158	0.121	0.174	0.289	0.252	0.305
	Top side	0.217	0.267	0.011	0.239	0.103	0.320	0.484	0.228	0.456	0.587	0.331	0.559
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 25_Ant 0	Front	0.424	0.088	0.122	0.196	0.291	0.715	0.512	0.546	0.620	0.803	0.837	0.911
	Back	0.696	0.136	0.170	0.251	0.199	0.895	0.832	0.866	0.947	1.031	1.065	1.146
	Left side	0.935	0.008	0.275	0.369	0.146	1.081	0.943	1.210	1.304	1.089	1.356	1.450
	Right side	0.034	0.038	0.001	0.054	0.131	0.165	0.072	0.035	0.088	0.203	0.166	0.219
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.641					0.641	0.641	0.641	0.641	0.641	0.641	0.641
LTE Band 26_Ant 1	Front	0.210	0.088	0.122	0.196	0.291	0.501	0.298	0.332	0.406	0.589	0.623	0.697
	Back	0.301	0.136	0.170	0.251	0.199	0.500	0.437	0.471	0.552	0.636	0.670	0.751
	Left side	0.179	0.008	0.275	0.369	0.146	0.325	0.187	0.454	0.548	0.333	0.600	0.694
	Right side	0.123	0.038	0.001	0.054	0.131	0.254	0.161	0.124	0.177	0.292	0.255	0.308
	Top side	0.230	0.267	0.011	0.239	0.103	0.333	0.497	0.241	0.469	0.600	0.344	0.572
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 30_Ant 0	Front	0.435	0.088	0.122	0.196	0.291	0.726	0.523	0.557	0.631	0.814	0.848	0.922
	Back	0.588	0.136	0.170	0.251	0.199	0.787	0.724	0.758	0.839	0.923	0.957	1.038
	Left side	0.872	0.008	0.275	0.369	0.146	1.018	0.880	1.147	1.241	1.026	1.293	1.387
	Right side	0.029	0.038	0.001	0.054	0.131	0.160	0.067	0.030	0.083	0.198	0.161	0.214
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.133					0.133	0.133	0.133	0.133	0.133	0.133	0.133
LTE Band 41_Ant 0	Front	0.414	0.088	0.122	0.196	0.291	0.705	0.502	0.536	0.610	0.793	0.827	0.901
	Back	0.682	0.136	0.170	0.251	0.199	0.881	0.818	0.852	0.933	1.017	1.051	1.132
	Left side	0.523	0.008	0.275	0.369	0.146	0.669	0.531	0.798	0.892	0.677	0.944	1.038
	Right side	0.087	0.038	0.001	0.054	0.131	0.218	0.125	0.088	0.141	0.256	0.219	0.272
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.254					0.254	0.254	0.254	0.254	0.254	0.254	0.254
LTE Band 48_Ant 2	Front	0.336	0.088	0.122	0.196	0.291	0.627	0.424	0.458	0.532	0.715	0.749	0.823
	Back	0.410	0.136	0.170	0.251	0.199	0.609	0.546	0.580	0.661	0.745	0.779	0.860
	Left side	0.133	0.008	0.275	0.369	0.146	0.279	0.141	0.408	0.502	0.287	0.554	0.648
	Right side	0.256	0.038	0.001	0.054	0.131	0.387	0.294	0.257	0.310	0.425	0.388	0.441
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.467					0.467	0.467	0.467	0.467	0.467	0.467	0.467
LTE Band 66_Ant 0	Front	0.460	0.088	0.122	0.196	0.291	0.751	0.548	0.582	0.656	0.839	0.873	0.947
	Back	0.740	0.136	0.170	0.251	0.199	0.939	0.876	0.910	0.991	1.075	1.109	1.190
	Left side	0.643	0.008	0.275	0.369	0.146	0.789	0.651	0.918	1.012	0.797	1.064	1.158
	Right side	0.066	0.038	0.001	0.054	0.131	0.197	0.104	0.067	0.120	0.235	0.198	0.251
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.908					0.908	0.908	0.908	0.908	0.908	0.908	0.908
LTE Band 71_Ant 1	Front	0.180	0.088	0.122	0.196	0.291	0.471	0.268	0.302	0.376	0.559	0.593	0.667
	Back	0.243	0.136	0.170	0.251	0.199	0.442	0.379	0.413	0.494	0.578	0.612	0.693
	Left side	0.287	0.008	0.275	0.369	0.146	0.433	0.295	0.562	0.656	0.441	0.708	0.802
	Right side	0.104	0.038	0.001	0.054	0.131	0.235	0.142	0.105	0.158	0.273	0.236	0.289
	Top side	0.176	0.267	0.011	0.239	0.103	0.279	0.443	0.187	0.415	0.546	0.290	0.518
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n5_Ant 1	Front	0.193	0.088	0.122	0.196	0.291	0.484	0.281	0.315	0.389	0.572	0.606	0.680
	Back	0.322	0.136	0.170	0.251	0.199	0.521	0.458	0.492	0.573	0.657	0.691	0.772
	Left side	0.110	0.008	0.275	0.369	0.146	0.256	0.118	0.385	0.479	0.264	0.531	0.625
	Right side	0.094	0.038	0.001	0.054	0.131	0.225	0.132	0.095	0.148	0.263	0.226	0.279
	Top side	0.142	0.267	0.011	0.239	0.103	0.245	0.409	0.153	0.381	0.512	0.256	0.484
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n7_Ant 0	Front	0.439	0.088	0.122	0.196	0.291	0.730	0.527	0.561	0.635	0.818	0.852	0.926
	Back	0.611	0.136	0.170	0.251	0.199	0.810	0.747	0.781	0.862	0.946	0.980	1.061
	Left side	0.932	0.008	0.275	0.369	0.146	1.078	0.940	1.207	1.301	1.086	1.353	1.447
	Right side	0.017	0.038	0.001	0.054	0.131	0.148	0.055	0.018	0.071	0.186	0.149	0.202
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342



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	Bottom side	0.203					0.203	0.203	0.203	0.203	0.203	0.203	0.203
FR1 n12_Ant 1	Front	0.153	0.088	0.122	0.196	0.291	0.444	0.241	0.275	0.349	0.532	0.566	0.640
	Back	0.249	0.136	0.170	0.251	0.199	0.448	0.385	0.419	0.500	0.584	0.618	0.699
	Left side	0.238	0.008	0.275	0.369	0.146	0.384	0.246	0.513	0.607	0.392	0.659	0.753
	Right side	0.127	0.038	0.001	0.054	0.131	0.258	0.165	0.128	0.181	0.296	0.259	0.312
	Top side	0.166	0.267	0.011	0.239	0.103	0.269	0.433	0.177	0.405	0.536	0.280	0.508
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n25_Ant 0	Front	0.457	0.088	0.122	0.196	0.291	0.748	0.545	0.579	0.653	0.836	0.870	0.944
	Back	0.808	0.136	0.170	0.251	0.199	1.007	0.944	0.978	1.059	1.143	1.177	1.258
	Left side	0.976	0.008	0.275	0.369	0.146	1.122	0.984	1.251	1.345	1.130	1.397	1.491
	Right side	0.025	0.038	0.001	0.054	0.131	0.156	0.063	0.026	0.079	0.194	0.157	0.210
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.619					0.619	0.619	0.619	0.619	0.619	0.619	0.619
FR1 n30_Ant 0	Front	0.417	0.088	0.122	0.196	0.291	0.708	0.505	0.539	0.613	0.796	0.830	0.904
	Back	0.637	0.136	0.170	0.251	0.199	0.836	0.773	0.807	0.888	0.972	1.006	1.087
	Left side	0.891	0.008	0.275	0.369	0.146	1.037	0.899	1.166	1.260	1.045	1.312	1.406
	Right side	0.034	0.038	0.001	0.054	0.131	0.165	0.072	0.035	0.088	0.203	0.166	0.219
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.147					0.147	0.147	0.147	0.147	0.147	0.147	0.147
FR1 n41_Ant 1	Front	0.525	0.088	0.122	0.196	0.291	0.816	0.613	0.647	0.721	0.904	0.938	1.012
	Back	0.499	0.136	0.170	0.251	0.199	0.698	0.635	0.669	0.750	0.834	0.868	0.949
	Left side	0.119	0.008	0.275	0.369	0.146	0.265	0.127	0.394	0.488	0.273	0.540	0.634
	Right side	0.043	0.038	0.001	0.054	0.131	0.174	0.081	0.044	0.097	0.212	0.175	0.228
	Top side	0.945	0.267	0.011	0.239	0.103	1.048	1.212	0.956	1.184	1.315	1.059	1.287
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n66_Ant 0	Front	0.473	0.088	0.122	0.196	0.291	0.764	0.561	0.595	0.669	0.852	0.886	0.960
	Back	0.827	0.136	0.170	0.251	0.199	1.026	0.963	0.997	1.078	1.162	1.196	1.277
	Left side	0.709	0.008	0.275	0.369	0.146	0.855	0.717	0.984	1.078	0.863	1.130	1.224
	Right side	0.074	0.038	0.001	0.054	0.131	0.205	0.112	0.075	0.128	0.243	0.206	0.259
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.990					0.990	0.990	0.990	0.990	0.990	0.990	0.990
FR1 n71_Ant 1	Front	0.147	0.088	0.122	0.196	0.291	0.438	0.235	0.269	0.343	0.526	0.560	0.634
	Back	0.193	0.136	0.170	0.251	0.199	0.392	0.329	0.363	0.444	0.528	0.562	0.643
	Left side	0.233	0.008	0.275	0.369	0.146	0.379	0.241	0.508	0.602	0.387	0.654	0.748
	Right side	0.094	0.038	0.001	0.054	0.131	0.225	0.132	0.095	0.148	0.263	0.226	0.279
	Top side	0.114	0.267	0.011	0.239	0.103	0.217	0.381	0.125	0.353	0.484	0.228	0.456
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n77_Ant 2	Front	0.754	0.088	0.122	0.196	0.291	1.045	0.842	0.876	0.950	1.133	1.167	1.241
	Back	0.980	0.136	0.170	0.251	0.199	1.179	1.116	1.150	1.231	1.315	1.349	1.430
	Left side	0.209	0.008	0.275	0.369	0.146	0.355	0.217	0.484	0.578	0.363	0.630	0.724
	Right side	0.786	0.038	0.001	0.054	0.131	0.917	0.824	0.787	0.840	0.955	0.918	0.971
	Top side		0.267	0.011	0.239	0.103	0.103	0.267	0.011	0.239	0.370	0.114	0.342
	Bottom side	0.940					0.940	0.940	0.940	0.940	0.940	0.940	0.940



<WWAN Index 4, WLAN Index 9, BT Index 3>

WWAN Band	Exposure Position	1	5	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 0	Front	0.476	0.440	0.055	0.070	0.050	0.531	0.546	0.526	0.971	0.986	0.966	0.916
	Back	0.560	0.314	0.075	0.091	0.069	0.635	0.651	0.629	0.949	0.965	0.943	0.874
	Left side	0.865	0.279	0.001	0.131	0.059	0.866	0.996	0.924	1.145	1.275	1.203	1.144
	Right side	0.464	0.212	0.019	0.001	0.018	0.483	0.465	0.482	0.695	0.677	0.694	0.676
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.260					0.260	0.260	0.260	0.260	0.260	0.260	0.260
GSM1900_Ant 2	Front	0.591	0.440	0.055	0.070	0.050	0.646	0.661	0.641	1.086	1.101	1.081	1.031
	Back	0.716	0.314	0.075	0.091	0.069	0.791	0.807	0.785	1.105	1.121	1.099	1.030
	Left side	0.052	0.279	0.001	0.131	0.059	0.053	0.183	0.111	0.332	0.462	0.390	0.331
	Right side	0.539	0.212	0.019	0.001	0.018	0.558	0.540	0.557	0.770	0.752	0.769	0.751
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.953					0.953	0.953	0.953	0.953	0.953	0.953	0.953
WCDMA II_Ant 2	Front	0.567	0.440	0.055	0.070	0.050	0.622	0.637	0.617	1.062	1.077	1.057	1.007
	Back	0.743	0.314	0.075	0.091	0.069	0.818	0.834	0.812	1.132	1.148	1.126	1.057
	Left side	0.059	0.279	0.001	0.131	0.059	0.060	0.190	0.118	0.339	0.469	0.397	0.338
	Right side	0.490	0.212	0.019	0.001	0.018	0.509	0.491	0.508	0.721	0.703	0.720	0.702
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.943					0.943	0.943	0.943	0.943	0.943	0.943	0.943
WCDMA IV_Ant 2	Front	0.595	0.440	0.055	0.070	0.050	0.650	0.665	0.645	1.090	1.105	1.085	1.035
	Back	0.867	0.314	0.075	0.091	0.069	0.942	0.958	0.936	1.256	1.272	1.250	1.181
	Left side	0.070	0.279	0.001	0.131	0.059	0.071	0.201	0.129	0.350	0.480	0.408	0.349
	Right side	0.693	0.212	0.019	0.001	0.018	0.712	0.694	0.711	0.924	0.906	0.923	0.905
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.952					0.952	0.952	0.952	0.952	0.952	0.952	0.952
WCDMA V_Ant 0	Front	0.391	0.440	0.055	0.070	0.050	0.446	0.461	0.441	0.886	0.901	0.881	0.831
	Back	0.426	0.314	0.075	0.091	0.069	0.501	0.517	0.495	0.815	0.831	0.809	0.740
	Left side	0.520	0.279	0.001	0.131	0.059	0.521	0.651	0.579	0.800	0.930	0.858	0.799
	Right side	0.311	0.212	0.019	0.001	0.018	0.330	0.312	0.329	0.542	0.524	0.541	0.523
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.224					0.224	0.224	0.224	0.224	0.224	0.224	0.224
LTE Band 7_Ant 2	Front	0.343	0.440	0.055	0.070	0.050	0.398	0.413	0.393	0.838	0.853	0.833	0.783
	Back	0.607	0.314	0.075	0.091	0.069	0.682	0.698	0.676	0.996	1.012	0.990	0.921
	Left side	0.010	0.279	0.001	0.131	0.059	0.011	0.141	0.069	0.290	0.420	0.348	0.289
	Right side	0.822	0.212	0.019	0.001	0.018	0.841	0.823	0.840	1.053	1.035	1.052	1.034
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.329					0.329	0.329	0.329	0.329	0.329	0.329	0.329
LTE Band 12_Ant 0	Front	0.307	0.440	0.055	0.070	0.050	0.362	0.377	0.357	0.802	0.817	0.797	0.747
	Back	0.425	0.314	0.075	0.091	0.069	0.500	0.516	0.494	0.814	0.830	0.808	0.739
	Left side	0.505	0.279	0.001	0.131	0.059	0.506	0.636	0.564	0.785	0.915	0.843	0.784
	Right side	0.331	0.212	0.019	0.001	0.018	0.350	0.332	0.349	0.562	0.544	0.561	0.543
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.073					0.073	0.073	0.073	0.073	0.073	0.073	0.073
LTE Band 13_Ant 0	Front	0.446	0.440	0.055	0.070	0.050	0.501	0.516	0.496	0.941	0.956	0.936	0.886
	Back	0.483	0.314	0.075	0.091	0.069	0.558	0.574	0.552	0.872	0.888	0.866	0.797
	Left side	0.668	0.279	0.001	0.131	0.059	0.669	0.799	0.727	0.948	1.078	1.006	0.947
	Right side	0.483	0.212	0.019	0.001	0.018	0.502	0.484	0.501	0.714	0.696	0.713	0.695
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.146					0.146	0.146	0.146	0.146	0.146	0.146	0.146
LTE Band 14_Ant 0	Front	0.412	0.440	0.055	0.070	0.050	0.467	0.482	0.462	0.907	0.922	0.902	0.852
	Back	0.508	0.314	0.075	0.091	0.069	0.583	0.599	0.577	0.897	0.913	0.891	0.822
	Left side	0.793	0.279	0.001	0.131	0.059	0.794	0.924	0.852	1.073	1.203	1.131	1.072



	Right side	0.499	0.212	0.019	0.001	0.018	0.518	0.500	0.517	0.730	0.712	0.729	0.711
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.175					0.175	0.175	0.175	0.175	0.175	0.175	0.175
LTE Band 25_Ant 2	Front	0.645	0.440	0.055	0.070	0.050	0.700	0.715	0.695	1.140	1.155	1.135	1.085
	Back	0.747	0.314	0.075	0.091	0.069	0.822	0.838	0.816	1.136	1.152	1.130	1.061
	Left side	0.045	0.279	0.001	0.131	0.059	0.046	0.176	0.104	0.325	0.455	0.383	0.324
	Right side	0.543	0.212	0.019	0.001	0.018	0.562	0.544	0.561	0.774	0.756	0.773	0.755
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.986					0.986	0.986	0.986	0.986	0.986	0.986	0.986
LTE Band 26_Ant 0	Front	0.408	0.440	0.055	0.070	0.050	0.463	0.478	0.458	0.903	0.918	0.898	0.848
	Back	0.438	0.314	0.075	0.091	0.069	0.513	0.529	0.507	0.827	0.843	0.821	0.752
	Left side	0.599	0.279	0.001	0.131	0.059	0.600	0.730	0.658	0.879	1.009	0.937	0.878
	Right side	0.353	0.212	0.019	0.001	0.018	0.372	0.354	0.371	0.584	0.566	0.583	0.565
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.252					0.252	0.252	0.252	0.252	0.252	0.252	0.252
LTE Band 30_Ant 2	Front	0.617	0.440	0.055	0.070	0.050	0.672	0.687	0.667	1.112	1.127	1.107	1.057
	Back	0.936	0.314	0.075	0.091	0.069	1.011	1.027	1.005	1.325	1.341	1.319	1.250
	Left side	0.013	0.279	0.001	0.131	0.059	0.014	0.144	0.072	0.293	0.423	0.351	0.292
	Right side	0.923	0.212	0.019	0.001	0.018	0.942	0.924	0.941	1.154	1.136	1.153	1.135
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.840					0.840	0.840	0.840	0.840	0.840	0.840	0.840
LTE Band 41_Ant 2	Front	0.426	0.440	0.055	0.070	0.050	0.481	0.496	0.476	0.921	0.936	0.916	0.866
	Back	0.546	0.314	0.075	0.091	0.069	0.621	0.637	0.615	0.935	0.951	0.929	0.860
	Left side	0.015	0.279	0.001	0.131	0.059	0.016	0.146	0.074	0.295	0.425	0.353	0.294
	Right side	0.991	0.212	0.019	0.001	0.018	1.010	0.992	1.009	1.222	1.204	1.221	1.203
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.363					0.363	0.363	0.363	0.363	0.363	0.363	0.363
LTE Band 48_Ant 6	Front	0.887	0.440	0.055	0.070	0.050	0.942	0.957	0.937	1.382	1.397	1.377	1.327
	Back	0.439	0.314	0.075	0.091	0.069	0.514	0.530	0.508	0.828	0.844	0.822	0.753
	Left side	0.616	0.279	0.001	0.131	0.059	0.617	0.747	0.675	0.896	1.026	0.954	0.895
	Right side	0.051	0.212	0.019	0.001	0.018	0.070	0.052	0.069	0.282	0.264	0.281	0.263
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.460					0.460	0.460	0.460	0.460	0.460	0.460	0.460
LTE Band 66_Ant 2	Front	0.737	0.440	0.055	0.070	0.050	0.792	0.807	0.787	1.232	1.247	1.227	1.177
	Back	0.831	0.314	0.075	0.091	0.069	0.906	0.922	0.900	1.220	1.236	1.214	1.145
	Left side	0.076	0.279	0.001	0.131	0.059	0.077	0.207	0.135	0.356	0.486	0.414	0.355
	Right side	0.711	0.212	0.019	0.001	0.018	0.730	0.712	0.729	0.942	0.924	0.941	0.923
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.944					0.944	0.944	0.944	0.944	0.944	0.944	0.944
LTE Band 71_Ant 0	Front	0.347	0.440	0.055	0.070	0.050	0.402	0.417	0.397	0.842	0.857	0.837	0.787
	Back	0.483	0.314	0.075	0.091	0.069	0.558	0.574	0.552	0.872	0.888	0.866	0.797
	Left side	0.462	0.279	0.001	0.131	0.059	0.463	0.593	0.521	0.742	0.872	0.800	0.741
	Right side	0.308	0.212	0.019	0.001	0.018	0.327	0.309	0.326	0.539	0.521	0.538	0.520
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.081					0.081	0.081	0.081	0.081	0.081	0.081	0.081
FR1 n5_Ant 0	Front	0.325	0.440	0.055	0.070	0.050	0.380	0.395	0.375	0.820	0.835	0.815	0.765
	Back	0.428	0.314	0.075	0.091	0.069	0.503	0.519	0.497	0.817	0.833	0.811	0.742
	Left side	0.529	0.279	0.001	0.131	0.059	0.530	0.660	0.588	0.809	0.939	0.867	0.808
	Right side	0.316	0.212	0.019	0.001	0.018	0.335	0.317	0.334	0.547	0.529	0.546	0.528
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.221					0.221	0.221	0.221	0.221	0.221	0.221	0.221
FR1 n7_Ant 2	Front	0.417	0.440	0.055	0.070	0.050	0.472	0.487	0.467	0.912	0.927	0.907	0.857
	Back	0.585	0.314	0.075	0.091	0.069	0.660	0.676	0.654	0.974	0.990	0.968	0.899
	Left side	0.010	0.279	0.001	0.131	0.059	0.011	0.141	0.069	0.290	0.420	0.348	0.289
	Right side	0.853	0.212	0.019	0.001	0.018	0.872	0.854	0.871	1.084	1.066	1.083	1.065
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183



	Bottom side	0.374					0.374	0.374	0.374	0.374	0.374	0.374	0.374
FR1 n12_Ant 0	Front	0.401	0.440	0.055	0.070	0.050	0.456	0.471	0.451	0.896	0.911	0.891	0.841
	Back	0.462	0.314	0.075	0.091	0.069	0.537	0.553	0.531	0.851	0.867	0.845	0.776
	Left side	0.473	0.279	0.001	0.131	0.059	0.474	0.604	0.532	0.753	0.883	0.811	0.752
	Right side	0.326	0.212	0.019	0.001	0.018	0.345	0.327	0.344	0.557	0.539	0.556	0.538
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.078					0.078	0.078	0.078	0.078	0.078	0.078	0.078
FR1 n25_Ant 2	Front	0.670	0.440	0.055	0.070	0.050	0.725	0.740	0.720	1.165	1.180	1.160	1.110
	Back	0.842	0.314	0.075	0.091	0.069	0.917	0.933	0.911	1.231	1.247	1.225	1.156
	Left side	0.055	0.279	0.001	0.131	0.059	0.056	0.186	0.114	0.335	0.465	0.393	0.334
	Right side	0.648	0.212	0.019	0.001	0.018	0.667	0.649	0.666	0.879	0.861	0.878	0.860
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.982					0.982	0.982	0.982	0.982	0.982	0.982	0.982
FR1 n30_Ant 2	Front	0.727	0.440	0.055	0.070	0.050	0.782	0.797	0.777	1.222	1.237	1.217	1.167
	Back	0.991	0.314	0.075	0.091	0.069	1.066	1.082	1.060	1.380	1.396	1.374	1.305
	Left side	0.015	0.279	0.001	0.131	0.059	0.016	0.146	0.074	0.295	0.425	0.353	0.294
	Right side	0.988	0.212	0.019	0.001	0.018	1.007	0.989	1.006	1.219	1.201	1.218	1.200
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.934					0.934	0.934	0.934	0.934	0.934	0.934	0.934
FR1 n41_Ant 5	Front	0.353	0.440	0.055	0.070	0.050	0.408	0.423	0.403	0.848	0.863	0.843	0.793
	Back	0.537	0.314	0.075	0.091	0.069	0.612	0.628	0.606	0.926	0.942	0.920	0.851
	Left side	0.018	0.279	0.001	0.131	0.059	0.019	0.149	0.077	0.298	0.428	0.356	0.297
	Right side	0.981	0.212	0.019	0.001	0.018	1.000	0.982	0.999	1.212	1.194	1.211	1.193
	Top side	0.230	0.183	0.132	0.003	0.161	0.362	0.233	0.391	0.545	0.416	0.574	0.413
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n66_Ant 2	Front	0.713	0.440	0.055	0.070	0.050	0.768	0.783	0.763	1.208	1.223	1.203	1.153
	Back	0.901	0.314	0.075	0.091	0.069	0.976	0.992	0.970	1.290	1.306	1.284	1.215
	Left side	0.043	0.279	0.001	0.131	0.059	0.044	0.174	0.102	0.323	0.453	0.381	0.322
	Right side	0.704	0.212	0.019	0.001	0.018	0.723	0.705	0.722	0.935	0.917	0.934	0.916
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.997					0.997	0.997	0.997	0.997	0.997	0.997	0.997
FR1 n71_Ant 0	Front	0.363	0.440	0.055	0.070	0.050	0.418	0.433	0.413	0.858	0.873	0.853	0.803
	Back	0.447	0.314	0.075	0.091	0.069	0.522	0.538	0.516	0.836	0.852	0.830	0.761
	Left side	0.498	0.279	0.001	0.131	0.059	0.499	0.629	0.557	0.778	0.908	0.836	0.777
	Right side	0.353	0.212	0.019	0.001	0.018	0.372	0.354	0.371	0.584	0.566	0.583	0.565
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.093					0.093	0.093	0.093	0.093	0.093	0.093	0.093
FR1 n77_Ant 6	Front	0.993	0.440	0.055	0.070	0.050	1.048	1.063	1.043	1.488	1.503	1.483	1.433
	Back	0.577	0.314	0.075	0.091	0.069	0.652	0.668	0.646	0.966	0.982	0.960	0.891
	Left side	0.826	0.279	0.001	0.131	0.059	0.827	0.957	0.885	1.106	1.236	1.164	1.105
	Right side	0.092	0.212	0.019	0.001	0.018	0.111	0.093	0.110	0.323	0.305	0.322	0.304
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.433					0.433	0.433	0.433	0.433	0.433	0.433	0.433



FCC SAR TEST REPORT

Report No. : FA161608-05C

<WWAN Index 4, WLAN Index 9, BT Index 3>

WWAN Band	Exposure Position	1	5	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 1	Front	0.392	0.440	0.055	0.070	0.050	0.447	0.462	0.442	0.887	0.902	0.882	0.832
	Back	0.542	0.314	0.075	0.091	0.069	0.617	0.633	0.611	0.931	0.947	0.925	0.856
	Left side	0.335	0.279	0.001	0.131	0.059	0.336	0.466	0.394	0.615	0.745	0.673	0.614
	Right side	0.259	0.212	0.019	0.001	0.018	0.278	0.260	0.277	0.490	0.472	0.489	0.471
	Top side	0.375	0.183	0.132	0.003	0.161	0.507	0.378	0.536	0.690	0.561	0.719	0.558
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
GSM1900_Ant 0	Front	0.506	0.440	0.055	0.070	0.050	0.561	0.576	0.556	1.001	1.016	0.996	0.946
	Back	0.994	0.314	0.075	0.091	0.069	1.069	1.085	1.063	1.383	1.399	1.377	1.308
	Left side	0.993	0.279	0.001	0.131	0.059	0.994	1.124	1.052	1.273	1.403	1.331	1.272
	Right side	0.038	0.212	0.019	0.001	0.018	0.057	0.039	0.056	0.269	0.251	0.268	0.250
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.837					0.837	0.837	0.837	0.837	0.837	0.837	0.837
WCDMA II_Ant 0	Front	0.445	0.440	0.055	0.070	0.050	0.500	0.515	0.495	0.940	0.955	0.935	0.885
	Back	0.692	0.314	0.075	0.091	0.069	0.767	0.783	0.761	1.081	1.097	1.075	1.006
	Left side	0.947	0.279	0.001	0.131	0.059	0.948	1.078	1.006	1.227	1.357	1.285	1.226
	Right side	0.034	0.212	0.019	0.001	0.018	0.053	0.035	0.052	0.265	0.247	0.264	0.246
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.635					0.635	0.635	0.635	0.635	0.635	0.635	0.635
WCDMA IV_Ant 0	Front	0.448	0.440	0.055	0.070	0.050	0.503	0.518	0.498	0.943	0.958	0.938	0.888
	Back	0.764	0.314	0.075	0.091	0.069	0.839	0.855	0.833	1.153	1.169	1.147	1.078
	Left side	0.692	0.279	0.001	0.131	0.059	0.693	0.823	0.751	0.972	1.102	1.030	0.971
	Right side	0.065	0.212	0.019	0.001	0.018	0.084	0.066	0.083	0.296	0.278	0.295	0.277
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.992					0.992	0.992	0.992	0.992	0.992	0.992	0.992
WCDMA V_Ant 1	Front	0.246	0.440	0.055	0.070	0.050	0.301	0.316	0.296	0.741	0.756	0.736	0.686
	Back	0.395	0.314	0.075	0.091	0.069	0.470	0.486	0.464	0.784	0.800	0.778	0.709
	Left side	0.242	0.279	0.001	0.131	0.059	0.243	0.373	0.301	0.522	0.652	0.580	0.521
	Right side	0.235	0.212	0.019	0.001	0.018	0.254	0.236	0.253	0.466	0.448	0.465	0.447
	Top side	0.233	0.183	0.132	0.003	0.161	0.365	0.236	0.394	0.548	0.419	0.577	0.416
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 7_Ant 0	Front	0.364	0.440	0.055	0.070	0.050	0.419	0.434	0.414	0.859	0.874	0.854	0.804
	Back	0.560	0.314	0.075	0.091	0.069	0.635	0.651	0.629	0.949	0.965	0.943	0.874
	Left side	0.901	0.279	0.001	0.131	0.059	0.902	1.032	0.960	1.181	1.311	1.239	1.180
	Right side	0.020	0.212	0.019	0.001	0.018	0.039	0.021	0.038	0.251	0.233	0.250	0.232
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.193					0.193	0.193	0.193	0.193	0.193	0.193	0.193
LTE Band 12_Ant 1	Front	0.190	0.440	0.055	0.070	0.050	0.245	0.260	0.240	0.685	0.700	0.680	0.630
	Back	0.277	0.314	0.075	0.091	0.069	0.352	0.368	0.346	0.666	0.682	0.660	0.591
	Left side	0.263	0.279	0.001	0.131	0.059	0.264	0.394	0.322	0.543	0.673	0.601	0.542
	Right side	0.127	0.212	0.019	0.001	0.018	0.146	0.128	0.145	0.358	0.340	0.357	0.339
	Top side	0.257	0.183	0.132	0.003	0.161	0.389	0.260	0.418	0.572	0.443	0.601	0.440
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 13_Ant 1	Front	0.217	0.440	0.055	0.070	0.050	0.272	0.287	0.267	0.712	0.727	0.707	0.657
	Back	0.289	0.314	0.075	0.091	0.069	0.364	0.380	0.358	0.678	0.694	0.672	0.603
	Left side	0.184	0.279	0.001	0.131	0.059	0.185	0.315	0.243	0.464	0.594	0.522	0.463
	Right side	0.123	0.212	0.019	0.001	0.018	0.142	0.124	0.141	0.354	0.336	0.353	0.335
	Top side	0.192	0.183	0.132	0.003	0.161	0.324	0.195	0.353	0.507	0.378	0.536	0.375
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 14_Ant 1	Front	0.233	0.440	0.055	0.070	0.050	0.288	0.303	0.283	0.728	0.743	0.723	0.673
	Back	0.349	0.314	0.075	0.091	0.069	0.424	0.440	0.418	0.738	0.754	0.732	0.663
	Left side	0.210	0.279	0.001	0.131	0.059	0.211	0.341	0.269	0.490	0.620	0.548	0.489



	Right side	0.120	0.212	0.019	0.001	0.018	0.139	0.121	0.138	0.351	0.333	0.350	0.332
	Top side	0.217	0.183	0.132	0.003	0.161	0.349	0.220	0.378	0.532	0.403	0.561	0.400
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 25_Ant 0	Front	0.424	0.440	0.055	0.070	0.050	0.479	0.494	0.474	0.919	0.934	0.914	0.864
	Back	0.696	0.314	0.075	0.091	0.069	0.771	0.787	0.765	1.085	1.101	1.079	1.010
	Left side	0.935	0.279	0.001	0.131	0.059	0.936	1.066	0.994	1.215	1.345	1.273	1.214
	Right side	0.034	0.212	0.019	0.001	0.018	0.053	0.035	0.052	0.265	0.247	0.264	0.246
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.641					0.641	0.641	0.641	0.641	0.641	0.641	0.641
LTE Band 26_Ant 1	Front	0.210	0.440	0.055	0.070	0.050	0.265	0.280	0.260	0.705	0.720	0.700	0.650
	Back	0.301	0.314	0.075	0.091	0.069	0.376	0.392	0.370	0.690	0.706	0.684	0.615
	Left side	0.179	0.279	0.001	0.131	0.059	0.180	0.310	0.238	0.459	0.589	0.517	0.458
	Right side	0.123	0.212	0.019	0.001	0.018	0.142	0.124	0.141	0.354	0.336	0.353	0.335
	Top side	0.230	0.183	0.132	0.003	0.161	0.362	0.233	0.391	0.545	0.416	0.574	0.413
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 30_Ant 0	Front	0.435	0.440	0.055	0.070	0.050	0.490	0.505	0.485	0.930	0.945	0.925	0.875
	Back	0.588	0.314	0.075	0.091	0.069	0.663	0.679	0.657	0.977	0.993	0.971	0.902
	Left side	0.872	0.279	0.001	0.131	0.059	0.873	1.003	0.931	1.152	1.282	1.210	1.151
	Right side	0.029	0.212	0.019	0.001	0.018	0.048	0.030	0.047	0.260	0.242	0.259	0.241
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.133					0.133	0.133	0.133	0.133	0.133	0.133	0.133
LTE Band 41_Ant 0	Front	0.414	0.440	0.055	0.070	0.050	0.469	0.484	0.464	0.909	0.924	0.904	0.854
	Back	0.682	0.314	0.075	0.091	0.069	0.757	0.773	0.751	1.071	1.087	1.065	0.996
	Left side	0.523	0.279	0.001	0.131	0.059	0.524	0.654	0.582	0.803	0.933	0.861	0.802
	Right side	0.087	0.212	0.019	0.001	0.018	0.106	0.088	0.105	0.318	0.300	0.317	0.299
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.254					0.254	0.254	0.254	0.254	0.254	0.254	0.254
LTE Band 48_Ant 2	Front	0.336	0.440	0.055	0.070	0.050	0.391	0.406	0.386	0.831	0.846	0.826	0.776
	Back	0.410	0.314	0.075	0.091	0.069	0.485	0.501	0.479	0.799	0.815	0.793	0.724
	Left side	0.133	0.279	0.001	0.131	0.059	0.134	0.264	0.192	0.413	0.543	0.471	0.412
	Right side	0.256	0.212	0.019	0.001	0.018	0.275	0.257	0.274	0.487	0.469	0.486	0.468
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.467					0.467	0.467	0.467	0.467	0.467	0.467	0.467
LTE Band 66_Ant 0	Front	0.460	0.440	0.055	0.070	0.050	0.515	0.530	0.510	0.955	0.970	0.950	0.900
	Back	0.740	0.314	0.075	0.091	0.069	0.815	0.831	0.809	1.129	1.145	1.123	1.054
	Left side	0.643	0.279	0.001	0.131	0.059	0.644	0.774	0.702	0.923	1.053	0.981	0.922
	Right side	0.066	0.212	0.019	0.001	0.018	0.085	0.067	0.084	0.297	0.279	0.296	0.278
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.908					0.908	0.908	0.908	0.908	0.908	0.908	0.908
LTE Band 71_Ant 1	Front	0.180	0.440	0.055	0.070	0.050	0.235	0.250	0.230	0.675	0.690	0.670	0.620
	Back	0.243	0.314	0.075	0.091	0.069	0.318	0.334	0.312	0.632	0.648	0.626	0.557
	Left side	0.287	0.279	0.001	0.131	0.059	0.288	0.418	0.346	0.567	0.697	0.625	0.566
	Right side	0.104	0.212	0.019	0.001	0.018	0.123	0.105	0.122	0.335	0.317	0.334	0.316
	Top side	0.176	0.183	0.132	0.003	0.161	0.308	0.179	0.337	0.491	0.362	0.520	0.359
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n5_Ant 1	Front	0.193	0.440	0.055	0.070	0.050	0.248	0.263	0.243	0.688	0.703	0.683	0.633
	Back	0.322	0.314	0.075	0.091	0.069	0.397	0.413	0.391	0.711	0.727	0.705	0.636
	Left side	0.110	0.279	0.001	0.131	0.059	0.111	0.241	0.169	0.390	0.520	0.448	0.389
	Right side	0.094	0.212	0.019	0.001	0.018	0.113	0.095	0.112	0.325	0.307	0.324	0.306
	Top side	0.142	0.183	0.132	0.003	0.161	0.274	0.145	0.303	0.457	0.328	0.486	0.325
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n7_Ant 0	Front	0.439	0.440	0.055	0.070	0.050	0.494	0.509	0.489	0.934	0.949	0.929	0.879
	Back	0.611	0.314	0.075	0.091	0.069	0.686	0.702	0.680	1.000	1.016	0.994	0.925
	Left side	0.932	0.279	0.001	0.131	0.059	0.933	1.063	0.991	1.212	1.342	1.270	1.211
	Right side	0.017	0.212	0.019	0.001	0.018	0.036	0.018	0.035	0.248	0.230	0.247	0.229
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183



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	Bottom side	0.203					0.203	0.203	0.203	0.203	0.203	0.203	0.203
FR1 n12_Ant 1	Front	0.153	0.440	0.055	0.070	0.050	0.208	0.223	0.203	0.648	0.663	0.643	0.593
	Back	0.249	0.314	0.075	0.091	0.069	0.324	0.340	0.318	0.638	0.654	0.632	0.563
	Left side	0.238	0.279	0.001	0.131	0.059	0.239	0.369	0.297	0.518	0.648	0.576	0.517
	Right side	0.127	0.212	0.019	0.001	0.018	0.146	0.128	0.145	0.358	0.340	0.357	0.339
	Top side	0.166	0.183	0.132	0.003	0.161	0.298	0.169	0.327	0.481	0.352	0.510	0.349
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n25_Ant 0	Front	0.457	0.440	0.055	0.070	0.050	0.512	0.527	0.507	0.952	0.967	0.947	0.897
	Back	0.808	0.314	0.075	0.091	0.069	0.883	0.899	0.877	1.197	1.213	1.191	1.122
	Left side	0.976	0.279	0.001	0.131	0.059	0.977	1.107	1.035	1.256	1.386	1.314	1.255
	Right side	0.025	0.212	0.019	0.001	0.018	0.044	0.026	0.043	0.256	0.238	0.255	0.237
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.619					0.619	0.619	0.619	0.619	0.619	0.619	0.619
FR1 n30_Ant 0	Front	0.417	0.440	0.055	0.070	0.050	0.472	0.487	0.467	0.912	0.927	0.907	0.857
	Back	0.637	0.314	0.075	0.091	0.069	0.712	0.728	0.706	1.026	1.042	1.020	0.951
	Left side	0.891	0.279	0.001	0.131	0.059	0.892	1.022	0.950	1.171	1.301	1.229	1.170
	Right side	0.034	0.212	0.019	0.001	0.018	0.053	0.035	0.052	0.265	0.247	0.264	0.246
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.147					0.147	0.147	0.147	0.147	0.147	0.147	0.147
FR1 n41_Ant 1	Front	0.525	0.440	0.055	0.070	0.050	0.580	0.595	0.575	1.020	1.035	1.015	0.965
	Back	0.499	0.314	0.075	0.091	0.069	0.574	0.590	0.568	0.888	0.904	0.882	0.813
	Left side	0.119	0.279	0.001	0.131	0.059	0.120	0.250	0.178	0.399	0.529	0.457	0.398
	Right side	0.043	0.212	0.019	0.001	0.018	0.062	0.044	0.061	0.274	0.256	0.273	0.255
	Top side	0.945	0.183	0.132	0.003	0.161	1.077	0.948	1.106	1.260	1.131	1.289	1.128
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n66_Ant 0	Front	0.473	0.440	0.055	0.070	0.050	0.528	0.543	0.523	0.968	0.983	0.963	0.913
	Back	0.827	0.314	0.075	0.091	0.069	0.902	0.918	0.896	1.216	1.232	1.210	1.141
	Left side	0.709	0.279	0.001	0.131	0.059	0.710	0.840	0.768	0.989	1.119	1.047	0.988
	Right side	0.074	0.212	0.019	0.001	0.018	0.093	0.075	0.092	0.305	0.287	0.304	0.286
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.990					0.990	0.990	0.990	0.990	0.990	0.990	0.990
FR1 n71_Ant 1	Front	0.147	0.440	0.055	0.070	0.050	0.202	0.217	0.197	0.642	0.657	0.637	0.587
	Back	0.193	0.314	0.075	0.091	0.069	0.268	0.284	0.262	0.582	0.598	0.576	0.507
	Left side	0.233	0.279	0.001	0.131	0.059	0.234	0.364	0.292	0.513	0.643	0.571	0.512
	Right side	0.094	0.212	0.019	0.001	0.018	0.113	0.095	0.112	0.325	0.307	0.324	0.306
	Top side	0.114	0.183	0.132	0.003	0.161	0.246	0.117	0.275	0.429	0.300	0.458	0.297
	Bottom side						0.000	0.000	0.000	0.000	0.000	0.000	0.000
FR1 n77_Ant 2	Front	0.754	0.440	0.055	0.070	0.050	0.809	0.824	0.804	1.249	1.264	1.244	1.194
	Back	0.980	0.314	0.075	0.091	0.069	1.055	1.071	1.049	1.369	1.385	1.363	1.294
	Left side	0.209	0.279	0.001	0.131	0.059	0.210	0.340	0.268	0.489	0.619	0.547	0.488
	Right side	0.786	0.212	0.019	0.001	0.018	0.805	0.787	0.804	1.017	0.999	1.016	0.998
	Top side		0.183	0.132	0.003	0.161	0.132	0.003	0.161	0.315	0.186	0.344	0.183
	Bottom side	0.940					0.940	0.940	0.940	0.940	0.940	0.940	0.940



16.4 Body-Worn Accessory Exposure Conditions

<WLAN Index 5, BT Index 2>

Band	Exposure Position	2	3	4	5	6	7	8	5+6 Summed 1g SAR (W/kg)	5+7 Summed 1g SAR (W/kg)	5+8 Summed 1g SAR (W/kg)
		WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)			
WLAN	Front	0.429	0.388	0.348	0.897	0.220	0.126	0.098	1.117	1.023	0.995
	Back	0.579	0.632	0.494	1.126	0.339	0.353	0.156	1.465	1.479	1.282

<WLAN Index 6>

Band	Exposure Position	2	3	4	5	2+5 Summed 1g SAR (W/kg)	3+5 Summed 1g SAR (W/kg)	4+5 Summed 1g SAR (W/kg)
		WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)			
WLAN	Front	0.429	0.388	0.348	0.795	1.224	1.183	1.143
	Back	0.579	0.632	0.494	0.940	1.519	1.572	1.434

<WWAN Index 6, WLAN Index 7>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)				
GSM850_Ant 0	Front	0.476	0.236	0.303	0.212	0.488	0.964	0.712	0.779	0.688
	Back	0.710	0.330	0.396	0.334	0.509	1.219	1.040	1.106	1.044
GSM1900_Ant 2	Front	0.727	0.236	0.303	0.212	0.488	1.215	0.963	1.030	0.939
	Back	0.962	0.330	0.396	0.334	0.509	1.471	1.292	1.358	1.296
WCDMA II_Ant 2	Front	0.622	0.236	0.303	0.212	0.488	1.110	0.858	0.925	0.834
	Back	0.910	0.330	0.396	0.334	0.509	1.419	1.240	1.306	1.244
WCDMA IV_Ant 2	Front	0.683	0.236	0.303	0.212	0.488	1.171	0.919	0.986	0.895
	Back	0.980	0.330	0.396	0.334	0.509	1.489	1.310	1.376	1.314
WCDMA V_Ant 0	Front	0.391	0.236	0.303	0.212	0.488	0.879	0.627	0.694	0.603
	Back	0.426	0.330	0.396	0.334	0.509	0.935	0.756	0.822	0.760
LTE Band 7_Ant 2	Front	0.412	0.236	0.303	0.212	0.488	0.900	0.648	0.715	0.624
	Back	0.729	0.330	0.396	0.334	0.509	1.238	1.059	1.125	1.063
LTE Band 12_Ant 0	Front	0.307	0.236	0.303	0.212	0.488	0.795	0.543	0.610	0.519
	Back	0.425	0.330	0.396	0.334	0.509	0.934	0.755	0.821	0.759
LTE Band 13_Ant 0	Front	0.446	0.236	0.303	0.212	0.488	0.934	0.682	0.749	0.658
	Back	0.483	0.330	0.396	0.334	0.509	0.992	0.813	0.879	0.817
LTE Band 14_Ant 0	Front	0.412	0.236	0.303	0.212	0.488	0.900	0.648	0.715	0.624
	Back	0.574	0.330	0.396	0.334	0.509	1.083	0.904	0.970	0.908
LTE Band 25_Ant 2	Front	0.707	0.236	0.303	0.212	0.488	1.195	0.943	1.010	0.919
	Back	0.872	0.330	0.396	0.334	0.509	1.381	1.202	1.268	1.206
LTE Band 26_Ant 0	Front	0.408	0.236	0.303	0.212	0.488	0.896	0.644	0.711	0.620
	Back	0.438	0.330	0.396	0.334	0.509	0.947	0.768	0.834	0.772
LTE Band 30_Ant 2	Front	0.617	0.236	0.303	0.212	0.488	1.105	0.853	0.920	0.829
	Back	0.936	0.330	0.396	0.334	0.509	1.445	1.266	1.332	1.270
LTE Band 41_Ant 2	Front	0.512	0.236	0.303	0.212	0.488	1.000	0.748	0.815	0.724
	Back	0.786	0.330	0.396	0.334	0.509	1.295	1.116	1.182	1.120
LTE Band 48_Ant 6	Front	0.887	0.236	0.303	0.212	0.488	1.375	1.123	1.190	1.099
	Back	0.439	0.330	0.396	0.334	0.509	0.948	0.769	0.835	0.773
LTE Band 66_Ant 2	Front	0.827	0.236	0.303	0.212	0.488	1.315	1.063	1.130	1.039
	Back	0.933	0.330	0.396	0.334	0.509	1.442	1.263	1.329	1.267
LTE Band 71_Ant 0	Front	0.347	0.236	0.303	0.212	0.488	0.835	0.583	0.650	0.559
	Back	0.483	0.330	0.396	0.334	0.509	0.992	0.813	0.879	0.817
FR1 n5_Ant 0	Front	0.325	0.236	0.303	0.212	0.488	0.813	0.561	0.628	0.537



FR1 n7_Ant 2	Back	0.428	0.330	0.396	0.334	0.509	0.937	0.758	0.824	0.762
	Front	0.501	0.236	0.303	0.212	0.488	0.989	0.737	0.804	0.713
FR1 n12_Ant 0	Back	0.757	0.330	0.396	0.334	0.509	1.266	1.087	1.153	1.091
	Front	0.401	0.236	0.303	0.212	0.488	0.889	0.637	0.704	0.613
FR1 n25_Ant 2	Back	0.462	0.330	0.396	0.334	0.509	0.971	0.792	0.858	0.796
	Front	0.833	0.236	0.303	0.212	0.488	1.321	1.069	1.136	1.045
FR1 n30_Ant 2	Back	0.990	0.330	0.396	0.334	0.509	1.499	1.320	1.386	1.324
	Front	0.727	0.236	0.303	0.212	0.488	1.215	0.963	1.030	0.939
FR1 n41_Ant 5	Back	0.991	0.330	0.396	0.334	0.509	1.500	1.321	1.387	1.325
	Front	0.353	0.236	0.303	0.212	0.488	0.841	0.589	0.656	0.565
FR1 n66_Ant 2	Back	0.537	0.330	0.396	0.334	0.509	1.046	0.867	0.933	0.871
	Front	0.747	0.236	0.303	0.212	0.488	1.235	0.983	1.050	0.959
FR1 n71_Ant 0	Back	0.943	0.330	0.396	0.334	0.509	1.452	1.273	1.339	1.277
	Front	0.363	0.236	0.303	0.212	0.488	0.851	0.599	0.666	0.575
FR1 n77_Ant 6	Back	0.447	0.330	0.396	0.334	0.509	0.956	0.777	0.843	0.781
	Front	0.993	0.236	0.303	0.212	0.488	1.481	1.229	1.296	1.205
	Back	0.577	0.330	0.396	0.334	0.509	1.086	0.907	0.973	0.911

<WWAN Index 6, WLAN Index 7>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)				
GSM850_Ant 1	Front	0.392	0.236	0.303	0.212	0.488	0.880	0.628	0.695	0.604
	Back	0.542	0.330	0.396	0.334	0.509	1.051	0.872	0.938	0.876
GSM1900_Ant 0	Front	0.506	0.236	0.303	0.212	0.488	0.994	0.742	0.809	0.718
	Back	0.994	0.330	0.396	0.334	0.509	1.503	1.324	1.390	1.328
WCDMA II_Ant 0	Front	0.481	0.236	0.303	0.212	0.488	0.969	0.717	0.784	0.693
	Back	0.902	0.330	0.396	0.334	0.509	1.411	1.232	1.298	1.236
WCDMA IV_Ant 0	Front	0.459	0.236	0.303	0.212	0.488	0.947	0.695	0.762	0.671
	Back	0.844	0.330	0.396	0.334	0.509	1.353	1.174	1.240	1.178
WCDMA V_Ant 1	Front	0.246	0.236	0.303	0.212	0.488	0.734	0.482	0.549	0.458
	Back	0.395	0.330	0.396	0.334	0.509	0.904	0.725	0.791	0.729
LTE Band 7_Ant 0	Front	0.437	0.236	0.303	0.212	0.488	0.925	0.673	0.740	0.649
	Back	0.674	0.330	0.396	0.334	0.509	1.183	1.004	1.070	1.008
LTE Band 12_Ant 1	Front	0.190	0.236	0.303	0.212	0.488	0.678	0.426	0.493	0.402
	Back	0.277	0.330	0.396	0.334	0.509	0.786	0.607	0.673	0.611
LTE Band 13_Ant 1	Front	0.217	0.236	0.303	0.212	0.488	0.705	0.453	0.520	0.429
	Back	0.289	0.330	0.396	0.334	0.509	0.798	0.619	0.685	0.623
LTE Band 14_Ant 1	Front	0.233	0.236	0.303	0.212	0.488	0.721	0.469	0.536	0.445
	Back	0.349	0.330	0.396	0.334	0.509	0.858	0.679	0.745	0.683
LTE Band 25_Ant 0	Front	0.510	0.236	0.303	0.212	0.488	0.998	0.746	0.813	0.722
	Back	0.936	0.330	0.396	0.334	0.509	1.445	1.266	1.332	1.270
LTE Band 26_Ant 1	Front	0.210	0.236	0.303	0.212	0.488	0.698	0.446	0.513	0.422
	Back	0.301	0.330	0.396	0.334	0.509	0.810	0.631	0.697	0.635
LTE Band 30_Ant 0	Front	0.523	0.236	0.303	0.212	0.488	1.011	0.759	0.826	0.735
	Back	0.707	0.330	0.396	0.334	0.509	1.216	1.037	1.103	1.041
LTE Band 41_Ant 0	Front	0.414	0.236	0.303	0.212	0.488	0.902	0.650	0.717	0.626
	Back	0.682	0.330	0.396	0.334	0.509	1.191	1.012	1.078	1.016
LTE Band 48_Ant 2	Front	0.336	0.236	0.303	0.212	0.488	0.824	0.572	0.639	0.548
	Back	0.410	0.330	0.396	0.334	0.509	0.919	0.740	0.806	0.744
LTE Band 66_Ant 0	Front	0.551	0.236	0.303	0.212	0.488	1.039	0.787	0.854	0.763
	Back	0.942	0.330	0.396	0.334	0.509	1.451	1.272	1.338	1.276
LTE Band 71_Ant 1	Front	0.180	0.236	0.303	0.212	0.488	0.668	0.416	0.483	0.392
	Back	0.243	0.330	0.396	0.334	0.509	0.752	0.573	0.639	0.577
FR1 n5_Ant 1	Front	0.193	0.236	0.303	0.212	0.488	0.681	0.429	0.496	0.405



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FR1 n7_Ant 0	Back	0.322	0.330	0.396	0.334	0.509	0.831	0.652	0.718	0.656
	Front	0.528	0.236	0.303	0.212	0.488	1.016	0.764	0.831	0.740
FR1 n12_Ant 1	Back	0.735	0.330	0.396	0.334	0.509	1.244	1.065	1.131	1.069
	Front	0.153	0.236	0.303	0.212	0.488	0.641	0.389	0.456	0.365
FR1 n25_Ant 0	Back	0.249	0.330	0.396	0.334	0.509	0.758	0.579	0.645	0.583
	Front	0.550	0.236	0.303	0.212	0.488	1.038	0.786	0.853	0.762
FR1 n30_Ant 0	Back	0.972	0.330	0.396	0.334	0.509	1.481	1.302	1.368	1.306
	Front	0.502	0.236	0.303	0.212	0.488	0.990	0.738	0.805	0.714
FR1 n41_Ant 1	Back	0.766	0.330	0.396	0.334	0.509	1.275	1.096	1.162	1.100
	Front	0.525	0.236	0.303	0.212	0.488	1.013	0.761	0.828	0.737
FR1 n66_Ant 0	Back	0.499	0.330	0.396	0.334	0.509	1.008	0.829	0.895	0.833
	Front	0.506	0.236	0.303	0.212	0.488	0.994	0.742	0.809	0.718
FR1 n71_Ant 1	Back	0.886	0.330	0.396	0.334	0.509	1.395	1.216	1.282	1.220
	Front	0.147	0.236	0.303	0.212	0.488	0.635	0.383	0.450	0.359
FR1 n77_Ant 2	Back	0.193	0.330	0.396	0.334	0.509	0.702	0.523	0.589	0.527
	Front	0.754	0.236	0.303	0.212	0.488	1.242	0.990	1.057	0.966
	Back	0.980	0.330	0.396	0.334	0.509	1.489	1.310	1.376	1.314

<WWAN Index 6, WLAN Index 8>

WWAN Band	Exposure Position	1	2	3	4	5	1+5	1+2	1+3	1+4	1+2+5	1+3+5	1+4+5
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)
GSM850_Ant 0	Front	0.476	0.088	0.122	0.196	0.325	0.801	0.564	0.598	0.672	0.889	0.923	0.997
	Back	0.710	0.136	0.170	0.251	0.206	0.916	0.846	0.880	0.961	1.052	1.086	1.167
GSM1900_Ant 2	Front	0.727	0.088	0.122	0.196	0.325	1.052	0.815	0.849	0.923	1.140	1.174	1.248
	Back	0.962	0.136	0.170	0.251	0.206	1.168	1.098	1.132	1.213	1.304	1.338	1.419
WCDMA II_Ant 2	Front	0.622	0.088	0.122	0.196	0.325	0.947	0.710	0.744	0.818	1.035	1.069	1.143
	Back	0.910	0.136	0.170	0.251	0.206	1.116	1.046	1.080	1.161	1.252	1.286	1.367
WCDMA IV_Ant 2	Front	0.683	0.088	0.122	0.196	0.325	1.008	0.771	0.805	0.879	1.096	1.130	1.204
	Back	0.980	0.136	0.170	0.251	0.206	1.186	1.116	1.150	1.231	1.322	1.356	1.437
WCDMA V_Ant 0	Front	0.391	0.088	0.122	0.196	0.325	0.716	0.479	0.513	0.587	0.804	0.838	0.912
	Back	0.426	0.136	0.170	0.251	0.206	0.632	0.562	0.596	0.677	0.768	0.802	0.883
LTE Band 7_Ant 2	Front	0.412	0.088	0.122	0.196	0.325	0.737	0.500	0.534	0.608	0.825	0.859	0.933
	Back	0.729	0.136	0.170	0.251	0.206	0.935	0.865	0.899	0.980	1.071	1.105	1.186
LTE Band 12_Ant 0	Front	0.307	0.088	0.122	0.196	0.325	0.632	0.395	0.429	0.503	0.720	0.754	0.828
	Back	0.425	0.136	0.170	0.251	0.206	0.631	0.561	0.595	0.676	0.767	0.801	0.882
LTE Band 13_Ant 0	Front	0.446	0.088	0.122	0.196	0.325	0.771	0.534	0.568	0.642	0.859	0.893	0.967
	Back	0.483	0.136	0.170	0.251	0.206	0.689	0.619	0.653	0.734	0.825	0.859	0.940
LTE Band 14_Ant 0	Front	0.412	0.088	0.122	0.196	0.325	0.737	0.500	0.534	0.608	0.825	0.859	0.933
	Back	0.574	0.136	0.170	0.251	0.206	0.780	0.710	0.744	0.825	0.916	0.950	1.031
LTE Band 25_Ant 2	Front	0.707	0.088	0.122	0.196	0.325	1.032	0.795	0.829	0.903	1.120	1.154	1.228
	Back	0.872	0.136	0.170	0.251	0.206	1.078	1.008	1.042	1.123	1.214	1.248	1.329
LTE Band 26_Ant 0	Front	0.408	0.088	0.122	0.196	0.325	0.733	0.496	0.530	0.604	0.821	0.855	0.929
	Back	0.438	0.136	0.170	0.251	0.206	0.644	0.574	0.608	0.689	0.780	0.814	0.895
LTE Band 30_Ant 2	Front	0.617	0.088	0.122	0.196	0.325	0.942	0.705	0.739	0.813	1.030	1.064	1.138
	Back	0.936	0.136	0.170	0.251	0.206	1.142	1.072	1.106	1.187	1.278	1.312	1.393
LTE Band 41_Ant 2	Front	0.512	0.088	0.122	0.196	0.325	0.837	0.600	0.634	0.708	0.925	0.959	1.033
	Back	0.786	0.136	0.170	0.251	0.206	0.992	0.922	0.956	1.037	1.128	1.162	1.243
LTE Band 48_Ant 6	Front	0.887	0.088	0.122	0.196	0.325	1.212	0.975	1.009	1.083	1.300	1.334	1.408
	Back	0.439	0.136	0.170	0.251	0.206	0.645	0.575	0.609	0.690	0.781	0.815	0.896
LTE Band 66_Ant 2	Front	0.827	0.088	0.122	0.196	0.325	1.152	0.915	0.949	1.023	1.240	1.274	1.348
	Back	0.933	0.136	0.170	0.251	0.206	1.139	1.069	1.103	1.184	1.275	1.309	1.390
LTE Band 71_Ant 0	Front	0.347	0.088	0.122	0.196	0.325	0.672	0.435	0.469	0.543	0.760	0.794	0.868
	Back	0.483	0.136	0.170	0.251	0.206	0.689	0.619	0.653	0.734	0.825	0.859	0.940
FR1 n5_Ant 0	Front	0.325	0.088	0.122	0.196	0.325	0.650	0.413	0.447	0.521	0.738	0.772	0.846



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FR1 n7_Ant 2	Back	0.428	0.136	0.170	0.251	0.206	0.634	0.564	0.598	0.679	0.770	0.804	0.885
	Front	0.501	0.088	0.122	0.196	0.325	0.826	0.589	0.623	0.697	0.914	0.948	1.022
FR1 n12_Ant 0	Back	0.757	0.136	0.170	0.251	0.206	0.963	0.893	0.927	1.008	1.099	1.133	1.214
	Front	0.401	0.088	0.122	0.196	0.325	0.726	0.489	0.523	0.597	0.814	0.848	0.922
FR1 n25_Ant 2	Back	0.462	0.136	0.170	0.251	0.206	0.668	0.598	0.632	0.713	0.804	0.838	0.919
	Front	0.833	0.088	0.122	0.196	0.325	1.158	0.921	0.955	1.029	1.246	1.280	1.354
FR1 n30_Ant 2	Back	0.990	0.136	0.170	0.251	0.206	1.196	1.126	1.160	1.241	1.332	1.366	1.447
	Front	0.727	0.088	0.122	0.196	0.325	1.052	0.815	0.849	0.923	1.140	1.174	1.248
FR1 n41_Ant 5	Back	0.991	0.136	0.170	0.251	0.206	1.197	1.127	1.161	1.242	1.333	1.367	1.448
	Front	0.353	0.088	0.122	0.196	0.325	0.678	0.441	0.475	0.549	0.766	0.800	0.874
FR1 n66_Ant 2	Back	0.537	0.136	0.170	0.251	0.206	0.743	0.673	0.707	0.788	0.879	0.913	0.994
	Front	0.747	0.088	0.122	0.196	0.325	1.072	0.835	0.869	0.943	1.160	1.194	1.268
FR1 n71_Ant 0	Back	0.943	0.136	0.170	0.251	0.206	1.149	1.079	1.113	1.194	1.285	1.319	1.400
	Front	0.363	0.088	0.122	0.196	0.325	0.688	0.451	0.485	0.559	0.776	0.810	0.884
FR1 n77_Ant 6	Back	0.447	0.136	0.170	0.251	0.206	0.653	0.583	0.617	0.698	0.789	0.823	0.904
	Front	0.993	0.088	0.122	0.196	0.325	1.318	1.081	1.115	1.189	1.406	1.440	1.514
	Back	0.577	0.136	0.170	0.251	0.206	0.783	0.713	0.747	0.828	0.919	0.953	1.034

<WWAN Index 6, WLAN Index 8>

WWAN Band	Exposure Position	1	2	3	4	5	1+5 Summed 1g SAR (W/kg)	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+4+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN2.4GHz Ant 4 1g SAR (W/kg)	WLAN2.4GHz Ant 3 1g SAR (W/kg)	WLAN2.4GHz Ant 4+3 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 1	Front	0.392	0.088	0.122	0.196	0.325	0.717	0.480	0.514	0.588	0.805	0.839	0.913
	Back	0.542	0.136	0.170	0.251	0.206	0.748	0.678	0.712	0.793	0.884	0.918	0.999
GSM1900_Ant 0	Front	0.506	0.088	0.122	0.196	0.325	0.831	0.594	0.628	0.702	0.919	0.953	1.027
	Back	0.994	0.136	0.170	0.251	0.206	1.200	1.130	1.164	1.245	1.336	1.370	1.451
WCDMA II_Ant 0	Front	0.481	0.088	0.122	0.196	0.325	0.806	0.569	0.603	0.677	0.894	0.928	1.002
	Back	0.902	0.136	0.170	0.251	0.206	1.108	1.038	1.072	1.153	1.244	1.278	1.359
WCDMA IV_Ant 0	Front	0.459	0.088	0.122	0.196	0.325	0.784	0.547	0.581	0.655	0.872	0.906	0.980
	Back	0.844	0.136	0.170	0.251	0.206	1.050	0.980	1.014	1.095	1.186	1.220	1.301
WCDMA V_Ant 1	Front	0.246	0.088	0.122	0.196	0.325	0.571	0.334	0.368	0.442	0.659	0.693	0.767
	Back	0.395	0.136	0.170	0.251	0.206	0.601	0.531	0.565	0.646	0.737	0.771	0.852
LTE Band 7_Ant 0	Front	0.437	0.088	0.122	0.196	0.325	0.762	0.525	0.559	0.633	0.850	0.884	0.958
	Back	0.674	0.136	0.170	0.251	0.206	0.880	0.810	0.844	0.925	1.016	1.050	1.131
LTE Band 12_Ant 1	Front	0.190	0.088	0.122	0.196	0.325	0.515	0.278	0.312	0.386	0.603	0.637	0.711
	Back	0.277	0.136	0.170	0.251	0.206	0.483	0.413	0.447	0.528	0.619	0.653	0.734
LTE Band 13_Ant 1	Front	0.217	0.088	0.122	0.196	0.325	0.542	0.305	0.339	0.413	0.630	0.664	0.738
	Back	0.289	0.136	0.170	0.251	0.206	0.495	0.425	0.459	0.540	0.631	0.665	0.746
LTE Band 14_Ant 1	Front	0.233	0.088	0.122	0.196	0.325	0.558	0.321	0.355	0.429	0.646	0.680	0.754
	Back	0.349	0.136	0.170	0.251	0.206	0.555	0.485	0.519	0.600	0.691	0.725	0.806
LTE Band 25_Ant 0	Front	0.510	0.088	0.122	0.196	0.325	0.835	0.598	0.632	0.706	0.923	0.957	1.031
	Back	0.936	0.136	0.170	0.251	0.206	1.142	1.072	1.106	1.187	1.278	1.312	1.393
LTE Band 26_Ant 1	Front	0.210	0.088	0.122	0.196	0.325	0.535	0.298	0.332	0.406	0.623	0.657	0.731
	Back	0.301	0.136	0.170	0.251	0.206	0.507	0.437	0.471	0.552	0.643	0.677	0.758
LTE Band 30_Ant 0	Front	0.523	0.088	0.122	0.196	0.325	0.848	0.611	0.645	0.719	0.936	0.970	1.044
	Back	0.707	0.136	0.170	0.251	0.206	0.913	0.843	0.877	0.958	1.049	1.083	1.164
LTE Band 41_Ant 0	Front	0.414	0.088	0.122	0.196	0.325	0.739	0.502	0.536	0.610	0.827	0.861	0.935
	Back	0.682	0.136	0.170	0.251	0.206	0.888	0.818	0.852	0.933	1.024	1.058	1.139
LTE Band 48_Ant 2	Front	0.336	0.088	0.122	0.196	0.325	0.661	0.424	0.458	0.532	0.749	0.783	0.857
	Back	0.410	0.136	0.170	0.251	0.206	0.616	0.546	0.580	0.661	0.752	0.786	0.867
LTE Band 66_Ant 0	Front	0.551	0.088	0.122	0.196	0.325	0.876	0.639	0.673	0.747	0.964	0.998	1.072
	Back	0.942	0.136	0.170	0.251	0.206	1.148	1.078	1.112	1.193	1.284	1.318	1.399
LTE Band 71_Ant 1	Front	0.180	0.088	0.122	0.196	0.325	0.505	0.268	0.302	0.376	0.593	0.627	0.701
	Back	0.243	0.136	0.170	0.251	0.206	0.449	0.379	0.413	0.494	0.585	0.619	0.700



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FR1 n5_Ant 1	Front	0.193	0.088	0.122	0.196	0.325	0.518	0.281	0.315	0.389	0.606	0.640	0.714
	Back	0.322	0.136	0.170	0.251	0.206	0.528	0.458	0.492	0.573	0.664	0.698	0.779
FR1 n7_Ant 0	Front	0.528	0.088	0.122	0.196	0.325	0.853	0.616	0.650	0.724	0.941	0.975	1.049
	Back	0.735	0.136	0.170	0.251	0.206	0.941	0.871	0.905	0.986	1.077	1.111	1.192
FR1 n12_Ant 1	Front	0.153	0.088	0.122	0.196	0.325	0.478	0.241	0.275	0.349	0.566	0.600	0.674
	Back	0.249	0.136	0.170	0.251	0.206	0.455	0.385	0.419	0.500	0.591	0.625	0.706
FR1 n25_Ant 0	Front	0.550	0.088	0.122	0.196	0.325	0.875	0.638	0.672	0.746	0.963	0.997	1.071
	Back	0.972	0.136	0.170	0.251	0.206	1.178	1.108	1.142	1.223	1.314	1.348	1.429
FR1 n30_Ant 0	Front	0.502	0.088	0.122	0.196	0.325	0.827	0.590	0.624	0.698	0.915	0.949	1.023
	Back	0.766	0.136	0.170	0.251	0.206	0.972	0.902	0.936	1.017	1.108	1.142	1.223
FR1 n41_Ant 1	Front	0.525	0.088	0.122	0.196	0.325	0.850	0.613	0.647	0.721	0.938	0.972	1.046
	Back	0.499	0.136	0.170	0.251	0.206	0.705	0.635	0.669	0.750	0.841	0.875	0.956
FR1 n66_Ant 0	Front	0.506	0.088	0.122	0.196	0.325	0.831	0.594	0.628	0.702	0.919	0.953	1.027
	Back	0.886	0.136	0.170	0.251	0.206	1.092	1.022	1.056	1.137	1.228	1.262	1.343
FR1 n71_Ant 1	Front	0.147	0.088	0.122	0.196	0.325	0.472	0.235	0.269	0.343	0.560	0.594	0.668
	Back	0.193	0.136	0.170	0.251	0.206	0.399	0.329	0.363	0.444	0.535	0.569	0.650
FR1 n77_Ant 2	Front	0.754	0.088	0.122	0.196	0.325	1.079	0.842	0.876	0.950	1.167	1.201	1.275
	Back	0.980	0.136	0.170	0.251	0.206	1.186	1.116	1.150	1.231	1.322	1.356	1.437

<WWAN Index 6, WLAN Index 9, BT Index 3>

WWAN Band	Exposure Position	1	5	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 0	Front	0.476	0.440	0.055	0.070	0.050	0.531	0.546	0.526	0.971	0.986	0.966	0.916
	Back	0.710	0.314	0.079	0.091	0.137	0.789	0.801	0.847	1.103	1.115	1.161	1.024
GSM1900_Ant 2	Front	0.727	0.440	0.055	0.070	0.050	0.782	0.797	0.777	1.222	1.237	1.217	1.167
	Back	0.962	0.314	0.079	0.091	0.137	1.041	1.053	1.099	1.355	1.367	1.413	1.276
WCDMA II_Ant 2	Front	0.622	0.440	0.055	0.070	0.050	0.677	0.692	0.672	1.117	1.132	1.112	1.062
	Back	0.910	0.314	0.079	0.091	0.137	0.989	1.001	1.047	1.303	1.315	1.361	1.224
WCDMA IV_Ant 2	Front	0.683	0.440	0.055	0.070	0.050	0.738	0.753	0.733	1.178	1.193	1.173	1.123
	Back	0.980	0.314	0.079	0.091	0.137	1.059	1.071	1.117	1.373	1.385	1.431	1.294
WCDMA V_Ant 0	Front	0.391	0.440	0.055	0.070	0.050	0.446	0.461	0.441	0.886	0.901	0.881	0.831
	Back	0.426	0.314	0.079	0.091	0.137	0.505	0.517	0.563	0.819	0.831	0.877	0.740
LTE Band 7_Ant 2	Front	0.412	0.440	0.055	0.070	0.050	0.467	0.482	0.462	0.907	0.922	0.902	0.852
	Back	0.729	0.314	0.079	0.091	0.137	0.808	0.820	0.866	1.122	1.134	1.180	1.043
LTE Band 12_Ant 0	Front	0.307	0.440	0.055	0.070	0.050	0.362	0.377	0.357	0.802	0.817	0.797	0.747
	Back	0.425	0.314	0.079	0.091	0.137	0.504	0.516	0.562	0.818	0.830	0.876	0.739
LTE Band 13_Ant 0	Front	0.446	0.440	0.055	0.070	0.050	0.501	0.516	0.496	0.941	0.956	0.936	0.886
	Back	0.483	0.314	0.079	0.091	0.137	0.562	0.574	0.620	0.876	0.888	0.934	0.797
LTE Band 14_Ant 0	Front	0.412	0.440	0.055	0.070	0.050	0.467	0.482	0.462	0.907	0.922	0.902	0.852
	Back	0.574	0.314	0.079	0.091	0.137	0.653	0.665	0.711	0.967	0.979	1.025	0.888
LTE Band 25_Ant 2	Front	0.707	0.440	0.055	0.070	0.050	0.762	0.777	0.757	1.202	1.217	1.197	1.147
	Back	0.872	0.314	0.079	0.091	0.137	0.951	0.963	1.009	1.265	1.277	1.323	1.186
LTE Band 26_Ant 0	Front	0.408	0.440	0.055	0.070	0.050	0.463	0.478	0.458	0.903	0.918	0.898	0.848
	Back	0.438	0.314	0.079	0.091	0.137	0.517	0.529	0.575	0.831	0.843	0.889	0.752
LTE Band 30_Ant 2	Front	0.617	0.440	0.055	0.070	0.050	0.672	0.687	0.667	1.112	1.127	1.107	1.057
	Back	0.936	0.314	0.079	0.091	0.137	1.015	1.027	1.073	1.329	1.341	1.387	1.250
LTE Band 41_Ant 2	Front	0.512	0.440	0.055	0.070	0.050	0.567	0.582	0.562	1.007	1.022	1.002	0.952
	Back	0.786	0.314	0.079	0.091	0.137	0.865	0.877	0.923	1.179	1.191	1.237	1.100
LTE Band 48_Ant 6	Front	0.887	0.440	0.055	0.070	0.050	0.942	0.957	0.937	1.382	1.397	1.377	1.327
	Back	0.439	0.314	0.079	0.091	0.137	0.518	0.530	0.576	0.832	0.844	0.890	0.753
LTE Band 66_Ant 2	Front	0.827	0.440	0.055	0.070	0.050	0.882	0.897	0.877	1.322	1.337	1.317	1.267
	Back	0.933	0.314	0.079	0.091	0.137	1.012	1.024	1.070	1.326	1.338	1.384	1.247
LTE Band 71_Ant 0	Front	0.347	0.440	0.055	0.070	0.050	0.402	0.417	0.397	0.842	0.857	0.837	0.787



	Back	0.483	0.314	0.079	0.091	0.137	0.562	0.574	0.620	0.876	0.888	0.934	0.797
FR1 n5_Ant 0	Front	0.325	0.440	0.055	0.070	0.050	0.380	0.395	0.375	0.820	0.835	0.815	0.765
	Back	0.428	0.314	0.079	0.091	0.137	0.507	0.519	0.565	0.821	0.833	0.879	0.742
FR1 n7_Ant 2	Front	0.501	0.440	0.055	0.070	0.050	0.556	0.571	0.551	0.996	1.011	0.991	0.941
	Back	0.757	0.314	0.079	0.091	0.137	0.836	0.848	0.894	1.150	1.162	1.208	1.071
FR1 n12_Ant 0	Front	0.401	0.440	0.055	0.070	0.050	0.456	0.471	0.451	0.896	0.911	0.891	0.841
	Back	0.462	0.314	0.079	0.091	0.137	0.541	0.553	0.599	0.855	0.867	0.913	0.776
FR1 n25_Ant 2	Front	0.833	0.440	0.055	0.070	0.050	0.888	0.903	0.883	1.328	1.343	1.323	1.273
	Back	0.990	0.314	0.079	0.091	0.137	1.069	1.081	1.127	1.383	1.395	1.441	1.304
FR1 n30_Ant 2	Front	0.727	0.440	0.055	0.070	0.050	0.782	0.797	0.777	1.222	1.237	1.217	1.167
	Back	0.991	0.314	0.079	0.091	0.137	1.070	1.082	1.128	1.384	1.396	1.442	1.305
FR1 n41_Ant 5	Front	0.353	0.440	0.055	0.070	0.050	0.408	0.423	0.403	0.848	0.863	0.843	0.793
	Back	0.537	0.314	0.079	0.091	0.137	0.616	0.628	0.674	0.930	0.942	0.988	0.851
FR1 n66_Ant 2	Front	0.747	0.440	0.055	0.070	0.050	0.802	0.817	0.797	1.242	1.257	1.237	1.187
	Back	0.943	0.314	0.079	0.091	0.137	1.022	1.034	1.080	1.336	1.348	1.394	1.257
FR1 n71_Ant 0	Front	0.363	0.440	0.055	0.070	0.050	0.418	0.433	0.413	0.858	0.873	0.853	0.803
	Back	0.447	0.314	0.079	0.091	0.137	0.526	0.538	0.584	0.840	0.852	0.898	0.761
FR1 n77_Ant 6	Front	0.993	0.440	0.055	0.070	0.050	1.048	1.063	1.043	1.488	1.503	1.483	1.433
	Back	0.577	0.314	0.079	0.091	0.137	0.656	0.668	0.714	0.970	0.982	1.028	0.891

<WWAN Index 6, WLAN Index 9, BT Index 3>

WWAN Band	Exposure Position	1	5	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)	1+5+6 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	WLAN5/6GHz Ant 4+3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)							
GSM850_Ant 1	Front	0.392	0.440	0.055	0.070	0.050	0.447	0.462	0.442	0.887	0.902	0.882	0.832
	Back	0.542	0.314	0.079	0.091	0.137	0.621	0.633	0.679	0.935	0.947	0.993	0.856
GSM1900_Ant 0	Front	0.506	0.440	0.055	0.070	0.050	0.561	0.576	0.556	1.001	1.016	0.996	0.946
	Back	0.994	0.314	0.079	0.091	0.137	1.073	1.085	1.131	1.387	1.399	1.445	1.308
WCDMA II_Ant 0	Front	0.481	0.440	0.055	0.070	0.050	0.536	0.551	0.531	0.976	0.991	0.971	0.921
	Back	0.902	0.314	0.079	0.091	0.137	0.981	0.993	1.039	1.295	1.307	1.353	1.216
WCDMA IV_Ant 0	Front	0.459	0.440	0.055	0.070	0.050	0.514	0.529	0.509	0.954	0.969	0.949	0.899
	Back	0.844	0.314	0.079	0.091	0.137	0.923	0.935	0.981	1.237	1.249	1.295	1.158
WCDMA V_Ant 1	Front	0.246	0.440	0.055	0.070	0.050	0.301	0.316	0.296	0.741	0.756	0.736	0.686
	Back	0.395	0.314	0.079	0.091	0.137	0.474	0.486	0.532	0.788	0.800	0.846	0.709
LTE Band 7_Ant 0	Front	0.437	0.440	0.055	0.070	0.050	0.492	0.507	0.487	0.932	0.947	0.927	0.877
	Back	0.674	0.314	0.079	0.091	0.137	0.753	0.765	0.811	1.067	1.079	1.125	0.988
LTE Band 12_Ant 1	Front	0.190	0.440	0.055	0.070	0.050	0.245	0.260	0.240	0.685	0.700	0.680	0.630
	Back	0.277	0.314	0.079	0.091	0.137	0.356	0.368	0.414	0.670	0.682	0.728	0.591
LTE Band 13_Ant 1	Front	0.217	0.440	0.055	0.070	0.050	0.272	0.287	0.267	0.712	0.727	0.707	0.657
	Back	0.289	0.314	0.079	0.091	0.137	0.368	0.380	0.426	0.682	0.694	0.740	0.603
LTE Band 14_Ant 1	Front	0.233	0.440	0.055	0.070	0.050	0.288	0.303	0.283	0.728	0.743	0.723	0.673
	Back	0.349	0.314	0.079	0.091	0.137	0.428	0.440	0.486	0.742	0.754	0.800	0.663
LTE Band 25_Ant 0	Front	0.510	0.440	0.055	0.070	0.050	0.565	0.580	0.560	1.005	1.020	1.000	0.950
	Back	0.936	0.314	0.079	0.091	0.137	1.015	1.027	1.073	1.329	1.341	1.387	1.250
LTE Band 26_Ant 1	Front	0.210	0.440	0.055	0.070	0.050	0.265	0.280	0.260	0.705	0.720	0.700	0.650
	Back	0.301	0.314	0.079	0.091	0.137	0.380	0.392	0.438	0.694	0.706	0.752	0.615
LTE Band 30_Ant 0	Front	0.523	0.440	0.055	0.070	0.050	0.578	0.593	0.573	1.018	1.033	1.013	0.963
	Back	0.707	0.314	0.079	0.091	0.137	0.786	0.798	0.844	1.100	1.112	1.158	1.021
LTE Band 41_Ant 0	Front	0.414	0.440	0.055	0.070	0.050	0.469	0.484	0.464	0.909	0.924	0.904	0.854
	Back	0.682	0.314	0.079	0.091	0.137	0.761	0.773	0.819	1.075	1.087	1.133	0.996
LTE Band 48_Ant 2	Front	0.336	0.440	0.055	0.070	0.050	0.391	0.406	0.386	0.831	0.846	0.826	0.776
	Back	0.410	0.314	0.079	0.091	0.137	0.489	0.501	0.547	0.803	0.815	0.861	0.724
LTE Band 66_Ant 0	Front	0.551	0.440	0.055	0.070	0.050	0.606	0.621	0.601	1.046	1.061	1.041	0.991
	Back	0.942	0.314	0.079	0.091	0.137	1.021	1.033	1.079	1.335	1.347	1.393	1.256



LTE Band 71_Ant 1	Front	0.180	0.440	0.055	0.070	0.050	0.235	0.250	0.230	0.675	0.690	0.670	0.620
	Back	0.243	0.314	0.079	0.091	0.137	0.322	0.334	0.380	0.636	0.648	0.694	0.557
FR1 n5_Ant 1	Front	0.193	0.440	0.055	0.070	0.050	0.248	0.263	0.243	0.688	0.703	0.683	0.633
	Back	0.322	0.314	0.079	0.091	0.137	0.401	0.413	0.459	0.715	0.727	0.773	0.636
FR1 n7_Ant 0	Front	0.528	0.440	0.055	0.070	0.050	0.583	0.598	0.578	1.023	1.038	1.018	0.968
	Back	0.735	0.314	0.079	0.091	0.137	0.814	0.826	0.872	1.128	1.140	1.186	1.049
FR1 n12_Ant 1	Front	0.153	0.440	0.055	0.070	0.050	0.208	0.223	0.203	0.648	0.663	0.643	0.593
	Back	0.249	0.314	0.079	0.091	0.137	0.328	0.340	0.386	0.642	0.654	0.700	0.563
FR1 n25_Ant 0	Front	0.550	0.440	0.055	0.070	0.050	0.605	0.620	0.600	1.045	1.060	1.040	0.990
	Back	0.972	0.314	0.079	0.091	0.137	1.051	1.063	1.109	1.365	1.377	1.423	1.286
FR1 n30_Ant 0	Front	0.502	0.440	0.055	0.070	0.050	0.557	0.572	0.552	0.997	1.012	0.992	0.942
	Back	0.766	0.314	0.079	0.091	0.137	0.845	0.857	0.903	1.159	1.171	1.217	1.080
FR1 n41_Ant 1	Front	0.525	0.440	0.055	0.070	0.050	0.580	0.595	0.575	1.020	1.035	1.015	0.965
	Back	0.499	0.314	0.079	0.091	0.137	0.578	0.590	0.636	0.892	0.904	0.950	0.813
FR1 n66_Ant 0	Front	0.506	0.440	0.055	0.070	0.050	0.561	0.576	0.556	1.001	1.016	0.996	0.946
	Back	0.886	0.314	0.079	0.091	0.137	0.965	0.977	1.023	1.279	1.291	1.337	1.200
FR1 n71_Ant 1	Front	0.147	0.440	0.055	0.070	0.050	0.202	0.217	0.197	0.642	0.657	0.637	0.587
	Back	0.193	0.314	0.079	0.091	0.137	0.272	0.284	0.330	0.586	0.598	0.644	0.507
FR1 n77_Ant 2	Front	0.754	0.440	0.055	0.070	0.050	0.809	0.824	0.804	1.249	1.264	1.244	1.194
	Back	0.980	0.314	0.079	0.091	0.137	1.059	1.071	1.117	1.373	1.385	1.431	1.294

<WWAN Index 6, BT Index 2>

WWAN Band	Exposure Position	1	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)			
GSM850_Ant 0	Front	0.476	0.220	0.126	0.098	0.696	0.602	0.574
	Back	0.710	0.339	0.353	0.156	1.049	1.063	0.866
GSM1900_Ant 2	Front	0.727	0.220	0.126	0.098	0.947	0.853	0.825
	Back	0.962	0.339	0.353	0.156	1.301	1.315	1.118
WCDMA II_Ant 2	Front	0.622	0.220	0.126	0.098	0.842	0.748	0.720
	Back	0.910	0.339	0.353	0.156	1.249	1.263	1.066
WCDMA IV_Ant 2	Front	0.683	0.220	0.126	0.098	0.903	0.809	0.781
	Back	0.980	0.339	0.353	0.156	1.319	1.333	1.136
WCDMA V_Ant 0	Front	0.391	0.220	0.126	0.098	0.611	0.517	0.489
	Back	0.426	0.339	0.353	0.156	0.765	0.779	0.582
LTE Band 7_Ant 2	Front	0.412	0.220	0.126	0.098	0.632	0.538	0.510
	Back	0.729	0.339	0.353	0.156	1.068	1.082	0.885
LTE Band 12_Ant 0	Front	0.307	0.220	0.126	0.098	0.527	0.433	0.405
	Back	0.425	0.339	0.353	0.156	0.764	0.778	0.581
LTE Band 13_Ant 0	Front	0.446	0.220	0.126	0.098	0.666	0.572	0.544
	Back	0.483	0.339	0.353	0.156	0.822	0.836	0.639
LTE Band 14_Ant 0	Front	0.412	0.220	0.126	0.098	0.632	0.538	0.510
	Back	0.574	0.339	0.353	0.156	0.913	0.927	0.730
LTE Band 25_Ant 2	Front	0.707	0.220	0.126	0.098	0.927	0.833	0.805
	Back	0.872	0.339	0.353	0.156	1.211	1.225	1.028
LTE Band 26_Ant 0	Front	0.408	0.220	0.126	0.098	0.628	0.534	0.506
	Back	0.438	0.339	0.353	0.156	0.777	0.791	0.594
LTE Band 30_Ant 2	Front	0.617	0.220	0.126	0.098	0.837	0.743	0.715
	Back	0.936	0.339	0.353	0.156	1.275	1.289	1.092
LTE Band 41_Ant 2	Front	0.512	0.220	0.126	0.098	0.732	0.638	0.610
	Back	0.786	0.339	0.353	0.156	1.125	1.139	0.942
LTE Band 48_Ant 6	Front	0.887	0.220	0.126	0.098	1.107	1.013	0.985
	Back	0.439	0.339	0.353	0.156	0.778	0.792	0.595
LTE Band 66_Ant 2	Front	0.827	0.220	0.126	0.098	1.047	0.953	0.925
	Back	0.933	0.339	0.353	0.156	1.272	1.286	1.089



LTE Band 71_Ant 0	Front	0.347	0.220	0.126	0.098	0.567	0.473	0.445
	Back	0.483	0.339	0.353	0.156	0.822	0.836	0.639
FR1 n5_Ant 0	Front	0.325	0.220	0.126	0.098	0.545	0.451	0.423
	Back	0.428	0.339	0.353	0.156	0.767	0.781	0.584
FR1 n7_Ant 2	Front	0.501	0.220	0.126	0.098	0.721	0.627	0.599
	Back	0.757	0.339	0.353	0.156	1.096	1.110	0.913
FR1 n12_Ant 0	Front	0.401	0.220	0.126	0.098	0.621	0.527	0.499
	Back	0.462	0.339	0.353	0.156	0.801	0.815	0.618
FR1 n25_Ant 2	Front	0.833	0.220	0.126	0.098	1.053	0.959	0.931
	Back	0.990	0.339	0.353	0.156	1.329	1.343	1.146
FR1 n30_Ant 2	Front	0.727	0.220	0.126	0.098	0.947	0.853	0.825
	Back	0.991	0.339	0.353	0.156	1.330	1.344	1.147
FR1 n41_Ant 5	Front	0.353	0.220	0.126	0.098	0.573	0.479	0.451
	Back	0.537	0.339	0.353	0.156	0.876	0.890	0.693
FR1 n66_Ant 2	Front	0.747	0.220	0.126	0.098	0.967	0.873	0.845
	Back	0.943	0.339	0.353	0.156	1.282	1.296	1.099
FR1 n71_Ant 0	Front	0.363	0.220	0.126	0.098	0.583	0.489	0.461
	Back	0.447	0.339	0.353	0.156	0.786	0.800	0.603
FR1 n77_Ant 6	Front	0.993	0.220	0.126	0.098	1.213	1.119	1.091
	Back	0.577	0.339	0.353	0.156	0.916	0.930	0.733

<WWAN Index 6, BT Index 2>

WWAN Band	Exposure Position	1	6	7	8	1+6 Summed 1g SAR (W/kg)	1+7 Summed 1g SAR (W/kg)	1+8 Summed 1g SAR (W/kg)
		WWAN 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3 1g SAR (W/kg)	Bluetooth Ant 4+3 1g SAR (W/kg)			
GSM850_Ant 1	Front	0.392	0.220	0.126	0.098	0.612	0.518	0.490
	Back	0.542	0.339	0.353	0.156	0.881	0.895	0.698
GSM1900_Ant 0	Front	0.506	0.220	0.126	0.098	0.726	0.632	0.604
	Back	0.994	0.339	0.353	0.156	1.333	1.347	1.150
WCDMA II_Ant 0	Front	0.481	0.220	0.126	0.098	0.701	0.607	0.579
	Back	0.902	0.339	0.353	0.156	1.241	1.255	1.058
WCDMA IV_Ant 0	Front	0.459	0.220	0.126	0.098	0.679	0.585	0.557
	Back	0.844	0.339	0.353	0.156	1.183	1.197	1.000
WCDMA V_Ant 1	Front	0.246	0.220	0.126	0.098	0.466	0.372	0.344
	Back	0.395	0.339	0.353	0.156	0.734	0.748	0.551
LTE Band 7_Ant 0	Front	0.437	0.220	0.126	0.098	0.657	0.563	0.535
	Back	0.674	0.339	0.353	0.156	1.013	1.027	0.830
LTE Band 12_Ant 1	Front	0.190	0.220	0.126	0.098	0.410	0.316	0.288
	Back	0.277	0.339	0.353	0.156	0.616	0.630	0.433
LTE Band 13_Ant 1	Front	0.217	0.220	0.126	0.098	0.437	0.343	0.315
	Back	0.289	0.339	0.353	0.156	0.628	0.642	0.445
LTE Band 14_Ant 1	Front	0.233	0.220	0.126	0.098	0.453	0.359	0.331
	Back	0.349	0.339	0.353	0.156	0.688	0.702	0.505
LTE Band 25_Ant 0	Front	0.510	0.220	0.126	0.098	0.730	0.636	0.608
	Back	0.936	0.339	0.353	0.156	1.275	1.289	1.092
LTE Band 26_Ant 1	Front	0.210	0.220	0.126	0.098	0.430	0.336	0.308
	Back	0.301	0.339	0.353	0.156	0.640	0.654	0.457
LTE Band 30_Ant 0	Front	0.523	0.220	0.126	0.098	0.743	0.649	0.621
	Back	0.707	0.339	0.353	0.156	1.046	1.060	0.863
LTE Band 41_Ant 0	Front	0.414	0.220	0.126	0.098	0.634	0.540	0.512
	Back	0.682	0.339	0.353	0.156	1.021	1.035	0.838
LTE Band 48_Ant 2	Front	0.336	0.220	0.126	0.098	0.556	0.462	0.434
	Back	0.410	0.339	0.353	0.156	0.749	0.763	0.566
LTE Band 66_Ant 0	Front	0.551	0.220	0.126	0.098	0.771	0.677	0.649
	Back	0.942	0.339	0.353	0.156	1.281	1.295	1.098



LTE Band 71_Ant 1	Front	0.180	0.220	0.126	0.098	0.400	0.306	0.278
	Back	0.243	0.339	0.353	0.156	0.582	0.596	0.399
FR1 n5_Ant 1	Front	0.193	0.220	0.126	0.098	0.413	0.319	0.291
	Back	0.322	0.339	0.353	0.156	0.661	0.675	0.478
FR1 n7_Ant 0	Front	0.528	0.220	0.126	0.098	0.748	0.654	0.626
	Back	0.735	0.339	0.353	0.156	1.074	1.088	0.891
FR1 n12_Ant 1	Front	0.153	0.220	0.126	0.098	0.373	0.279	0.251
	Back	0.249	0.339	0.353	0.156	0.588	0.602	0.405
FR1 n25_Ant 0	Front	0.550	0.220	0.126	0.098	0.770	0.676	0.648
	Back	0.972	0.339	0.353	0.156	1.311	1.325	1.128
FR1 n30_Ant 0	Front	0.502	0.220	0.126	0.098	0.722	0.628	0.600
	Back	0.766	0.339	0.353	0.156	1.105	1.119	0.922
FR1 n41_Ant 1	Front	0.525	0.220	0.126	0.098	0.745	0.651	0.623
	Back	0.499	0.339	0.353	0.156	0.838	0.852	0.655
FR1 n66_Ant 0	Front	0.506	0.220	0.126	0.098	0.726	0.632	0.604
	Back	0.886	0.339	0.353	0.156	1.225	1.239	1.042
FR1 n71_Ant 1	Front	0.147	0.220	0.126	0.098	0.367	0.273	0.245
	Back	0.193	0.339	0.353	0.156	0.532	0.546	0.349
FR1 n77_Ant 2	Front	0.754	0.220	0.126	0.098	0.974	0.880	0.852
	Back	0.980	0.339	0.353	0.156	1.319	1.333	1.136



16.5 Product Specific Exposure Conditions

WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
		WWAN 10g SAR (W/kg)	WLAN5/6GHz Ant 4+3 10g SAR (W/kg)	
GSM1900_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	1.948		1.948
WCDMA II_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	1.644		1.644
WCDMA IV_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	2.934		2.934
WCDMA IV_Ant 0	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	2.086		2.086
LTE Band 25_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	2.083		2.083
LTE Band 66_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	2.910		2.910
FR1 n25_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	1.876		1.876
FR1 n66_Ant 2	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033
	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	2.981		2.981
FR1 n66_Ant 0	Front		2.339	2.339
	Back		1.367	1.367
	Left side		1.033	1.033



	Right side		0.433	0.433
	Top side		0.305	0.305
	Bottom side	2.159		2.159

WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
		WWAN 10g SAR (W/kg)	WLAN5/6GHz Ant 4+3 10g SAR (W/kg)	
GSM1900_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	1.948		1.948
WCDMA II_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	1.644		1.644
WCDMA IV_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	2.934		2.934
WCDMA IV_Ant 0	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	2.086		2.086
LTE Band 25_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	2.083		2.083
LTE Band 66_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	2.910		2.910
FR1 n25_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	1.876		1.876
FR1 n66_Ant 2	Front		1.097	1.097
	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	2.981		2.981
FR1 n66_Ant 0	Front		1.097	1.097



	Back		0.627	0.627
	Left side		0.378	0.378
	Right side		0.264	0.264
	Top side		0.166	0.166
	Bottom side	2.159		2.159

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WWAN Band	Exposure Position	1	2	1+2 Summed 10g SAR (W/kg)
		WWAN 10g SAR (W/kg)	WLAN5/6GHz Ant 4+3 10g SAR (W/kg)	
GSM1900_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	1.948		1.948
WCDMA II_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	1.644		1.644
WCDMA IV_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	2.934		2.934
WCDMA IV_Ant 0	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	2.086		2.086
LTE Band 25_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	2.083		2.083
LTE Band 66_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	2.910		2.910
FR1 n25_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	1.876		1.876
FR1 n66_Ant 2	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390



	Top side		0.196	0.196
	Bottom side	2.981		2.981
FR1 n66_Ant 0	Front		1.378	1.378
	Back		0.901	0.901
	Left side		0.426	0.426
	Right side		0.390	0.390
	Top side		0.196	0.196
	Bottom side	2.159		2.159

17. Supplemental Antenna tuner tests results

General Note:

1. This device implements antenna tuning techniques in the several frequency band and list as below. SAR test proposal was measured according to the normally required SAR configurations with the tuner active and worst tune state (auto tune) was used for SAR testing and this design will provide the highest power at different user scenarios and would not influence to the antenna characteristics other than impedance matching.
2. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values.
3. Dynamic antenna tuning mechanism is available at Ant. 0 / 1 and for its <1GHz band, details are illustrated in the operational description. In this section, all supported tuning states for each band are tested and it's verified that auto-tune state results in the highest SAR
4. The tuner state was established remotely through Wi-Fi so that the device is not moved for the entire series of single point SAR for the tuner states in each combination (band, mode, exposure conditions).

Antenna configuration	
Transmit switching diversity configuration	Support transmit antenna and band
TX 0	ANT 0: LTE B5/B12/B13/B14/B17/B26/B71
TX 1	ANT 1: LTE B5/B12/B13/B14/B17/B26/B71



17.1 Supplemental Head SAR results

Head (Ant0)	RF exposure position						Average Value of Time Sweep (W/kg)														
	Band	Mode	Channel		Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	LTE Band 5	10M_QPSK_1_0	Middle	20525	Left Cheek	0.294	0.400	0.267	0.271	0.288	0.305	0.395	0.344	0.279	0.294	0.288	0.397	0.276	0.351	0.342	0.342
							15	16	17	18	19	20	21	22	23						
							0.293	0.302	0.356	0.280	0.257	0.378	0.319	0.377	0.268						
LTE Band 12	10M_QPSK_1_0	Middle	23095	Left Cheek	0.240	0.283	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.226	0.234	0.282	0.253	0.280	0.241	0.228	0.227	0.225	0.195	0.209	0.214	0.212	0.232	
							15	16	17	18	19										
							0.215	0.216	0.197	0.193	0.228										
LTE Band 13	10M_QPSK_1_0	Middle	23230	Left Cheek	0.280	0.339	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.292	0.292	0.289	0.329	0.307	0.333	0.296	0.312	0.318	0.297	0.292	0.295	0.324	0.331	
							15	16	17	18	19										
							0.333	0.323	0.294	0.308	0.313										
LTE Band 14	10M_QPSK_1_0	Middle	23330	Left Cheek	0.287	0.330	1	2	3	4	5	6	7	8	9	10					
							0.311	0.298	0.255	0.329	0.241	0.303	0.272	0.282	0.297	0.305					
LTE Band 17	10M_QPSK_1_0	Middle	23790	Left Cheek	0.192	0.305	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.252	0.286	0.290	0.274	0.263	0.254	0.255	0.291	0.271	0.258	0.287	0.280	0.261	0.299	
							15	16	17	18	19	20									
							0.253	0.286	0.285	0.290	0.257	0.261									
LTE Band 26	15M_QPSK_1_0	Middle	26865	Left Cheek	0.280	0.394	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.255	0.279	0.340	0.368	0.387	0.377	0.384	0.279	0.301	0.286	0.319	0.369	0.354	0.251	
							15	16	17	18	19	20	21	22							
							0.357	0.302	0.265	0.298	0.341	0.283	0.376	0.281							
LTE Band 71	20M_QPSK_1_0	Middle	133322	Left Cheek	0.259	0.267	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.244	0.254	0.245	0.243	0.255	0.262	0.265	0.256	0.250	0.259	0.264	0.257	0.250	0.248	
							15	16	17	18	19										
							0.258	0.259	0.252	0.257	0.260										



Head (Ant1)	RF exposure position						Average Value of Time Sweep (W/kg)														
	Band	Mode	Channel		Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	LTE Band 5	10M_QPSK_1_0	Middle	20525	Right Tilted	0.712	0.735	0.733	0.731	0.733	0.681	0.727	0.626	0.703	0.729	0.728	0.707	0.724	0.644	0.729	0.655
							15	16	17												
							0.570	0.706	0.717												
LTE Band 12	10M_QPSK_1_0	Middle	23095	Right Cheek	0.871	0.883	1	2	3	4	5	6	7	8	9	10	11	12	13		
							0.847	0.850	0.735	0.848	0.849	0.842	0.798	0.777	0.629	0.830	0.823	0.850	0.667		
LTE Band 13	10M_QPSK_1_0	Middle	23230	Right Tilted	0.844	0.856	1	2	3	4	5	6	7	8	9						
							0.812	0.813	0.826	0.819	0.813	0.764	0.613	0.663	0.808						
LTE Band 14	10M_QPSK_1_0	Middle	23330	Right Cheek	0.886	0.892	1	2	3	4	5	6	7	8							
							0.828	0.835	0.824	0.839	0.835	0.737	0.805	0.840							
LTE Band 17	10M_QPSK_1_0	Middle	23790	Right Cheek	0.862	0.898	1	2	3	4	5	6	7	8	9	10	11	12	13		
							0.887	0.888	0.890	0.890	0.817	0.766	0.890	0.888	0.732	0.887	0.794	0.645	0.848		
LTE Band 26	15M_QPSK_1_0	Middle	26865	Right Tilted	0.846	0.925	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.912	0.852	0.921	0.492	0.747	0.899	0.920	0.913	0.237	0.675	0.918	0.876	0.920	0.915	
							15	16	17	18	19										
							0.603	0.372	0.908	0.920	0.919										
LTE Band 71	20M_QPSK_1_0	Middle	133322	Right Cheek	0.651	0.732	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.730	0.730	0.729	0.722	0.729	0.679	0.700	0.669	0.725	0.705	0.687	0.718	0.729	0.658	
							15														
							0.696														



17.2 Supplemental Body SAR results

Body (Ant0)	RF exposure position						Average Value of Time Sweep (W/kg)														
	Band	Mode	Channel		Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	LTE Band 5	10M_QPSK_1_0	Middle	20525	Left Side	0.452	0.485	0.291	0.292	0.322	0.343	0.451	0.416	0.309	0.329	0.259	0.483	0.302	0.428	0.348	0.404
							15	16	17	18	19	20	21	22	23						
							0.294	0.303	0.361	0.260	0.226	0.387	0.313	0.384	0.242						
LTE Band 12	10M_QPSK_1_0	Middle	23095	Left Side	0.405	0.411	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.336	0.353	0.404	0.373	0.380	0.364	0.331	0.376	0.401	0.362	0.378	0.349	0.383	0.406	
							15	16	17	18	19										
							0.393	0.287	0.230	0.259	0.299										
LTE Band 13	10M_QPSK_1_0	Middle	23230	Left Side	0.504	0.683	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.448	0.456	0.454	0.497	0.474	0.465	0.326	0.377	0.525	0.505	0.491	0.501	0.433	0.514	
							15	16	17	18	19										
							0.463	0.527	0.419	0.432	0.436										
LTE Band 14	10M_QPSK_1_0	Middle	23330	Left Side	0.793	0.805	1	2	3	4	5	6	7	8	9	10					
							0.720	0.724	0.741	0.737	0.674	0.727	0.599	0.479	0.487	0.495					
LTE Band 17	10M_QPSK_1_0	Middle	23790	Left Side	0.396	0.434	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.372	0.407	0.367	0.395	0.373	0.368	0.344	0.422	0.341	0.385	0.425	0.415	0.391	0.413	
							15	16	17	18	19	20									
							0.374	0.295	0.296	0.280	0.263	0.272									
LTE Band 26	15M_QPSK_1_0	Middle	26865	Left Side	0.489	0.551	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.295	0.295	0.379	0.412	0.418	0.397	0.418	0.397	0.435	0.415	0.462	0.540	0.454	0.311	
							15	16	17	18	19	20	21	22							
							0.461	0.359	0.333	0.378	0.441	0.359	0.476	0.364							
LTE Band 71	20M_QPSK_1_0	Middle	133322	Back	0.402	0.408	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.400	0.405	0.402	0.401	0.406	0.399	0.403	0.376	0.403	0.406	0.397	0.406	0.365	0.404	
							15	16	17	18	19										
							0.406	0.385	0.405	0.410	0.398										



Body (Ant1)	RF exposure position							Average Value of Time Sweep (W/kg)													
	Band	Mode	Channel		Test Position	Measured 1g SAR (W/kg)	Auto-Tune (State)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	LTE Band 5	10M_QPSK_1_0	Middle	20525	Back	0.242	0.271	0.255	0.256	0.254	0.268	0.260	0.261	0.267	0.256	0.257	0.263	0.258	0.262	0.254	0.264
							15	16	17												
							0.243	0.263	0.259												
LTE Band 12	10M_QPSK_1_0	Middle	23095	Back	0.207	0.226	1	2	3	4	5	6	7	8	9	10	11	12	13		
							0.224	0.225	0.178	0.223	0.223	0.219	0.200	0.191	0.143	0.214	0.207	0.219	0.155		
LTE Band 13	10M_QPSK_1_0	Middle	23230	Back	0.220	0.232	1	2	3	4	5	6	7	8	9						
							0.228	0.228	0.227	0.230	0.228	0.211	0.158	0.174	0.231						
LTE Band 14	10M_QPSK_1_0	Middle	23330	Back	0.261	0.291	1	2	3	4	5	6	7	8							
							0.278	0.284	0.276	0.288	0.289	0.255	0.280	0.286							
LTE Band 17	10M_QPSK_1_0	Middle	23790	Back	0.204	0.228	1	2	3	4	5	6	7	8	9	10	11	12	13		
							0.225	0.226	0.225	0.225	0.196	0.179	0.224	0.224	0.165	0.222	0.186	0.140	0.205		
LTE Band 26	15M_QPSK_1_0	Middle	26865	Back	0.259	0.290	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.274	0.283	0.287	0.126	0.246	0.288	0.279	0.272	0.050	0.189	0.272	0.283	0.286	0.269	
							15	16	17	18	19										
							0.160	0.087	0.269	0.284	0.273										
LTE Band 71	20M_QPSK_1_0	Middle	133322	Left Side	0.222	0.248	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
							0.238	0.237	0.237	0.235	0.237	0.211	0.228	0.205	0.235	0.230	0.214	0.234	0.239	0.195	
							15														
							0.203														

Test Engineer : Tommy Chen, Jordar Jhuang, Shane Song, Murphy Lee, Kells Chen, Ray Sun, Willy Yu, Jeff Tsao, Chris Yang and White Huang

18. Uncertainty Assessment

Declaration of Conformity:

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

Comments and Explanations:

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

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

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

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

Uncertainty Distributions	Normal	Rectangular	Triangular	U-Shape
Multi-plying Factor ^(a)	1/k ^(b)	1/√3	1/√6	1/√2

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

Standard Uncertainty for Assumed Distribution

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

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

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



Applicable for SAR Measurements:

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



Applicable for Power Density Measurements:

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



19. References

- [1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”
- [2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992
- [3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.
- [6] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015
- [7] FCC KDB 648474 D04 v01r03, “SAR Evaluation Considerations for Wireless Handsets”, Oct 2015.
- [8] FCC KDB 941225 D01 v03r01, “3G SAR MEAUREMENT PROCEDURES”, Oct 2015
- [9] FCC KDB 941225 D05 v02r05, “SAR Evaluation Considerations for LTE Devices”, Dec 2015
- [10] FCC KDB 941225 D05A v01r02, “Rel. 10 LTE SAR Test Guidance and KDB Inquiries”, Oct 2015
- [11] FCC KDB 941225 D06 v02r01, “SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities”, Oct 2015.
- [12] FCC KDB 941225 D07 v01r02, “SAR Evaluation Procedures for UMPC Mini-Tablet Devices”, Oct 2015.
- [13] FCC KDB 865664 D01 v01r04, “SAR Measurement Requirements for 100 MHz to 6 GHz”, Aug 2015.
- [14] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.
- [15] IEC/IEEE 62209-1528:2020, “Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)”, Oct. 2020
- [16] SPEAG DASY6 System Handbook
- [17] SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)