FCC SAR TEST REPORT

FCC ID	:	**A4RGWKK3**
Equipment	:	**Phone**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC 47 CFR Part 2 (2.1093)**

The product was received on Sep. 15, 2022 and testing was started from Sep. 21, 2022 and completed on Nov. 14, 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Cona Huang / Deputy Manager

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Appendix B. Plots of High SAR and PD Measurement
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History of this test report

Report No.	Version	Description	Issued Date
FA280208-01C	01	Initial issue of report	Dec. 06, 2022
FA280208-01C	02	Update section15.5	Jan. 16, 2023
FA280208-01C	03	Update section15.5	Jan. 19, 2023

1. Statement of Compliance

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

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 10mm)	Hotspot (Separation 10mm)	Product Specific (Separation 0mm)		
		1g SAR (W/kg)			10g SAR (W/kg)		
Licensed	GSM850	1.11	0.81	0.85		1.59	3.79
	GSM1900	0.56	0.91	0.91			
	WCDMA II	0.66	0.67	0.83			
	WCDMA IV	0.52	0.63	0.65			
	WCDMA V	1.17	0.62	0.67			
	LTE B2	1.15	0.97	0.99	2.96		
	LTE B7	1.08	0.59	0.99			
	LTE B12/17	1.19	0.44	0.54			
	LTE B13	1.12	0.52	0.79			
	LTE B14	1.18	0.48	0.85			
	LTE B25/2	0.70	0.99	0.99			
	LTE B26/5	1.08	0.46	0.69			
	LTE B30	0.79	0.64	0.88			
	LTE B41/38	0.88	0.68	0.97			
	LTE B48	0.39	0.61	0.83			
	LTE B66/4	1.18	0.78	0.97	2.87		
	LTE B71	1.19	0.42	0.52			
	FR1 n5	1.09	0.51	0.74			
	FR1 n7	1.09	0.66	0.94			
	FR1 n12	1.18	0.45	0.62			
	FR1 n14	1.10	0.53	0.84			
	FR1 n25/2	0.68	0.87	0.90			
	FR1 n30	0.77	0.79	0.98			
	FR1 n41/38	1.17	0.78	0.99			
	FR1 n48	0.99	0.46	0.80			
	FR1 n66	0.52	0.78	0.86			
	FR1 n71	1.10	0.42	0.54			
	FR1 n77	1.19	0.48	0.68			
DTS	2.4GHz WLAN	1.20	0.56	0.60		1.58	
NII	5GHz WLAN	1.18	0.55	0.43	2.24	1.59	3.79
6XD	6GHz WLAN	0.19	0.11		0.18		
DSS	Bluetooth	0.47	0.56	0.29		1.59	

Equipment Class	Frequency Band	Head	Body-worn	Product Specific	Reported PD (mW/cm^2)
		Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	
6XD	6GHz WLAN	0.10	0.09	0.42	0.61
Date of Testing:		2022/9/21 ~ 2022/11/14			

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093), Human Exposure to RF Radiation Limits (1.0 mW/cm^2=10 W/m^2) specified in FCC 47 CFR part 1.1310 and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang
Report Producer: Carlie Tsai

2. Data Reuse Approach

FCC ID: A4RG0DZQ (reference model) and FCC ID: A4RGWKK3 (variant model)

- **PCB**: The PCB layout is identical with parent model.
- **Component Positions**: The position of the components is identical with parent model.
- **Enclosure, Materials, and From Factor**: the Enclosure, Materials, and From Factor are exactly the same
- **Antenna Structures**: the FR2 antenna modules are depopulated on the Variant Model, but all of the other antennas are physically the same as the reference model.

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

For variant model 1g SAR and 10g spot check SAR result does not exceed 30% and 1g SAR < 1.2W/kg, 10g SAR < 3.0W/kg of the reference model, the WWAN max SAR summary are identical with parent model.

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: A4RGWKK3

3. Model Difference Information

A4RG0DZQ and A4RGWKK3 use the identical internal printed circuit board layout, and the major differences which may relate to RF are listed below:

- Depopulated the FR2 radio and FR2 antenna Module

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

4. Reference detail Section

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	FCC ID (Reference)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Test on the variant
Part 2.1093 SAR	DSS	Bluetooth	2400~2483.5				A4RGWKK3	Full Test
	DTS	BLE WiFi	2400~2483.5				A4RGWKK3	Full Test
	NII	Wi-Fi	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850 5850 ~ 5895				A4RGWKK3	Full Test
	6XD	Wi-Fi	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125				A4RGWKK3	Full Test
	PCB CBE	GSM	850/1900	A4RG0DZQ	Original Grant	FA241215-02D	A4RGWKK3	Spot Check
		WCDMA	B2/4/5	A4RG0DZQ	Original Grant	FA241215-02D	A4RGWKK3	Spot Check
		LTE	B2/4/5/7/12/13/14 /17/25/26/30/38/41 /48/66/71	A4RG0DZQ	Original Grant	FA241215-02D	A4RGWKK3	Spot check
		5G FR1	n2/5/7/12/14/25/30/ 38/41/48/66/71/77	A4RG0DZQ	Original Grant	FA241215-02D	A4RGWKK3	Spot check

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. Equipment Under Test (EUT) Information

6.1 General Information

Product Feature & Specification	
Equipment Name	Phone
FCC ID	A4RGWKK3
S / N	28251FQHN00022 28251FQHN00039 28291FQHN00144 28291FQHN00163 28291FQHN00160
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz WLAN 2.4GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2G Band: 5150 MHz ~ 5250 MHz WLAN 5.3G Band: 5250 MHz ~ 5350 MHz WLAN 5.5G Band: 5470 MHz ~ 5725 MHz WLAN 5.8G Band: 5725 MHz ~ 5850 MHz WLAN 5.9G 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/HE20/HE40/HE80 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:

1. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
2. 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.
3. 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.
4. The WWAN highest SAR result for variant model spot check are from the reference model FCC ID A4RG0DZQ (Sporton report no.: FA241215-02D).

6.2 Maximum Tune-up Limit

<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 1-2 are used; when the device is operated in the body-worn / Hotspot / Extremity condition, power index 3-6 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(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3
3. 4+3(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4

<Mobile Condition – Power index 0 / Power index 4 / Power index 6>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	20.00	20.00	23.00
		6	2437	20.00	20.00	23.00
		11	2462	20.00	20.00	23.00
		12	2467	16.50	16.50	19.50
		13	2472	12.50	12.50	15.50
	802.11g 6Mbps	1	2412	18.50	18.50	21.50
		6	2437	20.00	20.00	23.00
		11	2462	16.50	16.50	19.50
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11n-HT20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	19.00	22.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ac-VHT20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	19.00	22.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ax-HE20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	19.00	22.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50

<5GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11n-HT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	20.00
	802.11ax-HE20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.00

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

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11n-HT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11n-HT40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	17.00	17.00	20.00
		138	5690	17.00	17.00	20.00
	802.11ax-HE20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11ax-HE40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ax-HE80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	17.00	17.00	20.00
		138	5690	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	155	5775	17.00	17.00	20.00
	802.11ax-HE20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11ax-HE40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ax-HE80 MCS0	155	5775	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	19.00	19.00	22.00
		173	5865	19.00	19.00	22.00
		177	5885	17.00	17.00	20.00
	802.11n-HT20 MCS0	169	5845	19.00	19.00	22.00
		173	5865	19.00	19.00	22.00
		177	5885	17.00	17.00	20.00
	802.11n-HT40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ac-VHT20 MCS0	169	5845	19.00	19.00	22.00
		173	5865	19.00	19.00	22.00
		177	5885	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ac-VHT80 MCS0	171	5855	16.00	16.00	19.00
	802.11ax-HE20 MCS0	169	5845	19.00	19.00	22.00
		173	5865	19.00	19.00	22.00
		177	5885	17.00	17.00	20.00
	802.11ax-HE40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ax-HE80 MCS0	171	5855	16.00	16.00	19.00

<Power Index 1>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	13.50	13.00	16.30
		6	2437	13.50	13.00	16.30
		11	2462	13.50	13.00	16.30
		12	2467	13.50	13.00	16.30
		13	2472	12.50	12.50	15.50
	802.11g 6Mbps	1	2412	13.50	13.00	16.30
		6	2437	13.50	13.00	16.30
		11	2462	13.50	13.00	16.30
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11n-HT20 MCS0	1	2412	13.50	13.00	16.30
		6	2437	13.50	13.00	16.30
		11	2462	13.50	13.00	16.30
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ac-VHT20 MCS0	1	2412	13.50	13.00	16.30
		6	2437	13.50	13.00	16.30
		11	2462	13.50	13.00	16.30
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ax-HE20 MCS0	1	2412	13.50	13.00	16.30
		6	2437	13.50	13.00	16.30
		11	2462	13.50	13.00	16.30
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50

<5GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	10.00	8.00	12.10
		40	5200	10.00	8.00	12.10
		44	5220	10.00	8.00	12.10
		48	5240	10.00	8.00	12.10
	802.11n-HT20 MCS0	36	5180	10.00	8.00	12.10
		40	5200	10.00	8.00	12.10
		44	5220	10.00	8.00	12.10
		48	5240	10.00	8.00	12.10
	802.11n-HT40 MCS0	38	5190	10.00	8.00	12.10
		46	5230	10.00	8.00	12.10
	802.11ac-VHT20 MCS0	36	5180	10.00	8.00	12.10
		40	5200	10.00	8.00	12.10
		44	5220	10.00	8.00	12.10
		48	5240	10.00	8.00	12.10
	802.11ac-VHT40 MCS0	38	5190	10.00	8.00	12.10
		46	5230	10.00	8.00	12.10
	802.11ac-VHT80 MCS0	42	5210	10.00	8.00	12.10
	802.11ax-HE20 MCS0	36	5180	10.00	8.00	12.10
		40	5200	10.00	8.00	12.10
		44	5220	10.00	8.00	12.10
		48	5240	10.00	8.00	12.10
	802.11ax-HE40 MCS0	38	5190	10.00	8.00	12.10
		46	5230	10.00	8.00	12.10
	802.11ax-HE80 MCS0	42	5210	10.00	8.00	12.10

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	10.00	8.00	12.10
		56	5280	10.00	8.00	12.10
		60	5300	10.00	8.00	12.10
		64	5320	10.00	8.00	12.10
	802.11n-HT20 MCS0	52	5260	10.00	8.00	12.10
		56	5280	10.00	8.00	12.10
		60	5300	10.00	8.00	12.10
		64	5320	10.00	8.00	12.10
	802.11n-HT40 MCS0	54	5270	10.00	8.00	12.10
		62	5310	10.00	8.00	12.10
	802.11ac-VHT20 MCS0	52	5260	10.00	8.00	12.10
		56	5280	10.00	8.00	12.10
		60	5300	10.00	8.00	12.10
		64	5320	10.00	8.00	12.10
	802.11ac-VHT40 MCS0	54	5270	10.00	8.00	12.10
		62	5310	10.00	8.00	12.10
	802.11ac-VHT80 MCS0	58	5290	10.00	8.00	12.10
	802.11ax-HE20 MCS0	52	5260	10.00	8.00	12.10
		56	5280	10.00	8.00	12.10
		60	5300	10.00	8.00	12.10
		64	5320	10.00	8.00	12.10
	802.11ax-HE40 MCS0	54	5270	10.00	8.00	12.10
		62	5310	10.00	8.00	12.10
	802.11ax-HE80 MCS0	58	5290	10.00	8.00	12.10

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	6.50	9.00	10.90
		116	5580	6.50	9.00	10.90
		124	5620	6.50	9.00	10.90
		132	5660	6.50	9.00	10.90
		144	5720	6.50	9.00	10.90
	802.11n-HT20 MCS0	100	5500	6.50	9.00	10.90
		116	5580	6.50	9.00	10.90
		124	5620	6.50	9.00	10.90
		132	5660	6.50	9.00	10.90
		144	5720	6.50	9.00	10.90
	802.11n-HT40 MCS0	102	5510	6.50	9.00	10.90
		110	5550	6.50	9.00	10.90
		126	5630	6.50	9.00	10.90
		134	5670	6.50	9.00	10.90
		142	5710	6.50	9.00	10.90
	802.11ac-VHT20 MCS0	100	5500	6.50	9.00	10.90
		116	5580	6.50	9.00	10.90
		124	5620	6.50	9.00	10.90
		132	5660	6.50	9.00	10.90
		144	5720	6.50	9.00	10.90
	802.11ac-VHT40 MCS0	102	5510	6.50	9.00	10.90
		110	5550	6.50	9.00	10.90
		126	5630	6.50	9.00	10.90
		134	5670	6.50	9.00	10.90
		142	5710	6.50	9.00	10.90
	802.11ac-VHT80 MCS0	106	5530	6.50	9.00	10.90
		122	5610	6.50	9.00	10.90
		138	5690	6.50	9.00	10.90
	802.11ax-HE20 MCS0	100	5500	6.50	9.00	10.90
		116	5580	6.50	9.00	10.90
		124	5620	6.50	9.00	10.90
		132	5660	6.50	9.00	10.90
		144	5720	6.50	9.00	10.90
	802.11ax-HE40 MCS0	102	5510	6.50	9.00	10.90
		110	5550	6.50	9.00	10.90
		126	5630	6.50	9.00	10.90
		134	5670	6.50	9.00	10.90
		142	5710	6.50	9.00	10.90
	802.11ax-HE80 MCS0	106	5530	6.50	9.00	10.90
		122	5610	6.50	9.00	10.90
		138	5690	6.50	9.00	10.90

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	8.50	13.00	14.30
		157	5785	8.50	13.00	14.30
		165	5825	8.50	13.00	14.30
	802.11n-HT20 MCS0	149	5745	8.50	13.00	14.30
		157	5785	8.50	13.00	14.30
		165	5825	8.50	13.00	14.30
	802.11n-HT40 MCS0	151	5755	8.50	13.00	14.30
		159	5795	8.50	13.00	14.30
	802.11ac-VHT20 MCS0	149	5745	8.50	13.00	14.30
		157	5785	8.50	13.00	14.30
		165	5825	8.50	13.00	14.30
	802.11ac-VHT40 MCS0	151	5755	8.50	13.00	14.30
		159	5795	8.50	13.00	14.30
	802.11ac-VHT80 MCS0	155	5775	8.50	13.00	14.30
	802.11ax-HE20 MCS0	149	5745	8.50	13.00	14.30
		157	5785	8.50	13.00	14.30
		165	5825	8.50	13.00	14.30
	802.11ax-HE40 MCS0	151	5755	8.50	13.00	14.30
		159	5795	8.50	13.00	14.30
	802.11ax-HE80 MCS0	155	5775	8.50	13.00	14.30

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	8.50	12.00	13.60
		173	5865	8.50	12.00	13.60
		177	5885	8.50	12.00	13.60
	802.11n-HT20 MCS0	169	5845	8.50	12.00	13.60
		173	5865	8.50	12.00	13.60
		177	5885	8.50	12.00	13.60
	802.11n-HT40 MCS0	167	5835	8.50	12.00	13.60
		175	5875	8.50	12.00	13.60
	802.11ac-VHT20 MCS0	169	5845	8.50	12.00	13.60
		173	5865	8.50	12.00	13.60
		177	5885	8.50	12.00	13.60
	802.11ac-VHT40 MCS0	167	5835	8.50	12.00	13.60
		175	5875	8.50	12.00	13.60
	802.11ac-VHT80 MCS0	171	5855	8.50	12.00	13.60
	802.11ax-HE20 MCS0	169	5845	8.50	12.00	13.60
		173	5865	8.50	12.00	13.60
		177	5885	8.50	12.00	13.60
	802.11ax-HE40 MCS0	167	5835	8.50	12.00	13.60
		175	5875	8.50	12.00	13.60
	802.11ax-HE80 MCS0	171	5855	8.50	12.00	13.60

<Power Index 2>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.50	15.50	19.00
		6	2437	16.50	15.50	19.00
		11	2462	16.50	15.50	19.00
		12	2467	16.50	15.50	19.00
		13	2472	12.50	12.50	15.50
	802.11g 6Mbps	1	2412	16.50	15.50	19.00
		6	2437	16.50	15.50	19.00
		11	2462	16.50	15.50	19.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11n-HT20 MCS0	1	2412	16.00	15.50	18.80
		6	2437	16.50	15.50	19.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ac-VHT20 MCS0	1	2412	16.00	15.50	18.80
		6	2437	16.50	15.50	19.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ax-HE20 MCS0	1	2412	16.00	15.50	18.80
		6	2437	16.50	15.50	19.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50

<5GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.00	16.50	20.30
		40	5200	18.00	16.50	20.30
		44	5220	18.00	16.50	20.30
		48	5240	18.00	16.50	20.30
	802.11n-HT20 MCS0	36	5180	18.00	16.50	20.30
		40	5200	18.00	16.50	20.30
		44	5220	18.00	16.50	20.30
		48	5240	18.00	16.50	20.30
	802.11n-HT40 MCS0	38	5190	17.00	16.50	19.80
		46	5230	18.00	16.50	20.30
	802.11ac-VHT20 MCS0	36	5180	18.00	16.50	20.30
		40	5200	18.00	16.50	20.30
		44	5220	18.00	16.50	20.30
		48	5240	18.00	16.50	20.30
	802.11ac-VHT40 MCS0	38	5190	17.00	16.50	19.80
		46	5230	18.00	16.50	20.30
	802.11ac-VHT80 MCS0	42	5210	17.00	16.50	19.80
	802.11ax-HE20 MCS0	36	5180	18.00	16.50	20.30
		40	5200	18.00	16.50	20.30
		44	5220	18.00	16.50	20.30
		48	5240	18.00	16.50	20.30
	802.11ax-HE40 MCS0	38	5190	17.00	16.50	19.80
		46	5230	18.00	16.50	20.30
	802.11ax-HE80 MCS0	42	5210	17.00	16.50	19.80

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	18.00	16.50	20.30
		56	5280	18.00	16.50	20.30
		60	5300	18.00	16.50	20.30
		64	5320	18.00	16.50	20.30
	802.11n-HT20 MCS0	52	5260	18.00	16.50	20.30
		56	5280	18.00	16.50	20.30
		60	5300	18.00	16.50	20.30
		64	5320	18.00	16.50	20.30
	802.11n-HT40 MCS0	54	5270	18.00	16.50	20.30
		62	5310	18.00	16.50	20.30
	802.11ac-VHT20 MCS0	52	5260	18.00	16.50	20.30
		56	5280	18.00	16.50	20.30
		60	5300	18.00	16.50	20.30
		64	5320	18.00	16.50	20.30
	802.11ac-VHT40 MCS0	54	5270	18.00	16.50	20.30
		62	5310	18.00	16.50	20.30
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.00
	802.11ax-HE20 MCS0	52	5260	18.00	16.50	20.30
		56	5280	18.00	16.50	20.30
		60	5300	18.00	16.50	20.30
		64	5320	18.00	16.50	20.30
	802.11ax-HE40 MCS0	54	5270	18.00	16.50	20.30
		62	5310	18.00	16.50	20.30
	802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	15.50	17.50	19.60
		116	5580	15.50	17.50	19.60
		124	5620	15.50	17.50	19.60
		132	5660	15.50	17.50	19.60
		144	5720	15.50	17.50	19.60
	802.11n-HT20 MCS0	100	5500	15.50	17.50	19.60
		116	5580	15.50	17.50	19.60
		124	5620	15.50	17.50	19.60
		132	5660	15.50	17.50	19.60
		144	5720	15.50	17.50	19.60
	802.11n-HT40 MCS0	102	5510	15.50	17.50	19.60
		110	5550	15.50	17.50	19.60
		126	5630	15.50	17.50	19.60
		134	5670	15.50	17.50	19.60
		142	5710	15.50	17.50	19.60
	802.11ac-VHT20 MCS0	100	5500	15.50	17.50	19.60
		116	5580	15.50	17.50	19.60
		124	5620	15.50	17.50	19.60
		132	5660	15.50	17.50	19.60
		144	5720	15.50	17.50	19.60
	802.11ac-VHT40 MCS0	102	5510	15.50	17.50	19.60
		110	5550	15.50	17.50	19.60
		126	5630	15.50	17.50	19.60
		134	5670	15.50	17.50	19.60
		142	5710	15.50	17.50	19.60
	802.11ac-VHT80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	15.50	17.00	19.30
		138	5690	15.50	17.00	19.30
	802.11ax-HE20 MCS0	100	5500	15.50	17.50	19.60
		116	5580	15.50	17.50	19.60
		124	5620	15.50	17.50	19.60
		132	5660	15.50	17.50	19.60
		144	5720	15.50	17.50	19.60
	802.11ax-HE40 MCS0	102	5510	15.50	17.50	19.60
		110	5550	15.50	17.50	19.60
		126	5630	15.50	17.50	19.60
		134	5670	15.50	17.50	19.60
		142	5710	15.50	17.50	19.60
	802.11ax-HE80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	15.50	17.00	19.30
		138	5690	15.50	17.00	19.30

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.50	19.00	20.90
		157	5785	16.50	19.00	20.90
		165	5825	16.50	19.00	20.90
	802.11n-HT20 MCS0	149	5745	16.50	19.00	20.90
		157	5785	16.50	19.00	20.90
		165	5825	16.50	19.00	20.90
	802.11n-HT40 MCS0	151	5755	16.50	18.00	20.30
		159	5795	16.50	18.00	20.30
	802.11ac-VHT20 MCS0	149	5745	16.50	19.00	20.90
		157	5785	16.50	19.00	20.90
		165	5825	16.50	19.00	20.90
	802.11ac-VHT40 MCS0	151	5755	16.50	18.00	20.30
		159	5795	16.50	18.00	20.30
	802.11ac-VHT80 MCS0	155	5775	16.50	17.00	19.80
	802.11ax-HE20 MCS0	149	5745	16.50	19.00	20.90
		157	5785	16.50	19.00	20.90
		165	5825	16.50	19.00	20.90
	802.11ax-HE40 MCS0	151	5755	16.50	18.00	20.30
		159	5795	16.50	18.00	20.30
	802.11ax-HE80 MCS0	155	5775	16.50	17.00	19.80

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	16.00	19.00	20.80
		173	5865	16.00	19.00	20.80
		177	5885	16.00	17.00	19.50
	802.11n-HT20 MCS0	169	5845	16.00	19.00	20.80
		173	5865	16.00	19.00	20.80
		177	5885	16.00	17.00	19.50
	802.11n-HT40 MCS0	167	5835	16.00	18.00	20.10
		175	5875	16.00	16.00	19.00
	802.11ac-VHT20 MCS0	169	5845	16.00	19.00	20.80
		173	5865	16.00	19.00	20.80
		177	5885	16.00	17.00	19.50
	802.11ac-VHT40 MCS0	167	5835	16.00	18.00	20.10
		175	5875	16.00	16.00	19.00
	802.11ac-VHT80 MCS0	171	5855	16.00	16.00	19.00
	802.11ax-HE20 MCS0	169	5845	16.00	19.00	20.80
		173	5865	16.00	19.00	20.80
		177	5885	16.00	17.00	19.50
	802.11ax-HE40 MCS0	167	5835	16.00	18.00	20.10
		175	5875	16.00	16.00	19.00
	802.11ax-HE80 MCS0	171	5855	16.00	16.00	19.00

<Power Index 3>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.50	18.50	22.00
		6	2437	19.50	18.50	22.00
		11	2462	19.50	18.50	22.00
		12	2467	16.50	16.50	19.50
		13	2472	12.50	12.50	15.50
	802.11g 6Mbps	1	2412	18.50	18.50	21.50
		6	2437	19.50	18.50	22.00
		11	2462	16.50	16.50	19.50
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11n-HT20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	18.50	21.80
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ac-VHT20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	18.50	21.80
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ax-HE20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	18.50	21.80
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50

<5GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11n-HT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	20.00
	802.11ax-HE20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11n-HT20 MCS0	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11n-HT40 MCS0	54	5270	18.00	18.00	21.00
		62	5310	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11ac-VHT40 MCS0	54	5270	18.00	18.00	21.00
		62	5310	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.00
	802.11ax-HE20 MCS0	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11ax-HE40 MCS0	54	5270	18.00	18.00	21.00
		62	5310	18.00	18.00	21.00
	802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11n-HT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11n-HT40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	17.00	17.00	20.00
		138	5690	17.00	17.00	20.00
	802.11ax-HE20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11ax-HE40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ax-HE80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	17.00	17.00	20.00
		138	5690	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	155	5775	17.00	17.00	20.00
	802.11ax-HE20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11ax-HE40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ax-HE80 MCS0	155	5775	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11n-HT20 MCS0	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11n-HT40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ac-VHT20 MCS0	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ac-VHT80 MCS0	171	5855	16.00	16.00	19.00
	802.11ax-HE20 MCS0	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11ax-HE40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ax-HE80 MCS0	171	5855	16.00	16.00	19.00

<Power Index 5>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	20.00	20.00	23.00
		6	2437	20.00	20.00	23.00
		11	2462	20.00	20.00	23.00
		12	2467	16.50	16.50	19.50
		13	2472	12.50	12.50	15.50
	802.11g 6Mbps	1	2412	18.50	18.50	21.50
		6	2437	20.00	20.00	23.00
		11	2462	16.50	16.50	19.50
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11n-HT20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	19.00	22.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ac-VHT20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	19.00	22.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50
	802.11ax-HE20 MCS0	1	2412	16.00	16.00	19.00
		6	2437	19.00	19.00	22.00
		11	2462	14.00	14.00	17.00
		12	2467	13.00	13.00	16.00
		13	2472	1.50	1.50	4.50

<5GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11n-HT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11n-HT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	20.00
	802.11ax-HE20 MCS0	36	5180	19.00	19.00	22.00
		40	5200	19.00	19.00	22.00
		44	5220	19.00	19.00	22.00
		48	5240	19.00	19.00	22.00
	802.11ax-HE40 MCS0	38	5190	17.00	17.00	20.00
		46	5230	18.00	18.00	21.00
	802.11ax-HE80 MCS0	42	5210	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11n-HT20 MCS0	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11n-HT40 MCS0	54	5270	18.00	18.00	21.00
		62	5310	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11ac-VHT40 MCS0	54	5270	18.00	18.00	21.00
		62	5310	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	58	5290	16.00	16.00	19.00
	802.11ax-HE20 MCS0	52	5260	19.00	18.00	21.50
		56	5280	19.00	18.00	21.50
		60	5300	19.00	18.00	21.50
		64	5320	19.00	18.00	21.50
	802.11ax-HE40 MCS0	54	5270	18.00	18.00	21.00
		62	5310	18.00	18.00	21.00
	802.11ax-HE80 MCS0	58	5290	16.00	16.00	19.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11n-HT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11n-HT40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	17.00	17.00	20.00
		138	5690	17.00	17.00	20.00
	802.11ax-HE20 MCS0	100	5500	19.00	19.00	22.00
		116	5580	19.00	19.00	22.00
		124	5620	19.00	19.00	22.00
		132	5660	19.00	19.00	22.00
		144	5720	19.00	19.00	22.00
	802.11ax-HE40 MCS0	102	5510	18.00	18.00	21.00
		110	5550	18.00	18.00	21.00
		126	5630	18.00	18.00	21.00
		134	5670	18.00	18.00	21.00
		142	5710	18.00	18.00	21.00
	802.11ax-HE80 MCS0	106	5530	12.00	12.00	15.00
		122	5610	17.00	17.00	20.00
		138	5690	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11n-HT40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ac-VHT20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ac-VHT80 MCS0	155	5775	17.00	17.00	20.00
	802.11ax-HE20 MCS0	149	5745	19.00	19.00	22.00
		157	5785	19.00	19.00	22.00
		165	5825	19.00	19.00	22.00
	802.11ax-HE40 MCS0	151	5755	18.00	18.00	21.00
		159	5795	18.00	18.00	21.00
	802.11ax-HE80 MCS0	155	5775	17.00	17.00	20.00

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11n-HT20 MCS0	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11n-HT40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ac-VHT20 MCS0	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11ac-VHT40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ac-VHT80 MCS0	171	5855	16.00	16.00	19.00
	802.11ax-HE20 MCS0	169	5845	18.00	19.00	21.50
		173	5865	18.00	19.00	21.50
		177	5885	17.00	17.00	20.00
	802.11ax-HE40 MCS0	167	5835	18.00	18.00	21.00
		175	5875	16.00	16.00	19.00
	802.11ax-HE80 MCS0	171	5855	16.00	16.00	19.00

<Mobile Condition - Power Index 0 / Power Index 1 / Power Index 2 / Power Index 3 / Power Index 4 / Power Index 5 / Power Index 6>

<6GHz WLAN>

Burst Average Power (dBm)						
Transmit Antenna				MIMO		
	Mode	Channel	Frequency (MHz)	Ant 4+3(4) Tune-Up Limit	Ant 4+3(3) Tune-Up Limit	Ant 4+3 Tune-Up Limit
WiFi 6E	802.11a 6Mbps	1	5955	4.00	4.00	7.00
		57	6235	4.00	4.00	7.00
		113	6515	4.00	4.00	7.00
		173	6815	4.00	4.00	7.00
	802.11ax-HE20 MCS0	1	5955	4.00	4.00	7.00
		57	6235	4.00	4.00	7.00
		113	6515	4.00	4.00	7.00
		173	6815	4.00	4.00	7.00
	802.11ax-HE40 MCS0	3	5965	7.00	7.00	10.00
		59	6245	7.00	7.00	10.00
		107	6485	7.00	7.00	10.00
		171	6805	7.00	7.00	10.00
		227	7085	9.00	9.00	12.00
	802.11ax-HE80 MCS0	7	5985	9.00	9.00	12.00
		71	6305	9.00	9.00	12.00
		119	6545	9.00	9.00	12.00
		167	6785	9.00	9.00	12.00
		215	7025	9.00	9.00	12.00

<Bluetooth Maximum Power>

General Note:

1. The device implements the power management for Bluetooth SAR compliance for different exposure conditions and user cases. When the device is operated against the user's head, power index 1 is used; when the device is operated in the body-worn or extremity condition, power index 2-4 are used. In each exposure condition, the power selection is 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

<Mobile condition – Power Index 0 / Power Index 2 / Power Index 3>

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

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

<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

<Power Index 4>

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

7. RF Exposure Limits

7.1 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.

7.2 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 4cm^2 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/f2)	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/f2)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

8. Specific Absorption Rate (SAR)

8.1 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.

8.2 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:

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

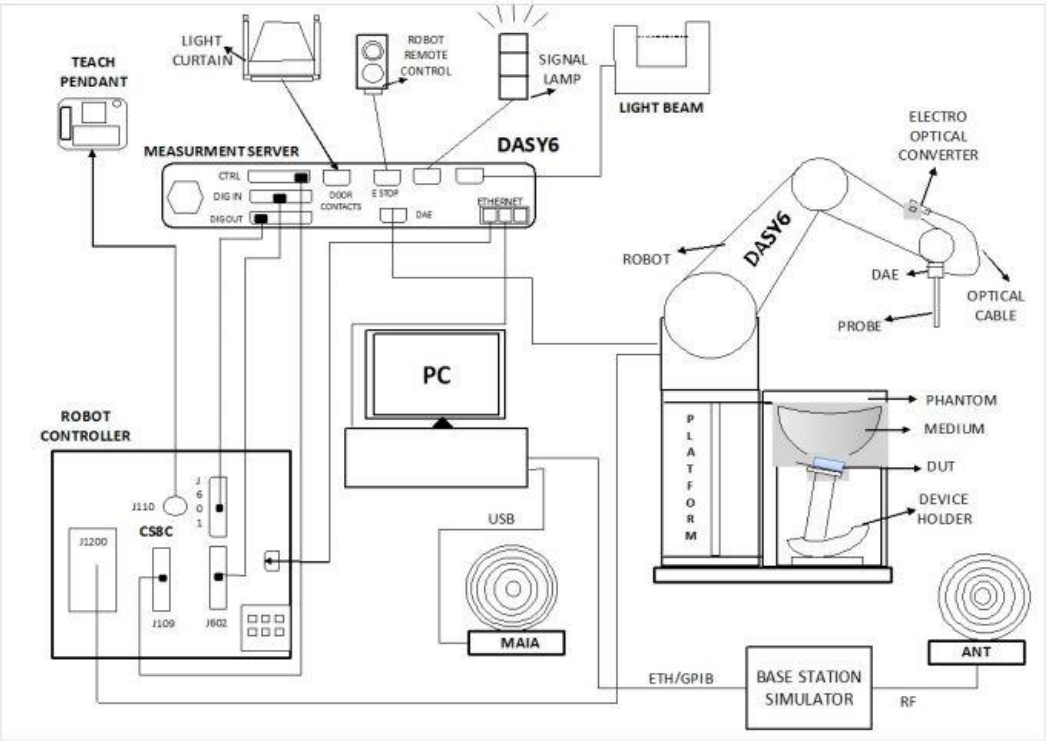
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

9. 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.

9.1 Test Site Location

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

Test Site	EMC & Wireless Communications Laboratory		Wensan Laboratory		
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan		
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	SAR16-HY
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	SAR17-HY

9.2 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

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

9.3 Data Acquisition Electronics (DAE)

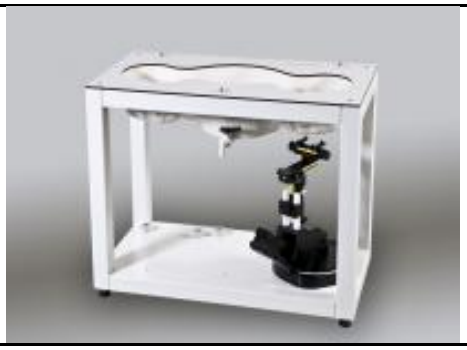
The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an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

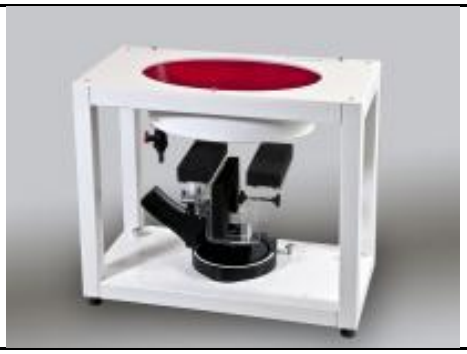
9.4 Phantom

<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.

9.5 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

10. 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 power measurement, use engineering software to configure EUT WLAN 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 output power

<SAR measurement>

(a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN 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

10.1 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

10.2 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.

10.3 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	½·δ·ln(2) ± 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: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

10.4 Zoom Scan

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

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

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{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 1st 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	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
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 *reported* SAR from the *area scan based 1-g SAR estimation* 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.

10.5 Volume Scan Procedures

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

10.6 Power Drift Monitoring

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

11. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit(2)	D750V3	1012	Aug. 18, 2021	Aug. 16, 2023
SPEAG	750MHz System Validation Kit	D750V3	1107	Jun. 22, 2022	Jun. 21, 2023
SPEAG	835MHz System Validation Kit(2)	D835V2	499	Aug. 18, 2021	Aug. 16, 2023
SPEAG	835MHz System Validation Kit(2)	D835V2	4d167	Nov. 25, 2019	Nov. 22, 2022
SPEAG	1750MHz System Validation Kit	D1750V2	1068	Nov. 25, 2021	Nov. 24, 2022
SPEAG	1750MHz System Validation Kit	D1750V2	1112	Jun. 22, 2022	Jun. 21, 2023
SPEAG	1900MHz System Validation Kit(2)	D1900V2	5d041	Aug. 19, 2021	Aug. 17, 2023
SPEAG	1900MHz System Validation Kit	D1900V2	5d093	Mar. 25, 2022	Mar. 24, 2023
SPEAG	1900MHz System Validation Kit	D1900V2	5d185	Jun. 17, 2022	Jun. 16, 2023
SPEAG	2300MHz System Validation Kit	D2300V2	1006	Jan. 18, 2022	Jan. 17, 2023
SPEAG	2300MHz System Validation Kit(2)	D2300V2	1088	Jul. 13, 2021	Jul. 11, 2023
SPEAG	2450MHz System Validation Kit(2)	D2450V2	929	Nov. 21, 2019	Nov. 18, 2022
SPEAG	2600MHz System Validation Kit(2)	D2600V2	1008	Aug. 17, 2021	Aug. 15, 2023
SPEAG	2600MHz System Validation Kit	D2600V2	1078	Jun. 23, 2022	Jun. 22, 2023
SPEAG	2600MHz System Validation Kit	D2600V2	1089	Mar. 24, 2022	Mar. 23, 2023
SPEAG	3500MHz System Validation Kit	D3500V2	1036	Mar. 23, 2022	Mar. 22, 2023
SPEAG	3700MHz System Validation Kit	D3700V2	1006	Jun. 20, 2022	Jun. 19, 2023
SPEAG	3900MHz System Validation Kit	D3900V2	1017	Apr. 22, 2022	Apr. 21, 2023
SPEAG	5GHz System Validation Kit(2)	D5GHzV2	1128	Dec. 16, 2019	Dec. 13, 2022
SPEAG	5GHz System Validation Kit(2)	D5GHzV2	1171	Apr. 20, 2021	Apr. 18, 2023
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1003	Sep. 24, 2021	Sep. 23, 2022
SPEAG	5G Verification Source	10 GHz	1020	Jan. 18, 2022	Jan. 17, 2023
SPEAG	Data Acquisition Electronics	DAE4	316	Jan. 26, 2022	Jan. 25, 2023
SPEAG	Data Acquisition Electronics	DAE3	393	May. 17, 2022	May. 16, 2023
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 19, 2022	Jan. 18, 2023
SPEAG	Data Acquisition Electronics	DAE4	699	Feb. 24, 2022	Feb. 23, 2023
SPEAG	Data Acquisition Electronics	DAE4	853	Jul. 20, 2022	Jul. 19, 2023
SPEAG	Data Acquisition Electronics	DAE4	1399	Feb. 28, 2022	Feb. 27, 2023
SPEAG	Data Acquisition Electronics	DAE4	1424	Jan. 20, 2022	Jan. 19, 2023
SPEAG	Data Acquisition Electronics	DAE4	1696	Nov. 03, 2021	Nov. 02, 2022
SPEAG	Data Acquisition Electronics	DAE4	1707	Jan. 12, 2022	Jan. 11, 2023
SPEAG	Dosimetric E-Field Probe	ES3DV3	3115	Nov. 23, 2021	Nov. 22, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3124	Nov. 23, 2021	Nov. 22, 2022
SPEAG	Dosimetric E-Field Probe	ES3DV3	3184	Sep. 26, 2022	Sep. 25, 2023
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	Sep. 26, 2022	Sep. 25, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	3728	Mar. 02, 2022	Mar. 01, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 21, 2021	Oct. 20, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3976	Jan. 27, 2022	Jan. 26, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7350	Dec. 20, 2021	Dec. 19, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7590	Mar. 28, 2022	Mar. 27, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Jan. 27, 2022	Jan. 26, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7695	Nov. 19, 2021	Nov. 18, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	7700	Jan. 11, 2022	Jan. 10, 2023
SPEAG	Dosimetric E-Field Probe	EUmmWV3	9424	Apr. 06, 2022	Apr. 05, 2023
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	Jun. 27, 2022	Jun. 26, 2023
RCPTWN	Thermometer	HTC-1	TM560-2	Mar. 15, 2022	Mar. 14, 2023
Anritsu	Radio Communication Analyzer	MT8821C	6201074414	Aug. 19, 2022	Aug. 18, 2023
Keysight	Wireless Communication Test Set	E5515C	MY50266977	May. 10, 2022	May. 09, 2023
Keysight	5G Wireless Test Platform	E7515B	MY59321826	Apr. 13, 2022	Apr. 12, 2023
R&S	BT Base Station	CBT32	101136	Oct. 17, 2021	Oct. 16, 2022

R&S	BT Base Station	CBT	100815	Feb. 18, 2022	Feb. 17, 2023
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Oct. 24, 2021	Oct. 23, 2022
R&S	Signal Generator	SMA100A	101091	Oct. 04, 2022	Oct. 03, 2023
Keysight	ENA Network Analyzer	E5071C	MY46316648	Jul. 25, 2022	Jul. 24, 2023
SPEAG	Dielectric Probe Kit	DAK-3.5	1146	Jul. 25, 2022	Jul. 24, 2023
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3252	Jul. 25, 2022	Jul. 24, 2023
Anritsu	Power Meter	ML2495A	1419002	Aug. 16, 2022	Aug. 15, 2023
Anritsu	Power Sensor	MA2411B	1911176	Aug. 16, 2022	Aug. 15, 2023
Anritsu	Power Meter	ML2496A	2119003	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Power Sensor	MA2411B	1911334	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 21, 2022	Jul. 20, 2023
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 19, 2021	Aug. 17, 2023
Mini-Circuits	Power Amplifier	ZHL-42W+	715701915	May. 12, 2022	May. 11, 2023
Mini-Circuits	Power Amplifier	ZVE-3W-183+	072602118	Mar. 09, 2022	Mar. 08, 2023
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.

12. System Verification

12.1 Tissue Verification

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18℃ to 25℃, 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℃ to 25℃ and within ± 2℃ 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. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
750	22.7	0.893	42.089	0.89	41.90	0.34	0.45	±5	2022/9/23
750	22.2	0.881	41.816	0.89	41.90	-1.01	-0.20	±5	2022/9/26
750	22.4	0.885	41.998	0.89	41.90	-0.56	0.23	±5	2022/9/27
750	22.6	0.898	41.594	0.89	41.90	0.90	-0.73	±5	2022/9/29
750	22.5	0.880	41.885	0.89	41.90	-1.12	-0.04	±5	2022/9/30
750	22.4	0.903	41.627	0.89	41.90	1.46	-0.65	±5	2022/9/30
750	22.1	0.873	42.966	0.89	41.90	-1.91	2.54	±5	2022/10/1
750	22.4	0.889	42.326	0.89	41.90	-0.11	1.02	±5	2022/10/1
750	22.6	0.886	42.016	0.89	41.90	-0.45	0.28	±5	2022/10/2
750	22.5	0.899	41.633	0.89	41.90	1.01	-0.64	±5	2022/11/14
835	22.4	0.892	40.992	0.90	41.50	-0.89	-1.22	±5	2022/9/25
835	22.5	0.921	41.671	0.90	41.50	2.33	0.41	±5	2022/9/25
835	22.6	0.912	41.746	0.90	41.50	1.33	0.59	±5	2022/9/29
835	22.4	0.883	41.438	0.90	41.50	-1.89	-0.15	±5	2022/10/1
835	22.1	0.913	41.923	0.90	41.50	1.44	1.02	±5	2022/10/3
835	22.7	0.877	41.225	0.90	41.50	-2.56	-0.66	±5	2022/10/6
835	22.4	0.896	41.547	0.90	41.50	-0.44	0.11	±5	2022/10/7
835	22.3	0.920	41.530	0.90	41.50	2.22	0.07	±5	2022/10/14
1750	22.4	1.380	40.451	1.37	40.10	0.73	0.88	±5	2022/9/25
1750	22.5	1.341	39.883	1.37	40.10	-2.12	-0.54	±5	2022/10/2
1750	22.7	1.373	41.043	1.37	40.10	0.22	2.35	±5	2022/10/3
1750	22.7	1.329	39.751	1.37	40.10	-2.99	-0.87	±5	2022/10/4
1750	22.3	1.369	40.923	1.37	40.10	-0.07	2.05	±5	2022/10/11
1750	22.3	1.334	41.668	1.37	40.10	-2.63	3.91	±5	2022/10/16
1750	22.5	1.349	40.546	1.37	40.10	-1.53	1.11	±5	2022/10/17
1750	22.5	1.341	40.609	1.37	40.10	-2.12	1.27	±5	2022/10/17
1750	22.5	1.341	40.609	1.37	40.10	-2.12	1.27	±5	2022/10/17
1900	22.4	1.412	40.129	1.40	40.00	0.86	0.32	±5	2022/9/25
1900	22.3	1.399	39.630	1.40	40.00	-0.07	-0.92	±5	2022/9/26
1900	22.4	1.432	40.772	1.40	40.00	2.29	1.93	±5	2022/9/28
1900	22.5	1.431	40.484	1.40	40.00	2.21	1.21	±5	2022/10/3
1900	22.8	1.443	40.594	1.40	40.00	3.07	1.49	±5	2022/10/5
1900	22.7	1.414	40.502	1.40	40.00	1.00	1.26	±5	2022/10/6
1900	22.5	1.418	40.622	1.40	40.00	1.29	1.56	±5	2022/10/8
1900	22.3	1.408	40.734	1.40	40.00	0.57	1.84	±5	2022/10/11
1900	22.5	1.424	38.998	1.40	40.00	1.71	-2.51	±5	2022/10/17
1900	22.5	1.445	40.555	1.40	40.00	3.21	1.39	±5	2022/10/17
1900	22.5	1.445	40.555	1.40	40.00	3.21	1.39	±5	2022/10/17
1900	22.5	1.455	41.386	1.40	40.00	3.93	3.47	±5	2022/11/14

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
2300	22.5	1.630	39.381	1.67	39.50	-2.40	-0.30	±5	2022/10/7
2300	22.4	1.614	39.258	1.67	39.50	-3.35	-0.61	±5	2022/10/8
2300	22.4	1.672	40.581	1.67	39.50	0.12	2.74	±5	2022/10/10
2300	22.3	1.676	40.691	1.67	39.50	0.36	3.02	±5	2022/10/12
2600	22.2	1.971	39.647	1.96	39.00	0.56	1.66	±5	2022/9/28
2600	22.1	1.954	39.495	1.96	39.00	-0.31	1.27	±5	2022/9/29
2600	22.5	1.993	39.458	1.96	39.00	1.68	1.17	±5	2022/10/4
2600	22.5	1.993	39.458	1.96	39.00	1.68	1.17	±5	2022/10/4
2600	22.2	1.954	39.750	1.96	39.00	-0.31	1.92	±5	2022/10/5
2600	22.7	1.986	38.461	1.96	39.00	1.33	-1.38	±5	2022/10/6
2600	22.3	1.993	39.445	1.96	39.00	1.68	1.14	±5	2022/10/12
2600	22.3	1.873	38.147	1.96	39.00	-4.44	-2.19	±5	2022/10/14
2600	22.3	1.873	38.147	1.96	39.00	-4.44	-2.19	±5	2022/10/14
2600	22.7	1.962	38.368	1.96	39.00	0.10	-1.62	±5	2022/10/23
3500	22.6	2.985	38.122	2.91	37.90	2.58	0.59	±5	2022/10/10
3500	22.3	2.961	37.998	2.91	37.90	1.75	0.26	±5	2022/10/11
3500	22.1	2.938	37.698	2.91	37.90	0.96	-0.53	±5	2022/10/12
3500	22.2	2.928	37.478	2.91	37.90	0.62	-1.11	±5	2022/10/13
3500	22.2	2.928	37.478	2.91	37.90	0.62	-1.11	±5	2022/10/13
3500	22.4	2.871	37.363	2.91	37.90	-1.34	-1.42	±5	2022/10/14
3500	22.5	2.983	38.148	2.91	37.90	2.51	0.65	±5	2022/10/15
3500	22.3	2.994	38.417	2.91	37.90	2.89	1.36	±5	2022/11/5
3700	22.3	3.118	37.761	3.12	37.70	-0.06	0.16	±5	2022/10/11
3700	22.5	3.141	37.911	3.12	37.70	0.67	0.56	±5	2022/10/15
3700	22.3	3.209	38.214	3.12	37.70	2.85	1.36	±5	2022/11/5
3900	22.6	3.318	37.639	3.33	37.51	-0.36	0.34	±5	2022/10/10
3900	22.1	3.265	37.216	3.33	37.51	-1.95	-0.78	±5	2022/10/12
3900	22.1	3.265	37.216	3.33	37.51	-1.95	-0.78	±5	2022/10/12
3900	22.2	3.254	37.086	3.33	37.51	-2.28	-1.13	±5	2022/10/13
3900	22.2	3.254	37.086	3.33	37.51	-2.28	-1.13	±5	2022/10/13

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
2450	22.6	1.870	40.961	1.80	39.20	3.89	4.49	±5	2022/9/21
2450	22.5	1.805	39.342	1.80	39.20	0.28	0.36	±5	2022/10/4
2450	22.1	1.803	39.411	1.80	39.20	0.17	0.54	±5	2022/10/18
2450	22.2	1.853	38.580	1.80	39.20	2.94	-1.58	±5	2022/10/23
2450	22.7	1.802	38.967	1.80	39.20	0.11	-0.59	±5	2022/10/23
5250	22.2	4.619	36.467	4.71	35.95	-1.93	1.44	±5	2022/10/15
5250	22.5	4.698	36.130	4.71	35.95	-0.25	0.50	±5	2022/10/16
5250	22.5	4.670	37.234	4.71	35.95	-0.85	3.57	±5	2022/10/17
5250	22.1	4.761	37.366	4.71	35.95	1.08	3.94	±5	2022/10/18
5250	22.2	4.759	37.439	4.71	35.95	1.04	4.14	±5	2022/10/19
5250	22.3	4.780	36.706	4.71	35.95	1.49	2.10	±5	2022/10/21
5250	22.2	4.720	37.307	4.71	35.95	0.21	3.77	±5	2022/10/22
5250	22.3	4.593	36.087	4.71	35.95	-2.48	0.38	±5	2022/10/22
5600	22.2	4.978	35.985	5.07	35.50	-1.81	1.37	±5	2022/10/15
5600	22.5	5.026	35.644	5.07	35.50	-0.87	0.41	±5	2022/10/16
5600	22.5	5.046	36.699	5.07	35.50	-0.47	3.38	±5	2022/10/17
5600	22.2	5.097	36.985	5.07	35.50	0.53	4.18	±5	2022/10/19
5600	22.3	5.155	36.196	5.07	35.50	1.68	1.96	±5	2022/10/21
5600	22.2	5.056	36.853	5.07	35.50	-0.28	3.81	±5	2022/10/22
5600	22.3	4.951	35.605	5.07	35.50	-2.35	0.30	±5	2022/10/22
5750	22.2	5.129	35.710	5.22	35.35	-1.74	1.02	±5	2022/10/15
5750	22.5	5.219	35.584	5.22	35.35	-0.02	0.66	±5	2022/10/16
5750	22.5	5.193	36.523	5.22	35.35	-0.52	3.32	±5	2022/10/17
5750	22.1	5.294	36.655	5.22	35.35	1.42	3.69	±5	2022/10/18
5750	22.2	5.220	36.707	5.22	35.35	0.00	3.84	±5	2022/10/19
5850	22.5	5.306	36.365	5.32	35.25	-0.26	3.16	±5	2022/10/17
6500	22.1	6.120	34.600	6.07	34.50	0.82	0.29	±5	2022/9/23
6500	22.5	6.030	34.280	6.07	34.50	-0.66	-0.64	±5	2022/10/28

12.2 System Performance Check Results

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

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR14	2022/9/23	750	50	D750V3-1012	EX3DV4 - SN7625	DAE4 Sn1424	0.395	8.560	7.9	-7.71	0.262	5.560	5.24	-5.76
SAR14	2022/9/26	750	50	D750V3-1012	EX3DV4 - SN7625	DAE4 Sn1424	0.390	8.560	7.8	-8.88	0.259	5.560	5.18	-6.83
SAR14	2022/9/27	750	50	D750V3-1107	EX3DV4 - SN7625	DAE4 Sn1424	0.436	8.540	8.72	2.11	0.286	5.570	5.72	2.69
SAR11	2022/9/29	750	50	D750V3-1012	EX3DV4 - SN3976	DAE4 Sn1707	0.388	8.560	7.76	-9.35	0.252	5.560	5.04	-9.35
SAR14	2022/9/30	750	50	D750V3-1107	EX3DV4 - SN7625	DAE4 Sn1424	0.433	8.540	8.66	1.41	0.285	5.570	5.7	2.33
SAR11	2022/9/30	750	50	D750V3-1012	EX3DV4 - SN3976	DAE4 Sn1707	0.395	8.560	7.9	-7.71	0.261	5.560	5.22	-6.12
SAR14	2022/10/1	750	50	D750V3-1107	EX3DV4 - SN7625	DAE4 Sn1424	0.430	8.540	8.6	0.70	0.282	5.570	5.64	1.26
SAR11	2022/10/1	750	50	D750V3-1012	EX3DV4 - SN3976	DAE4 Sn1707	0.389	8.560	7.78	-9.11	0.257	5.560	5.14	-7.55
SAR14	2022/10/2	750	250	D750V3-1012	EX3DV4 - SN7625	DAE4 Sn1424	2.000	8.560	8	-6.54	1.320	5.560	5.28	-5.04
SAR09	2022/11/14	750	50	D750V3-1012	ES3DV3 - SN3270	DAE3 Sn393	0.398	8.560	7.96	-7.01	0.262	5.560	5.24	-5.76
SAR12	2022/9/25	835	50	D835V2-4d167	EX3DV4 - SN3931	DAE4 Sn853	0.488	9.550	9.76	2.20	0.321	6.210	6.42	3.38
SAR14	2022/9/25	835	50	D835V2-4d167	EX3DV4 - SN7625	DAE4 Sn1424	0.460	9.550	9.2	-3.66	0.302	6.210	6.04	-2.74
SAR11	2022/9/29	835	50	D835V2-499	EX3DV4 - SN3976	DAE4 Sn1707	0.441	9.680	8.82	-8.88	0.286	6.280	5.72	-8.92
SAR11	2022/10/1	835	50	D835V2-4d167	EX3DV4 - SN3976	DAE4 Sn1707	0.446	9.550	8.92	-6.60	0.287	6.210	5.74	-7.57
SAR14	2022/10/3	835	50	D835V2-4d167	EX3DV4 - SN7625	DAE4 Sn1424	0.490	9.550	9.8	2.62	0.317	6.210	6.34	2.09
SAR11	2022/10/6	835	50	D835V2-4d167	EX3DV4 - SN3976	DAE4 Sn1707	0.443	9.550	8.86	-7.23	0.285	6.210	5.7	-8.21
SAR16	2022/10/7	835	50	D835V2-4d167	EX3DV4 - SN7350	DAE4 Sn699	0.483	9.550	9.66	1.15	0.316	6.210	6.32	1.77
SAR17	2022/10/14	835	50	D835V2-4d167	ES3DV3 - SN3184	DAE4 Sn699	0.494	9.550	9.88	3.46	0.327	6.210	6.54	5.31
SAR12	2022/9/25	1750	250	D1750V2-1112	EX3DV4 - SN3931	DAE4 Sn853	9.010	36.900	36.04	-2.33	4.740	19.400	18.96	-2.27
SAR11	2022/10/2	1750	50	D1750V2-1112	EX3DV4 - SN3976	DAE4 Sn1707	1.790	36.900	35.8	-2.98	0.972	19.400	19.44	0.21
SAR06	2022/10/3	1750	50	D1750V2-1068	ES3DV3 - SN3115	DAE4 Sn699	1.970	36.600	39.4	7.65	1.050	19.300	21	8.81
SAR11	2022/10/4	1750	50	D1750V2-1112	EX3DV4 - SN3976	DAE4 Sn1707	1.770	36.900	35.4	-4.07	0.963	19.400	19.26	-0.72
SAR16	2022/10/11	1750	250	D1750V2-1112	EX3DV4 - SN7350	DAE4 Sn699	8.750	36.900	35	-5.15	4.610	19.400	18.44	-4.95
SAR15	2022/10/16	1750	50	D1750V2-1112	EX3DV4 - SN7590	DAE4 Sn699	1.720	36.900	34.4	-6.78	0.901	19.400	18.02	-7.11
SAR15	2022/10/17	1750	50	D1750V2-1112	EX3DV4 - SN7590	DAE4 Sn699	1.740	36.900	34.8	-5.69	0.911	19.400	18.22	-6.08
SAR09	2022/10/17	1750	250	D1750V2-1112	EX3DV4 - SN7700	DAE4 Sn1399	8.620	36.900	34.48	-6.56	4.620	19.400	18.48	-4.74
SAR05	2022/10/17	1750	50	D1750V2-1112	ES3DV3 - SN3124	DAE4 Sn1696	2.010	36.900	40.2	8.94	1.010	19.400	20.2	4.12
SAR12	2022/9/25	1900	50	D1900V2-5d041	EX3DV4 - SN3931	DAE4 Sn853	1.930	40.600	38.6	-4.93	1.050	21.100	21	-0.47
SAR12	2022/9/26	1900	250	D1900V2-5d185	EX3DV4 - SN3931	DAE4 Sn853	9.990	39.000	39.96	2.46	5.150	20.400	20.6	0.98
SAR08	2022/9/28	1900	250	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn656	9.090	39.000	36.36	-6.77	4.690	20.400	18.76	-8.04
SAR11	2022/10/3	1900	50	D1900V2-5d185	EX3DV4 - SN3976	DAE4 Sn1707	1.850	39.000	37	-5.13	0.984	20.400	19.68	-3.53
SAR11	2022/10/5	1900	50	D1900V2-5d093	EX3DV4 - SN3976	DAE4 Sn1707	1.970	39.900	39.4	-1.25	1.020	20.700	20.4	-1.45
SAR16	2022/10/6	1900	250	D1900V2-5d185	EX3DV4 - SN7350	DAE4 Sn699	10.100	39.000	40.4	3.59	5.150	20.400	20.6	0.98
SAR16	2022/10/8	1900	250	D1900V2-5d185	EX3DV4 - SN7350	DAE4 Sn699	10.200	39.000	40.8	4.62	5.160	20.400	20.64	1.18
SAR16	2022/10/11	1900	250	D1900V2-5d185	EX3DV4 - SN7350	DAE4 Sn699	10.100	39.000	40.4	3.59	5.130	20.400	20.52	0.59
SAR15	2022/10/17	1900	250	D1900V2-5d093	EX3DV4 - SN7590	DAE4 Sn699	9.940	39.900	39.76	-0.35	5.200	20.700	20.8	0.48
SAR09	2022/10/17	1900	50	D1900V2-5d093	EX3DV4 - SN7700	DAE4 Sn1399	1.920	39.900	38.4	-3.76	0.985	20.700	19.7	-4.83
SAR05	2022/10/17	1900	50	D1900V2-5d093	ES3DV3 - SN3124	DAE4 Sn1696	1.850	39.900	37	-7.27	0.939	20.700	18.78	-9.28
SAR09	2022/11/14	1900	250	D1900V2-5d093	ES3DV3 - SN3270	DAE3 Sn393	10.100	39.900	40.4	1.25	5.360	20.700	21.44	3.57

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR11	2022/10/7	2300	50	D2300V2-1006	EX3DV4 - SN3976	DAE4 Sn1707	2.340	48.300	46.8	-3.11	1.150	23.500	23	-2.13
SAR11	2022/10/8	2300	50	D2300V2-1006	EX3DV4 - SN3976	DAE4 Sn1707	2.320	48.300	46.4	-3.93	1.140	23.500	22.8	-2.98
SAR16	2022/10/10	2300	250	D2300V2-1006	EX3DV4 - SN7350	DAE4 Sn699	11.700	48.300	46.8	-3.11	5.530	23.500	22.12	-5.87
SAR16	2022/10/12	2300	50	D2300V2-1088	EX3DV4 - SN7350	DAE4 Sn699	2.690	49.700	53.8	8.25	1.300	24.100	26	7.88
SAR14	2022/9/28	2600	250	D2600V2-1008	EX3DV4 - SN7625	DAE4 Sn1424	13.600	58.000	54.4	-6.21	6.280	25.800	25.12	-2.64
SAR14	2022/9/29	2600	250	D2600V2-1008	EX3DV4 - SN7625	DAE4 Sn1424	13.400	58.000	53.6	-7.59	6.220	25.800	24.88	-3.57
SAR06	2022/10/4	2600	250	D2600V2-1078	ES3DV3 - SN3115	DAE4 Sn699	13.400	55.400	53.6	-3.25	6.050	24.900	24.2	-2.81
SAR16	2022/10/4	2600	250	D2600V2-1008	EX3DV4 - SN7350	DAE4 Sn699	14.200	58.000	56.8	-2.07	6.220	25.800	24.88	-3.57
SAR16	2022/10/5	2600	50	D2600V2-1008	EX3DV4 - SN7350	DAE4 Sn699	3.120	58.000	62.4	7.59	1.410	25.800	28.2	9.30
SAR11	2022/10/6	2600	50	D2600V2-1089	EX3DV4 - SN3976	DAE4 Sn1707	2.850	55.400	57	2.89	1.330	24.600	26.6	8.13
SAR16	2022/10/12	2600	250	D2600V2-1078	EX3DV4 - SN7350	DAE4 Sn699	12.800	55.400	51.2	-7.58	5.720	24.900	22.88	-8.11
SAR15	2022/10/14	2600	250	D2600V2-1089	EX3DV4 - SN7590	DAE4 Sn699	14.400	55.400	57.6	3.97	6.570	24.600	26.28	6.83
SAR17	2022/10/14	2600	250	D2600V2-1078	ES3DV3 - SN3184	DAE4 Sn699	13.000	55.400	52	-6.14	6.230	24.900	24.92	0.08
SAR09	2022/10/23	2600	50	D2600V2-1008	EX3DV4 - SN7700	DAE4 Sn1399	2.670	58.000	53.4	-7.93	1.210	25.800	24.2	-6.20
SAR11	2022/10/10	3500	50	D3500V2-1036	EX3DV4 - SN3976	DAE4 Sn1707	3.270	67.400	65.4	-2.97	1.250	25.100	25	-0.40
SAR12	2022/10/11	3500	100	D3500V2-1036	EX3DV4 - SN3931	DAE4 Sn1707	6.960	67.400	69.6	3.26	2.590	25.100	25.9	3.19
SAR12	2022/10/12	3500	100	D3500V2-1036	EX3DV4 - SN3931	DAE4 Sn1707	6.900	67.400	69	2.37	2.570	25.100	25.7	2.39
SAR12	2022/10/13	3500	100	D3500V2-1036	EX3DV4 - SN3931	DAE4 Sn1707	6.820	67.400	68.2	1.19	2.520	25.100	25.2	0.40
SAR11	2022/10/13	3500	50	D3500V2-1036	EX3DV4 - SN3976	DAE4 Sn1707	3.210	67.400	64.2	-4.75	1.230	25.100	24.6	-1.99
SAR11	2022/10/14	3500	50	D3500V2-1036	EX3DV4 - SN3976	DAE4 Sn1707	3.140	67.400	62.8	-6.82	1.200	25.100	24	-4.38
SAR11	2022/10/15	3500	50	D3500V2-1036	EX3DV4 - SN3976	DAE4 Sn1707	3.370	67.400	67.4	0.00	1.280	25.100	25.6	1.99
SAR15	2022/11/5	3500	50	D3500V2-1036	EX3DV4 - SN7590	DAE4 Sn853	3.380	67.400	67.6	0.30	1.280	25.100	25.6	1.99
SAR12	2022/10/11	3700	50	D3700V2-1006	EX3DV4 - SN3931	DAE4 Sn1707	3.330	65.600	66.6	1.52	1.220	23.700	24.4	2.95
SAR11	2022/10/15	3700	50	D3700V2-1006	EX3DV4 - SN3976	DAE4 Sn1707	3.010	65.600	60.2	-8.23	1.090	23.700	21.8	-8.02
SAR15	2022/11/5	3700	50	D3700V2-1006	EX3DV4 - SN7590	DAE4 Sn853	3.130	65.600	62.6	-4.57	1.140	23.700	22.8	-3.80
SAR11	2022/10/10	3900	50	D3900V2-1017	EX3DV4 - SN3976	DAE4 Sn1707	3.180	68.700	63.6	-7.42	1.130	23.900	22.6	-5.44
SAR12	2022/10/12	3900	100	D3900V2-1017	EX3DV4 - SN3931	DAE4 Sn1707	6.850	68.700	68.5	-0.29	2.480	23.900	24.8	3.77
SAR11	2022/10/12	3900	50	D3900V2-1017	EX3DV4 - SN3976	DAE4 Sn1707	3.130	68.700	62.6	-8.88	1.110	23.900	22.2	-7.11
SAR12	2022/10/13	3900	100	D3900V2-1017	EX3DV4 - SN3931	DAE4 Sn1707	6.830	68.700	68.3	-0.58	2.470	23.900	24.7	3.35
SAR11	2022/10/13	3900	50	D3900V2-1017	EX3DV4 - SN3976	DAE4 Sn1707	3.120	68.700	62.4	-9.17	1.110	23.900	22.2	-7.11

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR12	2022/9/21	2450	50	D2450V2-929	EX3DV4 - SN3931	DAE4 Sn853	2.660	53.100	53.2	0.19	1.250	24.700	25	1.21
SAR14	2022/10/4	2450	50	D2450V2-929	EX3DV4 - SN3728	DAE4 Sn316	2.470	53.100	49.4	-6.97	1.160	24.700	23.2	-6.07
SAR13	2022/10/18	2450	50	D2450V2-929	EX3DV4 - SN7625	DAE4 Sn1424	2.450	53.100	49	-7.72	1.150	24.700	23	-6.88
SAR11	2022/10/23	2450	250	D2450V2-929	ES3DV3 - SN3184	DAE4 Sn699	12.800	53.100	51.2	-3.58	6.310	24.700	25.24	2.19
SAR09	2022/10/23	2450	50	D2450V2-929	EX3DV4 - SN7700	DAE4 Sn1399	2.460	53.100	49.2	-7.34	1.150	24.700	23	-6.88
SAR13	2022/10/15	5250	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	7.970	80.000	79.7	-0.37	2.270	22.900	22.7	-0.87
SAR09	2022/10/16	5250	100	D5GHzV2-1128	EX3DV4 - SN7700	DAE4 Sn1399	8.100	80.000	81	1.25	2.320	22.900	23.2	1.31
SAR13	2022/10/17	5250	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	8.050	80.000	80.5	0.63	2.290	22.900	22.9	0.00
SAR14	2022/10/18	5250	50	D5GHzV2-1128	EX3DV4 - SN3728	DAE4 Sn316	3.650	80.000	73	-8.75	1.040	22.900	20.8	-9.17
SAR13	2022/10/19	5250	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	8.210	80.000	82.1	2.63	2.340	22.900	23.4	2.18
SAR14	2022/10/21	5250	100	D5GHzV2-1128	EX3DV4 - SN3728	DAE4 Sn316	7.940	80.000	79.4	-0.75	2.260	22.900	22.6	-1.31
SAR14	2022/10/22	5250	100	D5GHzV2-1128	EX3DV4 - SN3728	DAE4 Sn316	7.620	80.000	76.2	-4.75	2.150	22.900	21.5	-6.11
SAR15	2022/10/22	5250	50	D5GHzV2-1128	EX3DV4 - SN3976	DAE4 Sn1707	3.750	80.000	75	-6.25	1.070	22.900	21.4	-6.55
SAR13	2022/10/15	5600	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	8.040	82.400	80.4	-2.43	2.270	23.600	22.7	-3.81
SAR09	2022/10/16	5600	100	D5GHzV2-1128	EX3DV4 - SN7700	DAE4 Sn1399	8.260	82.400	82.6	0.24	2.360	23.600	23.6	0.00
SAR13	2022/10/17	5600	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	8.150	82.400	81.5	-1.09	2.310	23.600	23.1	-2.12
SAR13	2022/10/19	5600	50	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	4.040	82.400	80.8	-1.94	1.150	23.600	23	-2.54
SAR14	2022/10/21	5600	100	D5GHzV2-1128	EX3DV4 - SN3728	DAE4 Sn316	8.090	82.400	80.9	-1.82	2.350	23.600	23.5	-0.42
SAR14	2022/10/22	5600	100	D5GHzV2-1128	EX3DV4 - SN3728	DAE4 Sn316	7.900	82.400	79	-4.13	2.230	23.600	22.3	-5.51
SAR15	2022/10/22	5600	50	D5GHzV2-1128	EX3DV4 - SN3976	DAE4 Sn1707	3.750	82.400	75	-8.98	1.070	23.600	21.4	-9.32
SAR13	2022/10/15	5750	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	7.890	79.100	78.9	-0.25	2.240	22.600	22.4	-0.88
SAR09	2022/10/16	5750	100	D5GHzV2-1128	EX3DV4 - SN7700	DAE4 Sn1399	8.080	79.100	80.8	2.15	2.310	22.600	23.1	2.21
SAR13	2022/10/17	5750	100	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	7.990	79.100	79.9	1.01	2.270	22.600	22.7	0.44
SAR14	2022/10/18	5750	100	D5GHzV2-1128	EX3DV4 - SN3728	DAE4 Sn316	7.550	79.100	75.5	-4.55	2.150	22.600	21.5	-4.87
SAR13	2022/10/19	5750	50	D5GHzV2-1128	EX3DV4 - SN7625	DAE4 Sn1424	3.820	79.100	76.4	-3.41	1.100	22.600	22	-2.65
SAR13	2022/10/17	5850	100	D5GHzV2-1171	EX3DV4 - SN7625	DAE4 Sn1424	8.360	82.300	83.6	1.58	2.340	23.100	23.4	1.30
SAR14	2022/9/23	6500	100	D6.5GHzV2-1003	EX3DV4 - SN3728	DAE4 Sn316	30.500	292.000	305	4.45	5.680	53.800	56.8	5.58
SAR13	2022/10/28	6500	100	D6.5GHzV2-1003	EX3DV4 - SN7625	DAE4 Sn1424	30.900	292.000	309	5.82	5.700	53.800	57	5.95

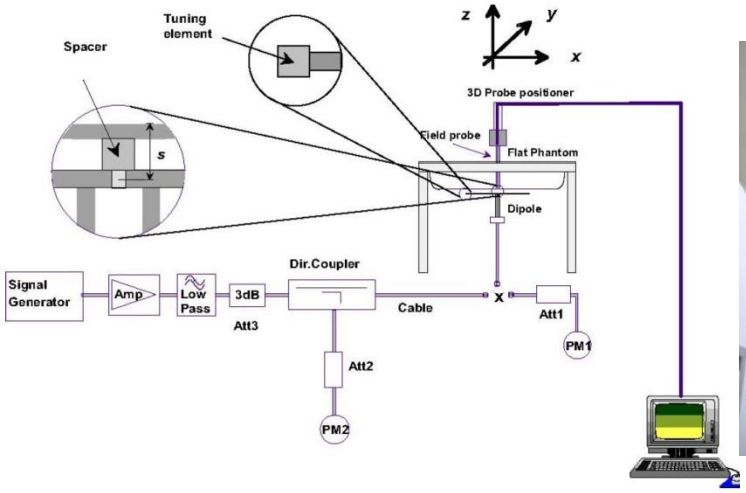


Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

12.3 PD System Performance Check Results

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

Test Location	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm^2 (W/m^2)	Targeted 4 cm^2 (W/m^2)	Deviation (dB)	Date
SAR06-HY	10G	10GHz_1020	EUmmWV3 - SN9424	Sn316	10	55.6	51.7	0.32	2022/9/25

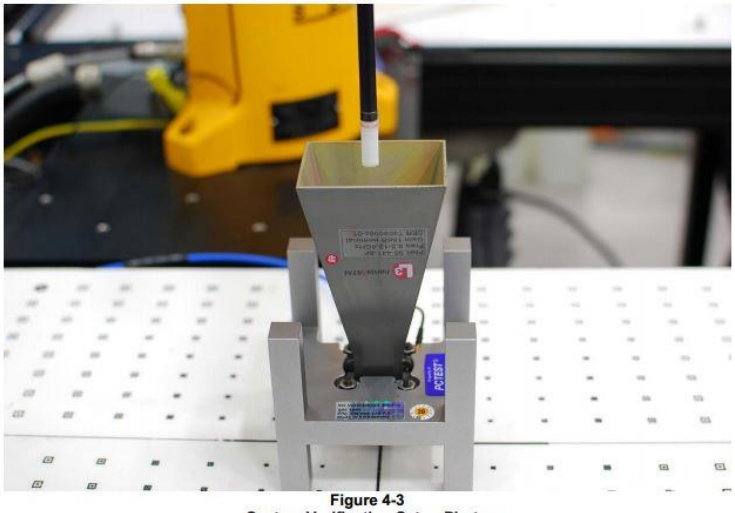


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

13. WiFi/Bluetooth Output Power (Unit: dBm)

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

Operation Mode	Duty cycle %
802.11b 1Mbps	98.24
802.11a 6Mbps	100
802.11an-HT40	100
802.11ac-VHT80	100
802.11ax-HE80	100

WLAN 2.4GHz Power Index 1

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	13.40	13.50	12.70	13.00	16.07	16.30	98.24
		6	2437	13.40	13.50	12.90	13.00	16.17	16.30	
		11	2462	13.40	13.50	12.90	13.00	16.17	16.30	
		12	2467	13.10	13.50	12.80	13.00	15.96	16.30	
		13	2472	12.00	12.50	12.40	12.50	15.21	15.50	
	802.11g 6Mbps	1	2412	Not Required	13.50	Not Required	13.00	Not Required	16.30	Not Required
		6	2437		13.50		13.00		16.30	
		11	2462		13.50		13.00		16.30	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11n-HT20 MCS0	1	2412		13.50		13.00		16.30	
		6	2437		13.50		13.00		16.30	
		11	2462		13.50		13.00		16.30	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ac-VHT20 MCS0	1	2412		13.50		13.00		16.30	
		6	2437		13.50		13.00		16.30	
		11	2462		13.50		13.00		16.30	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ax-HE20 MCS0	1	2412		13.50		13.00		16.30	
		6	2437		13.50		13.00		16.30	
		11	2462		13.50		13.00		16.30	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	

WLAN 2.4GHz Power Index 2

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.40	16.50	15.20	15.50	18.85	19.00	98.24
		6	2437	16.40	16.50	15.10	15.50	18.81	19.00	
		11	2462	16.30	16.50	15.10	15.50	18.75	19.00	
		12	2467	16.10	16.50	15.20	15.50	18.68	19.00	
		13	2472	12.00	12.50	12.40	12.50	15.21	15.50	
	802.11g 6Mbps	1	2412	Not Required	16.50	Not Required	15.50	Not Required	19.00	Not Required
		6	2437		16.50		15.50		19.00	
		11	2462		16.50		15.50		19.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11n-HT20 MCS0	1	2412		16.00		15.50		18.80	
		6	2437		16.50		15.50		19.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ac-VHT20 MCS0	1	2412		16.00		15.50		18.80	
		6	2437		16.50		15.50		19.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ax-HE20 MCS0	1	2412		16.00		15.50		18.80	
		6	2437		16.50		15.50		19.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	

WLAN 2.4GHz Power Index 3

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.40	19.50	18.40	18.50	21.85	22.00	98.24
		6	2437	19.30	19.50	18.20	18.50	21.80	22.00	
		11	2462	19.40	19.50	18.10	18.50	21.70	22.00	
		12	2467	16.00	16.50	16.10	16.50	19.06	19.50	
		13	2472	12.00	12.50	12.40	12.50	15.21	15.50	
	802.11g 6Mbps	1	2412	Not Required	18.50	Not Required	18.50	Not Required	21.50	Not Required
		6	2437		19.50		18.50		22.00	
		11	2462		16.50		16.50		19.50	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11n-HT20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		18.50		21.80	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ac-VHT20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		18.50		21.80	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ax-HE20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		18.50		21.80	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	

WLAN 2.4GHz Power Index 4/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.90	20.00	19.50	20.00	22.71	23.00	98.24
		6	2437	19.80	20.00	19.80	20.00	22.81	23.00	
		11	2462	19.90	20.00	19.80	20.00	22.86	23.00	
		12	2467	16.00	16.50	16.10	16.50	19.06	19.50	
		13	2472	12.00	12.50	12.40	12.50	15.21	15.50	
	802.11g 6Mbps	1	2412	Not Required	18.50	Not Required	18.50	Not Required	21.50	Not Required
		6	2437		20.00		20.00		23.00	
		11	2462		16.50		16.50		19.50	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11n-HT20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		19.00		22.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ac-VHT20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		19.00		22.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ax-HE20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		19.00		22.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	

WLAN 2.4GHz Power Index 5

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	19.90	20.00	19.50	20.00	22.71	23.00	98.24
		6	2437	19.80	20.00	19.80	20.00	22.81	23.00	
		11	2462	19.90	20.00	19.80	20.00	22.86	23.00	
		12	2467	16.00	16.50	16.10	16.50	19.06	19.50	
		13	2472	12.00	12.50	12.40	12.50	15.21	15.50	
	802.11g 6Mbps	1	2412	Not Required	18.50	Not Required	18.50	Not Required	21.50	Not Required
		6	2437		20.00		20.00		23.00	
		11	2462		16.50		16.50		19.50	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11n-HT20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		19.00		22.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ac-VHT20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		19.00		22.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	
	802.11ax-HE20 MCS0	1	2412		16.00		16.00		19.00	
		6	2437		19.00		19.00		22.00	
		11	2462		14.00		14.00		17.00	
		12	2467		13.00		13.00		16.00	
		13	2472		1.50		1.50		4.50	

WLAN 5.2GHz Power Index 1

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required	10.00	Not Required	8.00	Not Required	12.10	Not Required
		40	5200		10.00		8.00		12.10	
		44	5220		10.00		8.00		12.10	
		48	5240		10.00		8.00		12.10	
	802.11n-HT20 MCS0	36	5180		10.00		8.00		12.10	
		40	5200		10.00		8.00		12.10	
		44	5220		10.00		8.00		12.10	
		48	5240		10.00		8.00		12.10	
	802.11n-HT40 MCS0	38	5190		10.00		8.00		12.10	
		46	5230		10.00		8.00		12.10	
	802.11ac-VHT20 MCS0	36	5180		10.00		8.00		12.10	
		40	5200		10.00		8.00		12.10	
		44	5220		10.00		8.00		12.10	
		48	5240		10.00		8.00		12.10	
	802.11ac-VHT40 MCS0	38	5190		10.00		8.00		12.10	
		46	5230		10.00		8.00		12.10	
	802.11ac-VHT80 MCS0	42	5210		10.00		8.00		12.10	
	802.11ax-HE20 MCS0	36	5180		10.00		8.00		12.10	
		40	5200		10.00		8.00		12.10	
		44	5220		10.00		8.00		12.10	
		48	5240		10.00		8.00		12.10	
	802.11ax-HE40 MCS0	38	5190		10.00		8.00		12.10	
		46	5230		10.00		8.00		12.10	
	802.11ax-HE80 MCS0	42	5210		10.00		8.00		12.10	

WLAN 5.2GHz Power Index 2

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required	18.00	Not Required	16.50	Not Required	20.30	Not Required
		40	5200		18.00		16.50		20.30	
		44	5220		18.00		16.50		20.30	
		48	5240		18.00		16.50		20.30	
	802.11n-HT20 MCS0	36	5180		18.00		16.50		20.30	
		40	5200		18.00		16.50		20.30	
		44	5220		18.00		16.50		20.30	
		48	5240		18.00		16.50		20.30	
	802.11n-HT40 MCS0	38	5190		17.00		16.50		19.80	
		46	5230		18.00		16.50		20.30	
	802.11ac-VHT20 MCS0	36	5180		18.00		16.50		20.30	
		40	5200		18.00		16.50		20.30	
		44	5220		18.00		16.50		20.30	
		48	5240		18.00		16.50		20.30	
	802.11ac-VHT40 MCS0	38	5190		17.00		16.50		19.80	
		46	5230		18.00		16.50		20.30	
	802.11ac-VHT80 MCS0	42	5210		17.00		16.50		19.80	
	802.11ax-HE20 MCS0	36	5180		18.00		16.50		20.30	
		40	5200		18.00		16.50		20.30	
		44	5220		18.00		16.50		20.30	
		48	5240		18.00		16.50		20.30	
	802.11ax-HE40 MCS0	38	5190		17.00		16.50		19.80	
		46	5230		18.00		16.50		20.30	
	802.11ax-HE80 MCS0	42	5210		17.00		16.50		19.80	

WLAN 5.2GHz Power Index 3

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.40	19.00	18.10	19.00	21.26	22.00	100.00
		40	5200	18.30	19.00	18.00	19.00	21.16	22.00	
		44	5220	18.40	19.00	18.10	19.00	21.26	22.00	
		48	5240	18.40	19.00	18.00	19.00	21.21	22.00	
	802.11n-HT20 MCS0	36	5180	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11n-HT40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	42	5210		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	42	5210		17.00		17.00		20.00	

WLAN 5.2GHz Power Index 4/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11n-HT20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11n-HT40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	42	5210		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	42	5210		17.00		17.00		20.00	

WLAN 5.2GHz Power Index 5

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.40	19.00	18.10	19.00	21.26	22.00	100.00
		40	5200	18.30	19.00	18.00	19.00	21.16	22.00	
		44	5220	18.40	19.00	18.10	19.00	21.26	22.00	
		48	5240	18.40	19.00	18.00	19.00	21.21	22.00	
	802.11n-HT20 MCS0	36	5180	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11n-HT40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	42	5210		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	36	5180		19.00		19.00		22.00	
		40	5200		19.00		19.00		22.00	
		44	5220		19.00		19.00		22.00	
		48	5240		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	38	5190		17.00		17.00		20.00	
		46	5230		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	42	5210		17.00		17.00		20.00	

WLAN 5.3GHz Power Index 1

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	10.00	Not Required	8.00	Not Required	12.10	Not Required
		56	5280		10.00		8.00		12.10	
		60	5300		10.00		8.00		12.10	
		64	5320		10.00		8.00		12.10	
	802.11n-HT20 MCS0	52	5260		10.00		8.00		12.10	
		56	5280		10.00		8.00		12.10	
		60	5300		10.00		8.00		12.10	
		64	5320		10.00		8.00		12.10	
	802.11n-HT40 MCS0	54	5270		10.00		8.00		12.10	
		62	5310		10.00		8.00		12.10	
	802.11ac-VHT20 MCS0	52	5260		10.00		8.00		12.10	
		56	5280		10.00		8.00		12.10	
		60	5300		10.00		8.00		12.10	
		64	5320		10.00		8.00		12.10	
	802.11ac-VHT40 MCS0	54	5270		10.00		8.00		12.10	
		62	5310		10.00		8.00		12.10	
	802.11ac-VHT80 MCS0	58	5290	9.70	10.00	7.70	8.00	11.82	12.10	100.00
	802.11ax-HE20 MCS0	52	5260	Not Required	10.00	Not Required	8.00	Not Required	12.10	Not Required
		56	5280		10.00		8.00		12.10	
		60	5300		10.00		8.00		12.10	
		64	5320		10.00		8.00		12.10	
	802.11ax-HE40 MCS0	54	5270		10.00		8.00		12.10	
		62	5310		10.00		8.00		12.10	
	802.11ax-HE80 MCS0	58	5290		10.00		8.00		12.10	

WLAN 5.3GHz Power Index 2

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	18.00	Not Required	16.50	Not Required	20.30	Not Required
		56	5280		18.00		16.50		20.30	
		60	5300		18.00		16.50		20.30	
		64	5320		18.00		16.50		20.30	
	802.11n-HT20 MCS0	52	5260		18.00		16.50		20.30	
		56	5280		18.00		16.50		20.30	
		60	5300		18.00		16.50		20.30	
		64	5320		18.00		16.50		20.30	
	802.11n-HT40 MCS0	54	5270	17.50	18.00	16.50	16.50	20.04	20.30	100.00
		62	5310	17.60	18.00	16.00	16.50	19.88	20.30	
	802.11ac-VHT20 MCS0	52	5260	Not Required	18.00	Not Required	16.50	Not Required	20.30	Not Required
		56	5280		18.00		16.50		20.30	
		60	5300		18.00		16.50		20.30	
		64	5320		18.00		16.50		20.30	
	802.11ac-VHT40 MCS0	54	5270		18.00		16.50		20.30	
		62	5310		18.00		16.50		20.30	
	802.11ac-VHT80 MCS0	58	5290		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	52	5260		18.00		16.50		20.30	
		56	5280		18.00		16.50		20.30	
		60	5300		18.00		16.50		20.30	
		64	5320		18.00		16.50		20.30	
	802.11ax-HE40 MCS0	54	5270		18.00		16.50		20.30	
		62	5310		18.00		16.50		20.30	
	802.11ax-HE80 MCS0	58	5290		16.00		16.00		19.00	

WLAN 5.3GHz Power Index 3

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	19.00	Not Required	18.00	Not Required	21.50	Not Required
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11n-HT20 MCS0	52	5260		19.00		18.00		21.50	
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11n-HT40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	52	5260		19.00		18.00		21.50	
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11ac-VHT40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	58	5290		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	52	5260		19.00		18.00		21.50	
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11ax-HE40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	58	5290		16.00		16.00		19.00	

WLAN 5.3GHz Power Index 4/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	18.50	19.00	18.10	19.00	21.31	22.00	100.00
		56	5280	18.50	19.00	18.00	19.00	21.26	22.00	
		60	5300	18.50	19.00	18.10	19.00	21.31	22.00	
		64	5320	18.50	19.00	18.10	19.00	21.31	22.00	
	802.11n-HT20 MCS0	52	5260	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		56	5280		19.00		19.00		22.00	
		60	5300		19.00		19.00		22.00	
		64	5320		19.00		19.00		22.00	
	802.11n-HT40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	52	5260		19.00		19.00		22.00	
		56	5280		19.00		19.00		22.00	
		60	5300		19.00		19.00		22.00	
		64	5320		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	58	5290		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	52	5260		19.00		19.00		22.00	
		56	5280		19.00		19.00		22.00	
		60	5300		19.00		19.00		22.00	
		64	5320		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	58	5290		16.00		16.00		19.00	

WLAN 5.3GHz Power Index 5

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not Required	19.00	Not Required	18.00	Not Required	21.50	Not Required
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11n-HT20 MCS0	52	5260		19.00		18.00		21.50	
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11n-HT40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	52	5260		19.00		18.00		21.50	
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11ac-VHT40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	58	5290		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	52	5260		19.00		18.00		21.50	
		56	5280		19.00		18.00		21.50	
		60	5300		19.00		18.00		21.50	
		64	5320		19.00		18.00		21.50	
	802.11ax-HE40 MCS0	54	5270		18.00		18.00		21.00	
		62	5310		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	58	5290		16.00		16.00		19.00	

WLAN 5.5GHz Power Index 1

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not Required	6.50	Not Required	9.00	Not Required	10.90	Not Required
		116	5580		6.50		9.00		10.90	
		124	5620		6.50		9.00		10.90	
		132	5660		6.50		9.00		10.90	
		144	5720		6.50		9.00		10.90	
	802.11n-HT20 MCS0	100	5500		6.50		9.00		10.90	
		116	5580		6.50		9.00		10.90	
		124	5620		6.50		9.00		10.90	
		132	5660		6.50		9.00		10.90	
		144	5720		6.50		9.00		10.90	
	802.11n-HT40 MCS0	102	5510		6.50		9.00		10.90	
		110	5550		6.50		9.00		10.90	
		126	5630		6.50		9.00		10.90	
		134	5670		6.50		9.00		10.90	
		142	5710		6.50		9.00		10.90	
	802.11ac-VHT20 MCS0	100	5500		6.50		9.00		10.90	
		116	5580		6.50		9.00		10.90	
		124	5620		6.50		9.00		10.90	
		132	5660		6.50		9.00		10.90	
		144	5720		6.50		9.00		10.90	
	802.11ac-VHT40 MCS0	102	5510		6.50		9.00		10.90	
		110	5550		6.50		9.00		10.90	
		126	5630		6.50		9.00		10.90	
		134	5670		6.50		9.00		10.90	
		142	5710		6.50		9.00		10.90	
	802.11ac-VHT80 MCS0	106	5530	6.10	6.50	8.90	9.00	10.73	10.90	100.00
		122	5610	6.30	6.50	8.90	9.00	10.80	10.90	
		138	5690	6.10	6.50	8.50	9.00	10.47	10.90	
	802.11ax-HE20 MCS0	100	5500	Not Required	6.50	Not Required	9.00	Not Required	10.90	Not Required
		116	5580		6.50		9.00		10.90	
		124	5620		6.50		9.00		10.90	
		132	5660		6.50		9.00		10.90	
		144	5720		6.50		9.00		10.90	
	802.11ax-HE40 MCS0	102	5510		6.50		9.00		10.90	
		110	5550		6.50		9.00		10.90	
		126	5630		6.50		9.00		10.90	
		134	5670		6.50		9.00		10.90	
		142	5710		6.50		9.00		10.90	
	802.11ax-HE80 MCS0	106	5530		6.50		9.00		10.90	
		122	5610		6.50		9.00		10.90	
		138	5690		6.50		9.00		10.90	

WLAN 5.5GHz Power Index 2

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not Required	15.50	Not Required	17.50	Not Required	19.60	Not Required
		116	5580		15.50		17.50		19.60	
		124	5620		15.50		17.50		19.60	
		132	5660		15.50		17.50		19.60	
		144	5720		15.50		17.50		19.60	
	802.11n-HT20 MCS0	100	5500		15.50		17.50		19.60	
		116	5580		15.50		17.50		19.60	
		124	5620		15.50		17.50		19.60	
		132	5660		15.50		17.50		19.60	
		144	5720		15.50		17.50		19.60	
	802.11n-HT40 MCS0	102	5510	14.40	15.50	16.80	17.50	18.77	19.60	100.00
		110	5550	14.30	15.50	16.80	17.50	18.74	19.60	
		126	5630	14.20	15.50	16.80	17.50	18.70	19.60	
		134	5670	14.30	15.50	16.60	17.50	18.61	19.60	
		142	5710	14.40	15.50	16.60	17.50	18.65	19.60	
	802.11ac-VHT20 MCS0	100	5500	Not Required	15.50	Not Required	17.50	Not Required	19.60	Not Required
		116	5580		15.50		17.50		19.60	
		124	5620		15.50		17.50		19.60	
		132	5660		15.50		17.50		19.60	
		144	5720		15.50		17.50		19.60	
	802.11ac-VHT40 MCS0	102	5510		15.50		17.50		19.60	
		110	5550		15.50		17.50		19.60	
		126	5630		15.50		17.50		19.60	
		134	5670		15.50		17.50		19.60	
		142	5710		15.50		17.50		19.60	
	802.11ac-VHT80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		15.50		17.00		19.30	
		138	5690		15.50		17.00		19.30	
	802.11ax-HE20 MCS0	100	5500		15.50		17.50		19.60	
		116	5580		15.50		17.50		19.60	
		124	5620		15.50		17.50		19.60	
		132	5660		15.50		17.50		19.60	
		144	5720		15.50		17.50		19.60	
	802.11ax-HE40 MCS0	102	5510		15.50		17.50		19.60	
		110	5550		15.50		17.50		19.60	
		126	5630		15.50		17.50		19.60	
		134	5670		15.50		17.50		19.60	
		142	5710		15.50		17.50		19.60	
	802.11ax-HE80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		15.50		17.00		19.30	
		138	5690		15.50		17.00		19.30	

WLAN 5.5GHz Power Index 3

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11n-HT20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11n-HT40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		17.00		17.00		20.00	
		138	5690		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		17.00		17.00		20.00	
		138	5690		17.00		17.00		20.00	

WLAN 5.5GHz Power Index 4/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.00	19.00	18.10	19.00	21.06	22.00	100.00
		116	5580	17.80	19.00	18.10	19.00	20.96	22.00	
		124	5620	17.90	19.00	18.00	19.00	20.96	22.00	
		132	5660	18.00	19.00	17.80	19.00	20.91	22.00	
		144	5720	18.10	19.00	17.90	19.00	21.01	22.00	
	802.11n-HT20 MCS0	100	5500	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11n-HT40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		17.00		17.00		20.00	
		138	5690		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		17.00		17.00		20.00	
		138	5690		17.00		17.00		20.00	

WLAN 5.5GHz Power Index 5

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	18.00	19.00	18.10	19.00	21.06	22.00	100.00
		116	5580	17.80	19.00	18.10	19.00	20.96	22.00	
		124	5620	17.90	19.00	18.00	19.00	20.96	22.00	
		132	5660	18.00	19.00	17.80	19.00	20.91	22.00	
		144	5720	18.10	19.00	17.90	19.00	21.01	22.00	
	802.11n-HT20 MCS0	100	5500	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11n-HT40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		17.00		17.00		20.00	
		138	5690		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	100	5500		19.00		19.00		22.00	
		116	5580		19.00		19.00		22.00	
		124	5620		19.00		19.00		22.00	
		132	5660		19.00		19.00		22.00	
		144	5720		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	102	5510		18.00		18.00		21.00	
		110	5550		18.00		18.00		21.00	
		126	5630		18.00		18.00		21.00	
		134	5670		18.00		18.00		21.00	
		142	5710		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	106	5530		12.00		12.00		15.00	
		122	5610		17.00		17.00		20.00	
		138	5690		17.00		17.00		20.00	

WLAN 5.8GHz Power Index 1

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not Required	8.50	Not Required	13.00	Not Required	14.30	Not Required
		157	5785		8.50		13.00		14.30	
		165	5825		8.50		13.00		14.30	
	802.11n-HT20 MCS0	149	5745		8.50		13.00		14.30	
		157	5785		8.50		13.00		14.30	
		165	5825		8.50		13.00		14.30	
	802.11n-HT40 MCS0	151	5755		8.50		13.00		14.30	
		159	5795		8.50		13.00		14.30	
	802.11ac-VHT20 MCS0	149	5745		8.50		13.00		14.30	
		157	5785		8.50		13.00		14.30	
		165	5825		8.50		13.00		14.30	
	802.11ac-VHT40 MCS0	151	5755		8.50		13.00		14.30	
		159	5795		8.50		13.00		14.30	
	802.11ac-VHT80 MCS0	155	5775	8.40	8.50	12.70	13.00	14.07	14.30	100.00
	802.11ax-HE20 MCS0	149	5745	Not Required	8.50	Not Required	13.00	Not Required	14.30	Not Required
		157	5785		8.50		13.00		14.30	
		165	5825		8.50		13.00		14.30	
	802.11ax-HE40 MCS0	151	5755		8.50		13.00		14.30	
		159	5795		8.50		13.00		14.30	
	802.11ax-HE80 MCS0	155	5775		8.50		13.00		14.30	

WLAN 5.8GHz Power Index 2

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.90	16.50	18.80	19.00	20.60	20.90	100.00
		157	5785	15.80	16.50	18.80	19.00	20.56	20.90	
		165	5825	15.60	16.50	18.60	19.00	20.36	20.90	
	802.11n-HT20 MCS0	149	5745	Not Required	16.50	Not Required	19.00	Not Required	20.90	Not Required
		157	5785		16.50		19.00		20.90	
		165	5825		16.50		19.00		20.90	
	802.11n-HT40 MCS0	151	5755		16.50		18.00		20.30	
		159	5795		16.50		18.00		20.30	
	802.11ac-VHT20 MCS0	149	5745		16.50		19.00		20.90	
		157	5785		16.50		19.00		20.90	
		165	5825		16.50		19.00		20.90	
	802.11ac-VHT40 MCS0	151	5755		16.50		18.00		20.30	
		159	5795		16.50		18.00		20.30	
	802.11ac-VHT80 MCS0	155	5775		16.50		17.00		19.80	
	802.11ax-HE20 MCS0	149	5745		16.50		19.00		20.90	
		157	5785		16.50		19.00		20.90	
		165	5825		16.50		19.00		20.90	
	802.11ax-HE40 MCS0	151	5755		16.50		18.00		20.30	
		159	5795		16.50		18.00		20.30	
	802.11ax-HE80 MCS0	155	5775		16.50		17.00		19.80	

WLAN 5.8GHz Power Index 3

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.70	19.00	18.80	19.00	21.76	22.00	100.00
		157	5785	18.90	19.00	18.80	19.00	21.86	22.00	
		165	5825	18.60	19.00	18.60	19.00	21.61	22.00	
	802.11n-HT20 MCS0	149	5745	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11n-HT40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	149	5745		19.00		19.00		22.00	
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	155	5775		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	149	5745		19.00		19.00		22.00	
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	155	5775		17.00		17.00		20.00	

WLAN 5.8GHz Power Index 4/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.70	19.00	18.80	19.00	21.76	22.00	100.00
		157	5785	18.90	19.00	18.80	19.00	21.86	22.00	
		165	5825	18.60	19.00	18.60	19.00	21.61	22.00	
	802.11n-HT20 MCS0	149	5745	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11n-HT40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	149	5745		19.00		19.00		22.00	
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	155	5775		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	149	5745		19.00		19.00		22.00	
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	155	5775		17.00		17.00		20.00	

WLAN 5.8GHz Power Index 5

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.70	19.00	18.80	19.00	21.76	22.00	100.00
		157	5785	18.90	19.00	18.80	19.00	21.86	22.00	
		165	5825	18.60	19.00	18.60	19.00	21.61	22.00	
	802.11n-HT20 MCS0	149	5745	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11n-HT40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ac-VHT20 MCS0	149	5745		19.00		19.00		22.00	
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11ac-VHT40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ac-VHT80 MCS0	155	5775		17.00		17.00		20.00	
	802.11ax-HE20 MCS0	149	5745		19.00		19.00		22.00	
		157	5785		19.00		19.00		22.00	
		165	5825		19.00		19.00		22.00	
	802.11ax-HE40 MCS0	151	5755		18.00		18.00		21.00	
		159	5795		18.00		18.00		21.00	
	802.11ax-HE80 MCS0	155	5775		17.00		17.00		20.00	

WLAN 5.9GHz UNII4 Power Index 1

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	Not Required	8.50	Not Required	12.00	Not Required	13.60	Not Required
		173	5865		8.50		12.00		13.60	
		177	5885		8.50		12.00		13.60	
	802.11n-HT20 MCS0	169	5845		8.50		12.00		13.60	
		173	5865		8.50		12.00		13.60	
		177	5885		8.50		12.00		13.60	
	802.11n-HT40 MCS0	167	5835		8.50		12.00		13.60	
		175	5875		8.50		12.00		13.60	
	802.11ac-VHT20 MCS0	169	5845		8.50		12.00		13.60	
		173	5865		8.50		12.00		13.60	
		177	5885		8.50		12.00		13.60	
	802.11ac-VHT40 MCS0	167	5835		8.50		12.00		13.60	
		175	5875		8.50		12.00		13.60	
	802.11ac-VHT80 MCS0	171	5855	8.40	8.50	11.80	12.00	13.43	13.60	100.00
	802.11ax-HE20 MCS0	169	5845	Not Required	8.50	Not Required	12.00	Not Required	13.60	Not Required
		173	5865		8.50		12.00		13.60	
		177	5885		8.50		12.00		13.60	
	802.11ax-HE40 MCS0	167	5835		8.50		12.00		13.60	
		175	5875		8.50		12.00		13.60	
	802.11ax-HE80 MCS0	171	5855		8.50		12.00		13.60	

WLAN 5.9GHz UNII4 Power Index 2

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	15.90	16.00	18.80	19.00	20.60	20.80	100.00
		173	5865	15.70	16.00	18.90	19.00	20.60	20.80	
		177	5885	15.60	16.00	16.40	17.00	19.03	19.50	
	802.11n-HT20 MCS0	169	5845	Not Required	16.00	Not Required	19.00	Not Required	20.80	Not Required
		173	5865		16.00		19.00		20.80	
		177	5885		16.00		17.00		19.50	
	802.11n-HT40 MCS0	167	5835		16.00		18.00		20.10	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT20 MCS0	169	5845		16.00		19.00		20.80	
		173	5865		16.00		19.00		20.80	
		177	5885		16.00		17.00		19.50	
	802.11ac-VHT40 MCS0	167	5835		16.00		18.00		20.10	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT80 MCS0	171	5855		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	169	5845		16.00		19.00		20.80	
		173	5865		16.00		19.00		20.80	
		177	5885		16.00		17.00		19.50	
	802.11ax-HE40 MCS0	167	5835		16.00		18.00		20.10	
		175	5875		16.00		16.00		19.00	
	802.11ax-HE80 MCS0	171	5855		16.00		16.00		19.00	

WLAN 5.9GHz UNII4 Power Index 3

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	Not Required	18.00	Not Required	19.00	Not Required	21.50	Not Required
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11n-HT20 MCS0	169	5845		18.00		19.00		21.50	
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11n-HT40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT20 MCS0	169	5845		18.00		19.00		21.50	
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11ac-VHT40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT80 MCS0	171	5855		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	169	5845		18.00		19.00		21.50	
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11ax-HE40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ax-HE80 MCS0	171	5855		16.00		16.00		19.00	

WLAN 5.9GHz UNII4 Power Index 4/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	17.10	19.00	17.70	19.00	20.42	22.00	100.00
		173	5865	17.10	19.00	17.80	19.00	20.47	22.00	
		177	5885	15.60	17.00	16.40	17.00	19.03	20.00	
	802.11n-HT20 MCS0	169	5845	Not Required	19.00	Not Required	19.00	Not Required	22.00	Not Required
		173	5865		19.00		19.00		22.00	
		177	5885		17.00		17.00		20.00	
	802.11n-HT40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT20 MCS0	169	5845		19.00		19.00		22.00	
		173	5865		19.00		19.00		22.00	
		177	5885		17.00		17.00		20.00	
	802.11ac-VHT40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT80 MCS0	171	5855		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	169	5845		19.00		19.00		22.00	
		173	5865		19.00		19.00		22.00	
		177	5885		17.00		17.00		20.00	
	802.11ax-HE40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ax-HE80 MCS0	171	5855		16.00		16.00		19.00	

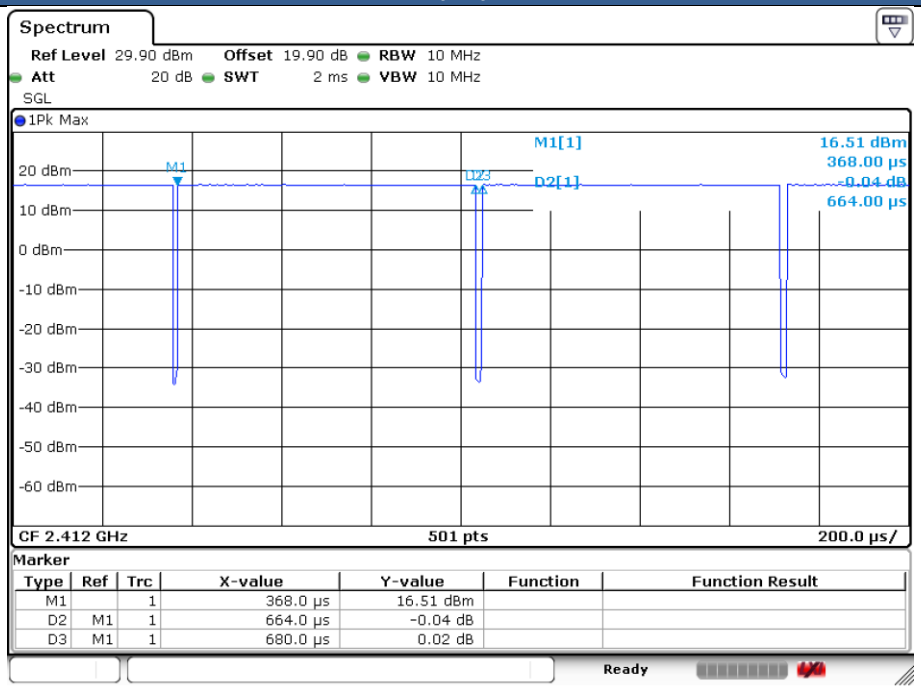
WLAN 5.9GHz UNII4 Power Index 5

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.9GHz WLAN UNII4	802.11a 6Mbps	169	5845	17.10	18.00	17.70	19.00	20.42	21.50	100.00
		173	5865	17.10	18.00	17.80	19.00	20.47	21.50	
		177	5885	15.60	17.00	16.40	17.00	19.03	20.00	
	802.11n-HT20 MCS0	169	5845	Not Required	18.00	Not Required	19.00	Not Required	21.50	Not Required
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11n-HT40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT20 MCS0	169	5845		18.00		19.00		21.50	
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11ac-VHT40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ac-VHT80 MCS0	171	5855		16.00		16.00		19.00	
	802.11ax-HE20 MCS0	169	5845		18.00		19.00		21.50	
		173	5865		18.00		19.00		21.50	
		177	5885		17.00		17.00		20.00	
	802.11ax-HE40 MCS0	167	5835		18.00		18.00		21.00	
		175	5875		16.00		16.00		19.00	
	802.11ax-HE80 MCS0	171	5855		16.00		16.00		19.00	

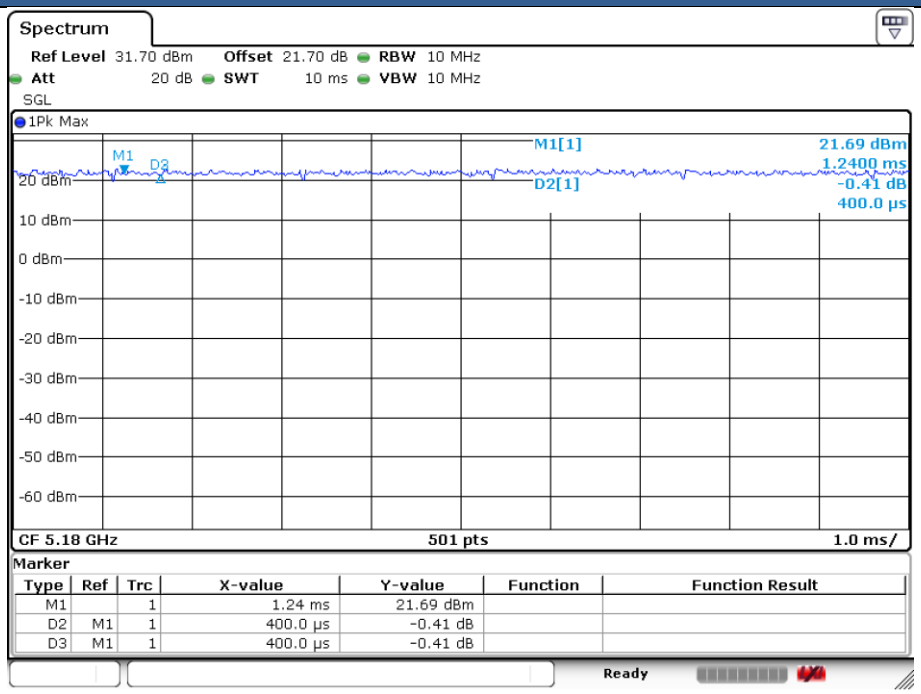
WLAN 6GHz Power Index 1/2/3/4/5/6

Burst Average Power(dBm)										
Transmit Antenna				Ant 4+3(4)		Ant 4+3(3)		Ant 4+3		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
WiFi 6E	802.11a 6Mbps	1	5955	Not Required	4.00	Not Required	4.00	Not Required	7.00	Not Required
		57	6235		4.00		4.00		7.00	
		113	6515		4.00		4.00		7.00	
		173	6815		4.00		4.00		7.00	
	802.11ax-HE20 MCS0	1	5955		4.00		4.00		7.00	
		57	6235		4.00		4.00		7.00	
		113	6515		4.00		4.00		7.00	
		173	6815		4.00		4.00		7.00	
	802.11ax-HE40 MCS0	3	5965		7.00		7.00		10.00	
		59	6245		7.00		7.00		10.00	
		107	6485		7.00		7.00		10.00	
		171	6805		7.00		7.00		10.00	
		227	7085		9.00		9.00		12.00	
	802.11ax-HE80 MCS0	7	5985	8.30	9.00	8.20	9.00	11.26	12.00	100.00
		71	6305	8.90	9.00	8.00	9.00	11.48	12.00	
		119	6545	7.10	9.00	8.40	9.00	10.81	12.00	
		167	6785	8.00	9.00	8.70	9.00	11.37	12.00	
		215	7025	8.30	9.00	8.70	9.00	11.51	12.00	

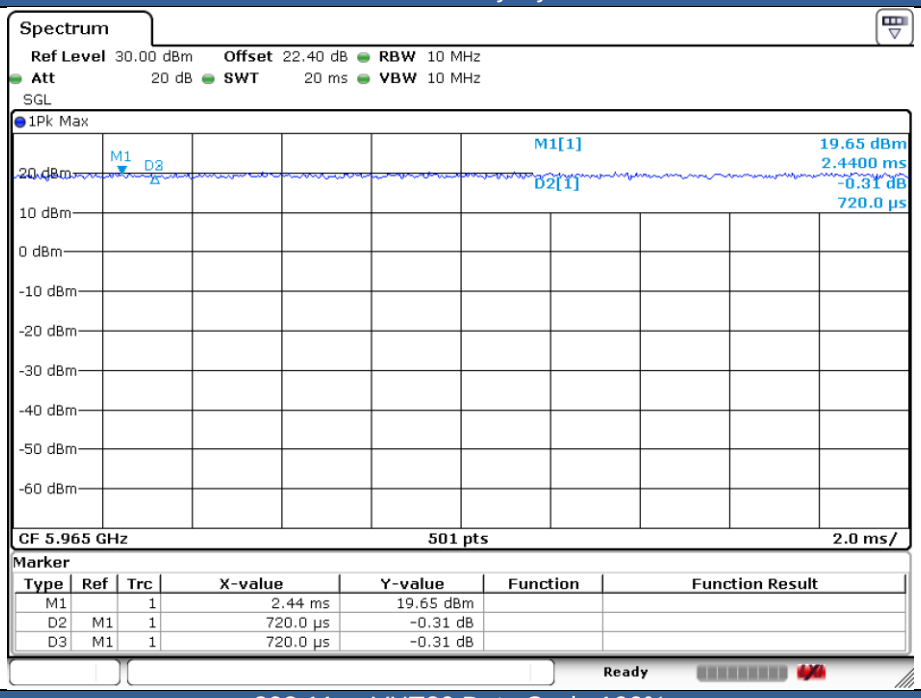
802.11b Duty Cycle 98.24%



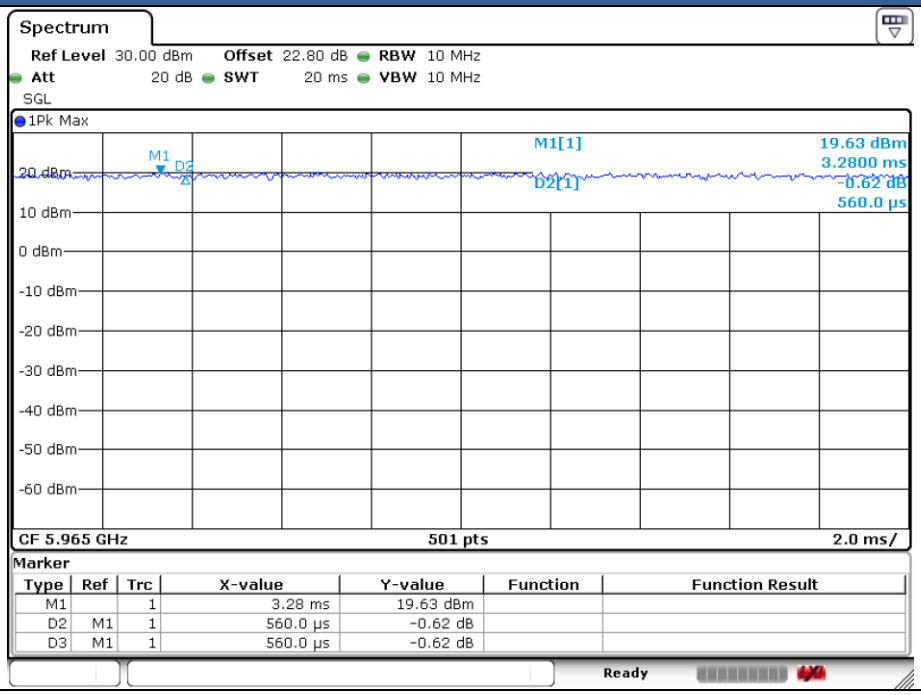
802.11a Duty Cycle 100%



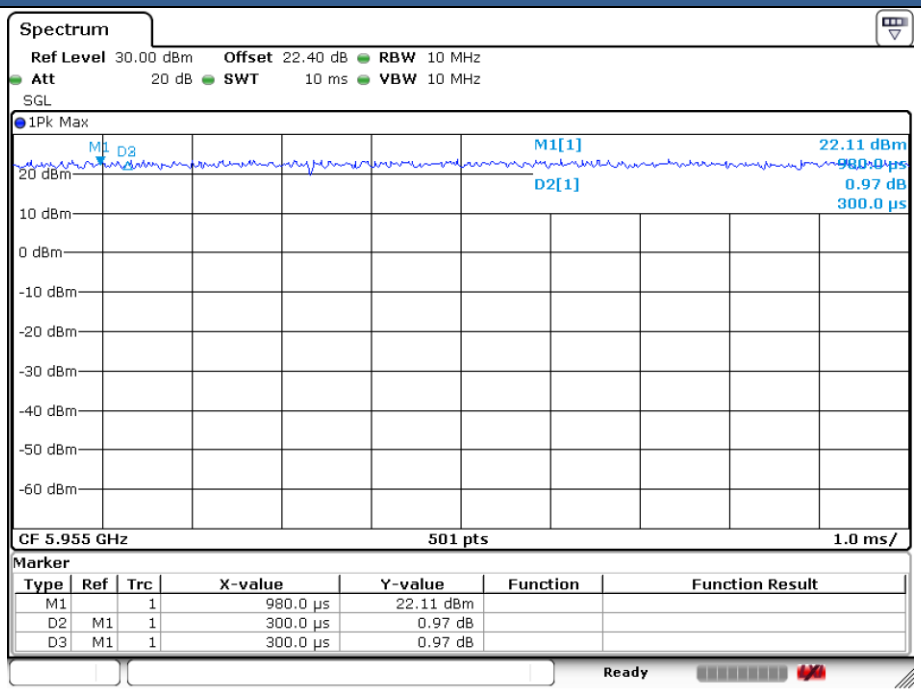
802.11an-HT40 Duty Cycle 100%



802.11ac-VHT80 Duty Cycle 100%



802.11ax-HE80 Duty Cycle 100%



Bluetooth Power index 1

Mode	Channel	Frequency (MHz)	Ant 4 Average power (dBm) 1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	11.52	Not Required	Not Required
	CH 39	2441	11.99		
	CH 78	2480	11.71		
Tune-up Limit			12.00	12.00	12.00

Mode	Channel	Frequency (MHz)	Ant 3 Average power (dBm) 1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	11.51	Not Required	Not Required
	CH 39	2441	11.53		
	CH 78	2480	11.88		
Tune-up Limit			12.00	12.00	12.00

Mode	Channel	Frequency (MHz)	Ant 4 Average power (dBm) 1Mbps	2Mbps
LE	CH 00	2402	Not Required	Not Required
	CH 19	2440		
	CH 39	2480		
Tune-up Limit			12.00	12.00

Mode	Channel	Frequency (MHz)	Ant 3 Average power (dBm) 1Mbps	2Mbps
LE	CH 00	2402	Not Required	Not Required
	CH 19	2440		
	CH 39	2480		
Tune-up Limit			12.00	12.00

Bluetooth Power index 2/3

Mode	Channel	Frequency (MHz)	Ant 4 Average power (dBm) 1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	18.44	Not Required	Not Required
	CH 39	2441	18.66		
	CH 78	2480	18.83		
Tune-up Limit			20.00	18.50	18.50

Mode	Channel	Frequency (MHz)	Ant 3 Average power (dBm) 1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	18.01	Not Required	Not Required
	CH 39	2441	18.31		
	CH 78	2480	18.33		
Tune-up Limit			20.00	18.50	18.50

Mode	Channel	Frequency (MHz)	Ant 4 Average power (dBm) 1Mbps	2Mbps
LE	CH 00	2402	Not Required	Not Required
	CH 19	2440		
	CH 39	2480		
Tune-up Limit			20.00	20.00

Mode	Channel	Frequency (MHz)	Ant 3 Average power (dBm) 1Mbps	2Mbps
LE	CH 00	2402	Not Required	Not Required
	CH 19	2440		
	CH 39	2480		
Tune-up Limit			20.00	20.00

Bluetooth Power index 4

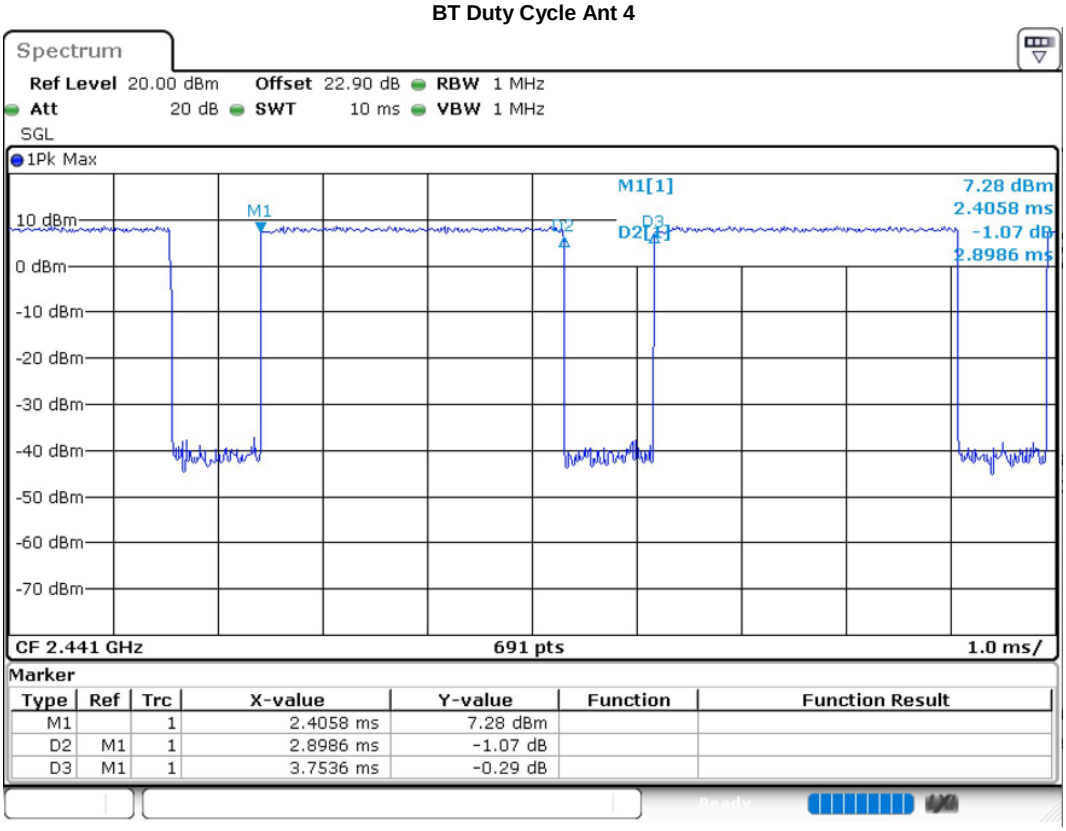
Mode	Channel	Frequency (MHz)	Ant 4 Average power (dBm) 1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	14.53	Not Required	Not Required
	CH 39	2441	14.99		
	CH 78	2480	14.62		
Tune-up Limit			15.00	15.00	15.00

Mode	Channel	Frequency (MHz)	Ant 3 Average power (dBm) 1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	14.51	Not Required	Not Required
	CH 39	2441	14.53		
	CH 78	2480	14.98		
Tune-up Limit			15.00	15.00	15.00

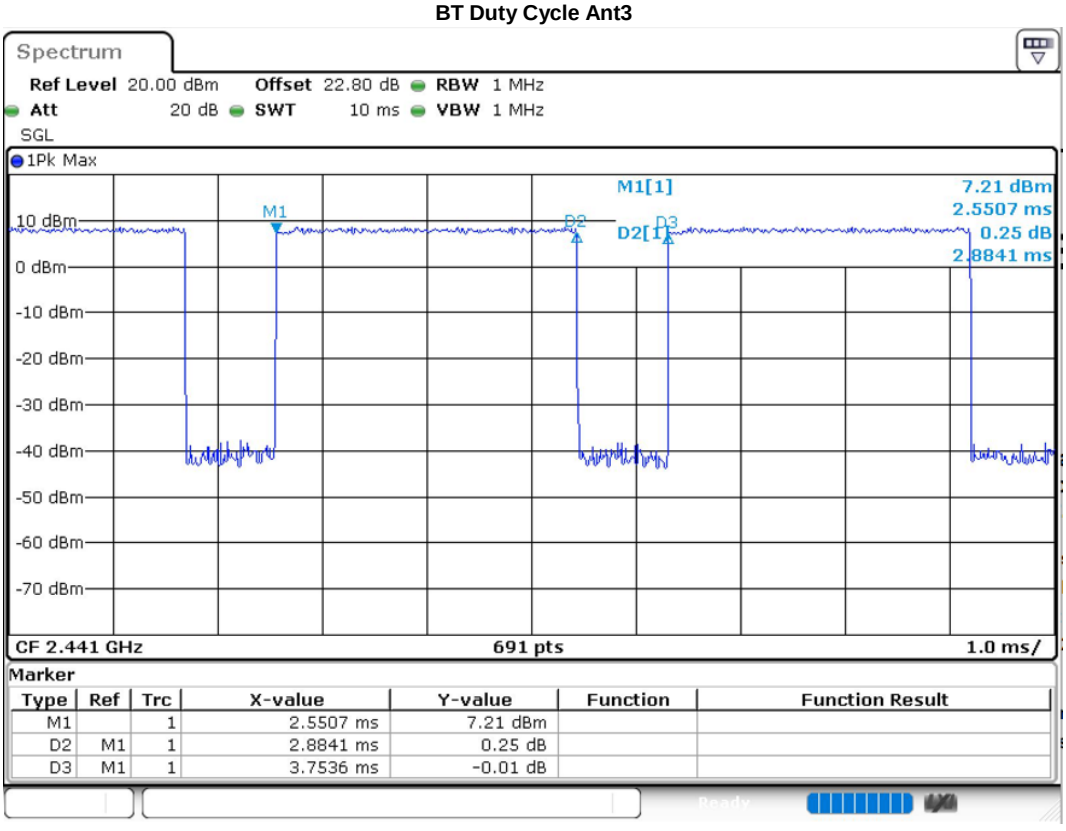
Mode	Channel	Frequency (MHz)	Ant 4 Average power (dBm) 1Mbps	2Mbps
LE	CH 00	2402	Not Required	Not Required
	CH 19	2440		
	CH 39	2480		
Tune-up Limit			15.00	15.00

Mode	Channel	Frequency (MHz)	Ant 3 Average power (dBm) 1Mbps	2Mbps
LE	CH 00	2402	Not Required	Not Required
	CH 19	2440		
	CH 39	2480		
Tune-up Limit			15.00	15.00

BT Duty Cycle Ant 4



BT Duty Cycle Ant3



14. Spot Check SAR Results

General Note:

1. SAR spot check verification on the worst cases from the original model was performed to demonstrate the test data from original model remains representative for the variant model.
2. If the 1-g SAR spot check result “does not exceed 30%, but larger than 1.2 W/kg”, more spot check on the next-higher exposure position until the spot check result does not exceed 1.2 W/kg.
3. The spot check results don’t show the SAR increase more than 30%, therefore referring to the guidance in the KDB inquiry, SAR data reuse is justified.

1st as parent model

2nd as variant model

14.1 Head SAR

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	189	836.4	29.18	30.50	1.355	-0.12	0.515	0.698	-7%
	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	189	836.4	29.25	30.50	1.334	-0.16	0.489	0.652	
	1st	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	189	836.4	25.45	26.80	1.365	0	0.811	1.107	0%
01	2nd	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2	189	836.4	25.44	26.80	1.368	0.05	0.808	1.105	
	1st	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	25.45	26.00	1.135	0	0.811	0.920	0%
	2nd	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	3	189	836.4	25.44	26.00	1.138	0.05	0.808	0.919	
	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	512	1850.2	26.82	28.00	1.312	0.04	0.414	0.543	-12%
	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	512	1850.2	27.06	28.00	1.242	-0.12	0.385	0.478	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	810	1909.8	26.44	27.70	1.337	-0.06	0.422	0.564	-8%
02	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	810	1909.8	26.37	27.70	1.358	-0.08	0.381	0.518	
	1st	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	9400	1880	24.86	25.70	1.213	-0.14	0.482	0.585	-3%
	2nd	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	9400	1880	24.63	25.70	1.279	0.03	0.443	0.567	
	1st	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	9538	1907.6	24.76	25.20	1.107	0.04	0.597	0.661	-1%
03	2nd	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	9538	1907.6	24.15	25.20	1.274	-0.14	0.516	0.657	
	1st	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	1413	1732.6	24.95	25.70	1.189	-0.01	0.440	0.523	-4%
	2nd	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	1413	1732.6	24.63	25.70	1.279	0.1	0.391	0.500	
	1st	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	1312	1712.4	24.79	25.20	1.099	-0.04	0.461	0.507	0%
04	2nd	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	1312	1712.4	24.66	25.20	1.132	0.12	0.446	0.505	
	1st	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	4182	836.4	24.16	25.70	1.426	-0.04	0.317	0.452	-3%
	2nd	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	4182	836.4	24.14	25.70	1.432	-0.12	0.307	0.440	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4132	826.4	21.11	23.00	1.545	-0.08	0.756	1.168	-5%
05	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2	4132	826.4	21.30	23.00	1.479	-0.12	0.753	1.114	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4132	826.4	21.11	22.20	1.285	-0.08	0.756	0.972	-5%
	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	3	4132	826.4	21.30	22.20	1.230	-0.12	0.753	0.926	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 2_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	2	18900	1880	16.71	18.00	1.346	0.05	0.852	1.147	-22.32%
06	2nd	LTE Band 2_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	2	18900	1880	16.19	18.00	1.517	-0.16	0.587	0.891	
	1st	LTE Band 2_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	3	18900	1880	16.71	17.20	1.119	0.05	0.852	0.954	-22.33%
	2nd	LTE Band 2_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	3	18900	1880	16.19	17.20	1.262	-0.16	0.587	0.741	
	1st	LTE Band 2_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	2	18900	1880	16.12	17.80	1.472	0.09	0.752	1.107	-25.56%
	2nd	LTE Band 2_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	2	18900	1880	15.85	17.80	1.567	-0.04	0.526	0.824	
	1st	LTE Band 2_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	3	18900	1880	16.12	17.00	1.225	0.09	0.752	0.921	-25.62%
	2nd	LTE Band 2_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	3	18900	1880	15.85	17.00	1.303	-0.04	0.526	0.685	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21100	2535	24.11	25.20	1.285	-0.08	0.837	1.076	-18%
07	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21100	2535	24.14	25.20	1.276	0.18	0.688	0.878	
	1st	LTE Band 7C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21100+20902	2535	22.70	23.50	1.202	0.05	0.732	0.880	-3%
	2nd	LTE Band 7C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2	21100+20902	2535	22.68	23.50	1.208	0.09	0.705	0.852	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21100	2535	24.11	24.40	1.069	-0.08	0.837	0.895	-18%
	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21100	2535	24.14	24.40	1.062	0.18	0.688	0.730	
	1st	LTE Band 7C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21100+20902	2535	22.70	22.70	1.000	0.05	0.732	0.732	-3%
	2nd	LTE Band 7C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	3	21100+20902	2535	22.68	22.70	1.005	0.09	0.705	0.708	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2	21350	2560	24.40	25.20	1.202	0.17	0.685	0.824	-3%
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2	21350	2560	24.19	25.20	1.262	-0.12	0.633	0.799	
	1st	LTE Band 7C_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2	21350+21152	2560	22.48	23.50	1.265	0.18	0.568	0.718	-8%
	2nd	LTE Band 7C_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2	21350+21152	2560	22.20	23.50	1.349	0.14	0.492	0.664	
	1st	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	3	21350	2560	24.40	25.00	1.148	0.17	0.685	0.786	-3%
	2nd	LTE Band 7_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	3	21350	2560	24.19	25.00	1.205	-0.12	0.633	0.763	
	1st	LTE Band 7C_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	3	21350+21152	2560	22.48	23.30	1.208	0.18	0.568	0.686	-8%
	2nd	LTE Band 7C_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	3	21350+21152	2560	22.20	23.30	1.288	0.14	0.492	0.634	
	1st	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23095	707.5	24.34	25.70	1.368	-0.18	0.291	0.398	-2%
	2nd	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23095	707.5	24.25	25.70	1.396	-0.17	0.279	0.390	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23095	707.5	22.63	24.10	1.403	-0.15	0.849	1.191	-1%
08	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23095	707.5	22.56	24.10	1.426	-0.18	0.830	1.183	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23095	707.5	22.63	23.30	1.167	-0.15	0.849	0.991	-1%
	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23095	707.5	22.56	23.30	1.186	-0.18	0.830	0.984	
	1st	LTE Band 13_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23230	782	24.33	25.70	1.371	-0.13	0.333	0.457	-0.66%
	2nd	LTE Band 13_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23230	782	24.14	25.70	1.432	-0.19	0.317	0.454	
	1st	LTE Band 13_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23230	782	22.18	23.60	1.387	-0.19	0.804	1.115	0%
09	2nd	LTE Band 13_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23230	782	22.11	23.60	1.409	-0.02	0.789	1.112	
	1st	LTE Band 13_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23230	782	22.18	22.80	1.153	-0.19	0.804	0.927	0%
	2nd	LTE Band 13_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23230	782	22.11	22.80	1.172	-0.02	0.789	0.925	
	1st	LTE Band 14_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23330	793	24.43	25.70	1.340	-0.1	0.354	0.474	0%
	2nd	LTE Band 14_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	23330	793	24.27	25.70	1.390	-0.1	0.340	0.473	
	1st	LTE Band 14_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23330	793	22.14	23.50	1.368	-0.15	0.863	1.180	-1%
10	2nd	LTE Band 14_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	23330	793	22.00	23.50	1.413	-0.15	0.830	1.172	
	1st	LTE Band 14_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23330	793	22.14	22.70	1.138	-0.15	0.863	0.982	-1%
	2nd	LTE Band 14_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	23330	793	22.00	22.70	1.175	-0.15	0.830	0.975	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 25_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	26340	1880	24.48	25.70	1.324			-0.02	0.494	0.654	-1%
	2nd	LTE Band 25_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	26340	1880	24.19	25.70	1.416			0.04	0.457	0.647	
	1st	LTE Band 25_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	26590	1905	23.74	25.20	1.400			0.02	0.502	0.703	-3%
11	2nd	LTE Band 25_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	26590	1905	23.68	25.20	1.419			0.19	0.480	0.681	
	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	2/3	26865	831.5	24.49	25.70	1.321			-0.14	0.353	0.466	-13%
	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	2/3	26865	831.5	24.45	25.70	1.334			-0.14	0.303	0.404	
	1st	LTE Band 5B_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	20600+20501	844	22.86	24.00	1.300			0.08	0.342	0.445	-8%
	2nd	LTE Band 5B_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	20600+20501	844	22.72	24.00	1.343			0.05	0.304	0.408	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	2	26865	831.5	21.66	23.20	1.426			-0.13	0.755	1.076	-2%
12	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	2	26865	831.5	21.36	23.20	1.528			-0.18	0.688	1.051	
	1st	LTE Band 5B_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	20600+20501	844	19.88	21.50	1.452			0.02	0.616	0.895	-4%
	2nd	LTE Band 5B_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	2	20600+20501	844	19.95	21.50	1.429			0.06	0.603	0.862	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	3	26865	831.5	21.66	22.40	1.186			-0.13	0.755	0.895	-2%
	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Right Cheek	0mm	3	26865	831.5	21.36	22.40	1.271			-0.18	0.688	0.874	
	1st	LTE Band 5B_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	20600+20501	844	19.88	20.70	1.208			0.02	0.616	0.744	-4%
	2nd	LTE Band 5B_Ant 1	10M_QPSK_1_0	Right Cheek	0mm	3	20600+20501	844	19.95	20.70	1.189			0.06	0.603	0.717	
	1st	LTE Band 30_Ant 2	10M_QPSK_1_0	Right Cheek	0mm	2/3	27710	2310	23.41	24.80	1.377			-0.14	0.471	0.649	-19%
	2nd	LTE Band 30_Ant 2	10M_QPSK_1_0	Right Cheek	0mm	2/3	27710	2310	23.40	24.80	1.380			-0.14	0.381	0.526	
	1st	LTE Band 30_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	27710	2310	23.95	25.10	1.303			0.1	0.607	0.791	-19%
13	2nd	LTE Band 30_Ant 0	10M_QPSK_1_0	Left Cheek	0mm	2/3	27710	2310	23.80	25.10	1.349			-0.07	0.475	0.641	
	1st	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	40620	2593	24.59	25.70	1.291	62.9	1.006	0.1	0.679	0.882	-10%
	2nd	LTE Band 41_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	40620	2593	24.52	25.70	1.312	62.9	1.006	-0.06	0.599	0.791	
	1st	LTE Band 41_HPUE_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	40620	2593	26.22	27.50	1.343	42.9	1.009	-0.02	0.647	0.877	-6%
14	2nd	LTE Band 41_HPUE_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	40620	2593	26.16	27.50	1.361	42.9	1.009	-0.01	0.602	0.827	
	1st	LTE Band 41C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	41490+41292	2680	12.07	12.80	1.183	62.9	1.006	0.12	0.041	0.049	-6%
	2nd	LTE Band 41C_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	41490+41292	2680	11.95	12.80	1.216	62.9	1.006	-0.08	0.038	0.046	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	41490	2680	24.15	25.20	1.274	62.9	1.006	-0.17	0.538	0.689	-27%
	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	41490	2680	23.99	25.20	1.321	62.9	1.006	0.07	0.380	0.505	
	1st	LTE Band 41_HPUE_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	40185	2549.5	25.83	27.00	1.309	42.9	1.009	-0.16	0.493	0.651	-28%
	2nd	LTE Band 41_HPUE_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	40185	2549.5	25.85	27.00	1.303	42.9	1.009	0.06	0.357	0.469	
	1st	LTE Band 41C_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	41490+41292	2680	11.44	12.30	1.219	62.9	1.006	0.04	0.026	0.032	-9%
	2nd	LTE Band 41C_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	41490+41292	2680	11.35	12.30	1.245	62.9	1.006	-0.02	0.023	0.029	
	1st	LTE Band 48_Ant 6	20M_QPSK_1_0	Left Cheek	0mm	2/3	56150	3641	22.66	23.20	1.132	62.9	1.006	-0.05	0.245	0.279	-1%
	2nd	LTE Band 48_Ant 6	20M_QPSK_1_0	Left Cheek	0mm	2/3	56150	3641	22.02	23.20	1.312	62.9	1.006	-0.16	0.210	0.277	
	1st	LTE Band 48_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	56640	3690	24.02	24.70	1.169	62.9	1.006	-0.19	0.332	0.391	0%
15	2nd	LTE Band 48_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	56640	3690	23.70	24.70	1.259	62.9	1.006	-0.1	0.308	0.390	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 66_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	132072	1720	24.52	25.70	1.312	0.17	0.412	0.541	-16%
	2nd	LTE Band 66_Ant 2	20M_QPSK_1_0	Right Cheek	0mm	2/3	132072	1720	24.35	25.70	1.365	0.06	0.332	0.453	
	1st	LTE Band 66B_Ant 2	15M_QPSK_1_0	Right Cheek	0mm	2/3	132597+132504	1772.5	22.73	24.00	1.340	0.1	0.319	0.427	-11%
	2nd	LTE Band 66B_Ant 2	15M_QPSK_1_0	Right Cheek	0mm	2/3	132597+132504	1772.5	22.96	24.00	1.271	0.05	0.300	0.381	
	1st	LTE Band 66C_Ant 2	20M_QPSK_1_99	Right Cheek	0mm	2/3	132072+132270	1720	22.75	24.00	1.334	-0.12	0.351	0.468	-14%
	2nd	LTE Band 66C_Ant 2	20M_QPSK_1_99	Right Cheek	0mm	2/3	132072+132270	1720	22.98	24.00	1.265	-0.05	0.318	0.402	
	1st	LTE Band 66_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	132072	1720	23.97	25.20	1.327	-0.16	0.362	0.481	-26%
	2nd	LTE Band 66_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	132072	1720	23.74	25.20	1.400	-0.16	0.255	0.357	
	1st	LTE Band 66B_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	2/3	132597+132504	1772.5	22.40	23.50	1.288	-0.03	0.278	0.358	-1%
	2nd	LTE Band 66B_Ant 0	15M_QPSK_1_0	Left Cheek	0mm	2/3	132597+132504	1772.5	22.23	23.50	1.340	0.06	0.264	0.354	
	1st	LTE Band 66C_Ant 0	20M_QPSK_1_99	Left Cheek	0mm	2/3	132072+132270	1720	22.37	23.50	1.297	0.15	0.274	0.355	0%
	2nd	LTE Band 66C_Ant 0	20M_QPSK_1_99	Left Cheek	0mm	2/3	132072+132270	1720	22.24	23.50	1.337	0.02	0.266	0.356	
	1st	LTE Band 66_Ant 1	20M_QPSK_50_0	Right Cheek	0mm	2	132572	1770	17.98	19.80	1.521	-0.08	0.663	1.008	-23.91%
	2nd	LTE Band 66_Ant 1	20M_QPSK_50_0	Right Cheek	0mm	2	132572	1770	17.88	19.80	1.556	0.08	0.493	0.767	
	1st	LTE Band 66_Ant 1	20M_QPSK_50_0	Right Cheek	0mm	3	132572	1770	17.98	19.00	1.265	-0.08	0.663	0.839	-23.96%
	2nd	LTE Band 66_Ant 1	20M_QPSK_50_0	Right Cheek	0mm	3	132572	1770	17.88	19.00	1.294	0.08	0.493	0.638	
	1st	LTE Band 66_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	2	132322	1745	17.38	19.10	1.486	0.03	0.793	1.178	-28.10%
16	2nd	LTE Band 66_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	2	132322	1745	17.20	19.10	1.549	-0.13	0.547	0.847	
	1st	LTE Band 66_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	3	132322	1745	17.38	18.30	1.236	0.03	0.793	0.980	-28.06%
	2nd	LTE Band 66_Ant 5	20M_QPSK_50_0	Left Cheek	0mm	3	132322	1745	17.20	18.30	1.288	-0.13	0.547	0.705	
	1st	LTE Band 71_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	133297	680.5	24.57	25.70	1.297	-0.18	0.238	0.309	-1%
	2nd	LTE Band 71_Ant 0	20M_QPSK_1_0	Left Cheek	0mm	2/3	133297	680.5	24.35	25.70	1.365	-0.15	0.225	0.307	
	1st	LTE Band 71_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	2	133297	680.5	22.22	23.40	1.312	-0.12	0.909	1.193	0%
17	2nd	LTE Band 71_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	2	133297	680.5	22.19	23.40	1.321	-0.11	0.900	1.189	
	1st	LTE Band 71_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	3	133297	680.5	22.22	22.60	1.091	-0.12	0.909	0.992	0%
	2nd	LTE Band 71_Ant 1	20M_QPSK_1_0	Right Cheek	0mm	3	133297	680.5	22.19	22.60	1.099	-0.11	0.900	0.989	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	FR1 n5_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	2/3	167300	836.5	24.70	25.70	1.259	-0.1	0.330	0.415	0%
	2nd	FR1 n5_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	2/3	167300	836.5	24.62	25.70	1.282	-0.1	0.322	0.413	
	1st	FR1 n5_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	2	167300	836.5	21.93	23.50	1.435	-0.12	0.762	1.094	0%
18	2nd	FR1 n5_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	2	167300	836.5	21.92	23.50	1.439	-0.02	0.757	1.089	
	1st	FR1 n5_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	3	167300	836.5	21.93	22.70	1.194	-0.12	0.762	0.910	0%
	2nd	FR1 n5_Ant 1	20M_BPSK_50_28	Right Cheek	0mm	3	167300	836.5	21.92	22.70	1.197	-0.02	0.757	0.906	
	1st	FR1 n7_Ant 2	50M_BPSK_135_68	Right Cheek	0mm	2	507000	2535	24.33	25.30	1.250	-0.09	0.868	1.085	-15%
19	2nd	FR1 n7_Ant 2	50M_BPSK_135_68	Right Cheek	0mm	2	507000	2535	24.00	25.30	1.349	-0.14	0.681	0.919	
	1st	FR1 n7_Ant 2	50M_BPSK_135_68	Right Cheek	0mm	3	507000	2535	24.33	24.50	1.040	-0.09	0.868	0.903	-15%
	2nd	FR1 n7_Ant 2	50M_BPSK_135_68	Right Cheek	0mm	3	507000	2535	24.00	24.50	1.122	-0.14	0.681	0.764	
	1st	FR1 n7_Ant 0	50M_BPSK_135_68	Left Cheek	0mm	2/3	507000	2535	24.50	25.20	1.175	-0.07	0.720	0.846	-11%
	2nd	FR1 n7_Ant 0	50M_BPSK_135_68	Left Cheek	0mm	2/3	507000	2535	24.08	25.20	1.294	-0.12	0.584	0.756	
	1st	FR1 n12_Ant 0	15M_BPSK_36_22	Left Cheek	0mm	2/3	141500	707.5	24.59	25.70	1.291	-0.13	0.271	0.350	-1%
	2nd	FR1 n12_Ant 0	15M_BPSK_36_22	Left Cheek	0mm	2/3	141500	707.5	24.55	25.70	1.303	-0.19	0.267	0.348	
	1st	FR1 n12_Ant 1	15M_BPSK_1_1	Right Cheek	0mm	2	141500	707.5	21.63	23.50	1.538	-0.15	0.770	1.184	-16%
20	2nd	FR1 n12_Ant 1	15M_BPSK_1_1	Right Cheek	0mm	2	141500	707.5	21.51	23.50	1.581	-0.05	0.632	0.999	
	1st	FR1 n12_Ant 1	15M_BPSK_1_1	Right Cheek	0mm	3	141500	707.5	21.63	22.70	1.279	-0.15	0.770	0.985	-16%
	2nd	FR1 n12_Ant 1	15M_BPSK_1_1	Right Cheek	0mm	3	141500	707.5	21.51	22.70	1.315	-0.05	0.632	0.831	
	1st	FR1 n14_Ant 0	10M_BPSK_25_14	Left Cheek	0mm	2/3	158600	793	24.74	25.70	1.247	-0.15	0.335	0.418	-5%
	2nd	FR1 n14_Ant 0	10M_BPSK_25_14	Left Cheek	0mm	2/3	158600	793	24.66	25.70	1.271	-0.1	0.314	0.399	
	1st	FR1 n14_Ant 1	10M_BPSK_50_0	Right Cheek	0mm	2	158600	793	22.52	23.60	1.282	-0.18	0.857	1.099	-8%
21	2nd	FR1 n14_Ant 1	10M_BPSK_50_0	Right Cheek	0mm	2	158600	793	22.70	23.60	1.230	-0.14	0.826	1.016	
	1st	FR1 n14_Ant 1	10M_BPSK_50_0	Right Cheek	0mm	3	158600	793	22.52	22.80	1.067	-0.18	0.857	0.914	-8%
	2nd	FR1 n14_Ant 1	10M_BPSK_50_0	Right Cheek	0mm	3	158600	793	22.70	22.80	1.023	-0.14	0.826	0.845	
	1st	FR1 n25_Ant 2	40M_BPSK_108_54	Right Cheek	0mm	2/3	376500	1882.5	24.38	25.70	1.355	0.12	0.498	0.675	0%
22	2nd	FR1 n25_Ant 2	40M_BPSK_108_54	Right Cheek	0mm	2/3	376500	1882.5	24.32	25.70	1.374	0.15	0.489	0.672	
	1st	FR1 n25_Ant 0	40M_BPSK_108_54	Left Cheek	0mm	2/3	376500	1882.5	23.70	25.20	1.413	0.04	0.407	0.575	-7%
	2nd	FR1 n25_Ant 0	40M_BPSK_108_54	Left Cheek	0mm	2/3	376500	1882.5	23.77	25.20	1.390	-0.11	0.384	0.534	
	1st	FR1 n30_Ant 2	10M_BPSK_25_14	Right Cheek	0mm	2/3	462000	2310	23.64	24.80	1.306	-0.02	0.489	0.639	-1%
23	2nd	FR1 n30_Ant 2	10M_BPSK_25_14	Right Cheek	0mm	2/3	462000	2310	23.60	24.80	1.318	-0.16	0.480	0.633	
	1st	FR1 n30_Ant 0	10M_BPSK_25_14	Left Cheek	0mm	2/3	462000	2310	24.01	25.10	1.285	0.14	0.602	0.774	-19%
	2nd	FR1 n30_Ant 0	10M_BPSK_25_14	Left Cheek	0mm	2/3	462000	2310	23.95	25.10	1.303	-0.14	0.480	0.626	
	1st	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	2	518598	2592.99	24.70	25.50	1.202	-0.16	0.971	1.167	-8%
24	2nd	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	2	518598	2592.99	24.58	25.50	1.236	-0.18	0.870	1.075	
	1st	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	3	518598	2592.99	24.70	24.80	1.023	-0.16	0.971	0.994	-8%
	2nd	FR1 n41_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	3	518598	2592.99	24.58	24.80	1.052	-0.18	0.870	0.915	
	1st	FR1 n41_Ant 0	100M_BPSK_135_69	Left Cheek	0mm	2	518598	2592.99	23.68	25.00	1.355	-0.13	0.639	0.866	-18%
	2nd	FR1 n41_Ant 0	100M_BPSK_135_69	Left Cheek	0mm	2	518598	2592.99	23.49	25.00	1.416	-0.04	0.499	0.706	
	1st	FR1 n41_Ant 0	100M_BPSK_135_69	Left Cheek	0mm	3	518598	2592.99	23.68	24.40	1.180	-0.13	0.639	0.754	-18%
	2nd	FR1 n41_Ant 0	100M_BPSK_135_69	Left Cheek	0mm	3	518598	2592.99	23.49	24.40	1.233	-0.04	0.499	0.615	
	1st	FR1 n48_Ant 6	10M_BPSK_1_1	Left Cheek	0mm	2/3	637000	3555	22.70	23.20	1.122	-0.11	0.306	0.343	-19%
	2nd	FR1 n48_Ant 6	10M_BPSK_1_1	Left Cheek	0mm	2/3	637000	3555	22.30	23.20	1.230	-0.08	0.227	0.279	
	1st	FR1 n48_Ant 2	10M_BPSK_12_6	Right Cheek	0mm	2/3	637000	3555	23.54	24.70	1.306	0.12	0.754	0.985	-14%
25	2nd	FR1 n48_Ant 2	10M_BPSK_12_6	Right Cheek	0mm	2/3	637000	3555	23.79	24.70	1.233	0.01	0.688	0.848	
	1st	FR1 n66_Ant 2	40M_BPSK_1_1	Right Cheek	0mm	2/3	349000	1745	24.65	25.70	1.274	-0.08	0.384	0.489	-2%
	2nd	FR1 n66_Ant 2	40M_BPSK_1_1	Right Cheek	0mm	2/3	349000	1745	24.49	25.70	1.321	-0.14	0.364	0.481	
	1st	FR1 n66_Ant 0	40M_BPSK_1_1	Left Cheek	0mm	2/3	349000	1745	23.87	25.20	1.358	0.05	0.383	0.520	-4%
26	2nd	FR1 n66_Ant 0	40M_BPSK_1_1	Left Cheek	0mm	2/3	349000	1745	23.76	25.20	1.393	-0.12	0.358	0.499	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	FR1 n71_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	2/3	136100	680.5	24.92	25.70	1.197	-0.17	0.257	0.308	-8%
	2nd	FR1 n71_Ant 0	20M_BPSK_50_28	Left Cheek	0mm	2/3	136100	680.5	24.85	25.70	1.216	-0.17	0.232	0.282	
	1st	FR1 n71_Ant 1	20M_BPSK_1_1	Right Cheek	0mm	2	136100	680.5	21.45	23.40	1.567	-0.02	0.699	1.095	-12%
27	2nd	FR1 n71_Ant 1	20M_BPSK_1_1	Right Cheek	0mm	2	136100	680.5	21.59	23.40	1.517	-0.04	0.635	0.963	
	1st	FR1 n71_Ant 1	20M_BPSK_1_1	Right Cheek	0mm	3	136100	680.5	21.45	22.60	1.303	-0.02	0.699	0.911	-12%
	2nd	FR1 n71_Ant 1	20M_BPSK_1_1	Right Cheek	0mm	3	136100	680.5	21.59	22.60	1.262	-0.04	0.635	0.801	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	2/3	656000	3840	23.22	24.20	1.253	-0.04	0.601	0.753	-6.77%
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Cheek	0mm	2/3	656000	3840	23.18	24.20	1.265	0.05	0.555	0.702	
	1st	FR1 n77_Ant 6	100M_BPSK_1_1	Left Cheek	0mm	2/3	633332	3499.98	23.60	24.20	1.148	0.05	0.466	0.535	0%
	2nd	FR1 n77_Ant 6	100M_BPSK_1_1	Left Cheek	0mm	2/3	633332	3499.98	23.15	24.20	1.274	0.14	0.420	0.535	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	2/3	656000	3840	22.41	23.20	1.199	-0.07	0.459	0.551	-3%
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Cheek	0mm	2/3	656000	3840	22.20	23.20	1.259	-0.11	0.425	0.535	
	1st	FR1 n77_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	2/3	633332	3499.98	21.97	23.20	1.327	-0.08	0.358	0.475	-3%
	2nd	FR1 n77_Ant 2	100M_BPSK_135_69	Right Cheek	0mm	2/3	633332	3499.98	21.85	23.20	1.365	0.11	0.338	0.461	
	1st	FR1 n77_Ant 1	100M_BPSK_1_1	Right Cheek	0mm	2	656000	3840	19.65	21.20	1.429	-0.12	0.834	1.192	-4%
28	2nd	FR1 n77_Ant 1	100M_BPSK_1_1	Right Cheek	0mm	2	656000	3840	19.40	21.20	1.514	-0.12	0.753	1.140	
	1st	FR1 n77_Ant 1	100M_BPSK_1_1	Right Cheek	0mm	3	656000	3840	19.65	20.40	1.189	-0.12	0.834	0.991	-4%
	2nd	FR1 n77_Ant 1	100M_BPSK_1_1	Right Cheek	0mm	3	656000	3840	19.40	20.40	1.259	-0.12	0.753	0.948	
	1st	FR1 n77_Ant 1	100M_BPSK_270_1	Right Cheek	0mm	2	633332	3499.98	19.86	21.20	1.361	-0.02	0.695	0.946	-5%
	2nd	FR1 n77_Ant 1	100M_BPSK_270_1	Right Cheek	0mm	2	633332	3499.98	19.41	21.20	1.510	-0.15	0.598	0.903	
	1st	FR1 n77_Ant 1	100M_BPSK_1_1	Right Cheek	0mm	3	633332	3499.98	19.81	20.40	1.146	-0.02	0.695	0.796	-6%
	2nd	FR1 n77_Ant 1	100M_BPSK_1_1	Right Cheek	0mm	3	633332	3499.98	19.41	20.40	1.256	-0.15	0.598	0.751	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	2	656000	3840	19.29	20.70	1.384	-0.1	0.467	0.646	-28%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	2	656000	3840	19.09	20.70	1.449	-0.1	0.319	0.462	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	3	656000	3840	19.29	19.90	1.151	-0.1	0.467	0.537	-28%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	3	656000	3840	19.09	19.90	1.205	-0.1	0.319	0.384	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	2	633332	3499.98	19.30	20.70	1.380	-0.15	0.749	1.034	-17%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	2	633332	3499.98	19.11	20.70	1.442	-0.16	0.596	0.860	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	3	633332	3499.98	19.30	19.90	1.148	-0.15	0.749	0.860	-17%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Left Cheek	0mm	3	633332	3499.98	19.11	19.90	1.199	-0.16	0.596	0.715	

14.2 Hotspot SAR

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	128	824.2	29.15	29.30	1.035	0.03	0.824	0.853	-2%
29	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	128	824.2	29.18	29.30	1.028	-0.05	0.811	0.834	
	1st	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	4	251	848.8	30.69	32.50	1.517	-0.19	0.394	0.598	-19%
	2nd	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	4	251	848.8	30.91	32.50	1.442	-0.15	0.337	0.486	
	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.40	25.20	1.202	-0.11	0.759	0.913	-8%
30	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	4	661	1880	24.39	25.20	1.205	-0.15	0.696	0.839	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	810	1909.8	25.27	26.10	1.211	-0.05	0.689	0.834	-12%
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	4	810	1909.8	25.30	26.10	1.202	0.14	0.611	0.735	
	1st	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	4	9400	1880	20.50	21.30	1.202	-0.15	0.558	0.671	-2%
	2nd	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	4	9400	1880	20.45	21.30	1.216	-0.1	0.540	0.657	
	1st	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	9538	1907.6	22.02	23.20	1.312	0.12	0.630	0.827	-16%
31	2nd	WCDMA II_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	9538	1907.6	22.34	23.20	1.219	0.17	0.567	0.691	
	1st	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	1312	1712.4	22.32	23.30	1.253	-0.03	0.522	0.654	-5%
32	2nd	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Side	10mm	4	1312	1712.4	22.36	23.30	1.242	0.01	0.501	0.622	
	1st	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	4	1513	1752.6	21.95	23.60	1.462	-0.08	0.283	0.414	-25%
	2nd	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	4	1513	1752.6	22.62	23.60	1.253	-0.08	0.247	0.310	
	1st	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	4132	826.4	24.06	25.70	1.459	-0.08	0.456	0.665	-2%
33	2nd	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	4	4132	826.4	24.01	25.70	1.476	-0.07	0.442	0.652	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4233	846.6	23.94	25.20	1.337	-0.01	0.342	0.457	0%
	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	4	4233	846.6	23.51	25.20	1.476	-0.08	0.308	0.455	
	1st	LTE Band 2_Ant 1	20M_QPSK_50_0	Top Side	10mm	4	19100	1900	20.68	21.40	1.180	0	0.837	0.988	-18.02%
	2nd	LTE Band 2_Ant 1	20M_QPSK_50_0	Top Side	10mm	4	19100	1900	20.18	21.40	1.324	0.1	0.612	0.810	
	1st	LTE Band 2_Ant 5	20M_QPSK_1_0	Right Side	10mm	4	18700	1860	22.16	22.20	1.009	0.19	0.975	0.984	-8.84%
34	2nd	LTE Band 2_Ant 5	20M_QPSK_1_0	Right Side	10mm	4	18700	1860	21.85	22.20	1.084	-0.15	0.828	0.897	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21100	2535	20.61	21.70	1.285	0.17	0.766	0.985	-5%
35	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21100	2535	20.70	21.70	1.259	0.13	0.742	0.934	
	1st	LTE Band 7C_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21100+20902	2535	19.11	20.00	1.227	0.02	0.737	0.905	-6%
	2nd	LTE Band 7C_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	21100+20902	2535	19.15	20.00	1.216	-0.11	0.700	0.851	
	1st	LTE Band 7_Ant 0	20M_QPSK_50_0	Left Side	10mm	4	21100	2535	20.47	21.60	1.297	0.07	0.597	0.774	-14%
	2nd	LTE Band 7_Ant 0	20M_QPSK_50_0	Left Side	10mm	4	21100	2535	20.46	21.60	1.300	0.08	0.514	0.668	
	1st	LTE Band 7C_Ant 2	20M_QPSK_1_0	Left Side	10mm	4	21100+20902	2535	18.92	19.90	1.253	0.06	0.537	0.673	-14%
	2nd	LTE Band 7C_Ant 2	20M_QPSK_1_0	Left Side	10mm	4	21100+20902	2535	18.99	19.90	1.233	-0.02	0.469	0.578	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23095	707.5	24.34	25.70	1.368			-0.02	0.398	0.544	0%
36	2nd	LTE Band 12_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23095	707.5	24.25	25.70	1.396			-0.19	0.388	0.542	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	4	23095	707.5	24.17	25.20	1.268			-0.01	0.200	0.254	-7%
	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	4	23095	707.5	24.00	25.20	1.318			-0.1	0.179	0.236	
	1st	LTE Band 13_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23230	782	24.33	25.70	1.371			-0.14	0.577	0.791	-4%
37	2nd	LTE Band 13_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23230	782	24.14	25.70	1.432			-0.16	0.530	0.759	
	1st	LTE Band 13_Ant 1	10M_QPSK_1_0	Back	10mm	4	23230	782	24.20	25.20	1.259			-0.19	0.247	0.311	0%
	2nd	LTE Band 13_Ant 1	10M_QPSK_1_0	Back	10mm	4	23230	782	23.96	25.20	1.330			-0.1	0.233	0.310	
	1st	LTE Band 14_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23330	793	24.43	25.70	1.340			-0.18	0.634	0.849	-10%
38	2nd	LTE Band 14_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	23330	793	24.27	25.70	1.390			-0.15	0.549	0.763	
	1st	LTE Band 14_Ant 1	10M_QPSK_1_0	Left Side	10mm	4	23330	793	24.22	25.20	1.253			-0.14	0.281	0.352	-17%
	2nd	LTE Band 14_Ant 1	10M_QPSK_1_0	Left Side	10mm	4	23330	793	23.84	25.20	1.368			-0.19	0.198	0.271	
	1st	LTE Band 25_Ant 2	20M_QPSK_50_0	Front	10mm	4	26340	1880	21.54	22.40	1.219			-0.14	0.813	0.991	-9%
39	2nd	LTE Band 25_Ant 2	20M_QPSK_50_0	Front	10mm	4	26340	1880	21.60	22.40	1.202			-0.17	0.753	0.905	
	1st	LTE Band 25_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	26590	1905	21.40	23.10	1.479			0.18	0.550	0.814	-20%
	2nd	LTE Band 25_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	26590	1905	21.58	23.10	1.419			0.14	0.459	0.651	
	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Side	10mm	4	26865	831.5	24.49	25.70	1.321			-0.17	0.521	0.688	-1%
40	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Left Side	10mm	4	26865	831.5	24.45	25.70	1.334			-0.17	0.512	0.683	
	1st	LTE Band 5B_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	20600+20501	844	22.86	24.00	1.300			0.04	0.414	0.538	0%
	2nd	LTE Band 5B_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	20600+20501	844	22.72	24.00	1.343			-0.1	0.400	0.537	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	4	26865	831.5	24.00	25.20	1.318			-0.17	0.290	0.382	-7%
	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	4	26865	831.5	23.88	25.20	1.355			-0.1	0.262	0.355	
	1st	LTE Band 5B_Ant 1	10M_QPSK_1_0	Back	10mm	4	20600+20501	844	22.32	23.50	1.312			0.1	0.250	0.328	-4%
	2nd	LTE Band 5B_Ant 1	10M_QPSK_1_0	Back	10mm	4	20600+20501	844	22.08	23.50	1.387			0.09	0.228	0.316	
	1st	LTE Band 30_Ant 2	10M_QPSK_25_0	Right Side	10mm	4	27710	2310	20.52	21.50	1.253			0.16	0.624	0.782	0%
	2nd	LTE Band 30_Ant 2	10M_QPSK_25_0	Right Side	10mm	4	27710	2310	20.51	21.50	1.256			0.1	0.620	0.779	
	1st	LTE Band 30_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	27710	2310	23.14	23.90	1.191			0.05	0.740	0.882	-8%
41	2nd	LTE Band 30_Ant 0	10M_QPSK_1_0	Left Side	10mm	4	27710	2310	22.92	23.90	1.253			0.04	0.646	0.810	
	1st	LTE Band 41_Ant 2	20M_QPSK_50_0	Right Side	10mm	4	39750	2506	22.36	23.60	1.330	62.9	1.006	-0.15	0.682	0.913	-7%
	2nd	LTE Band 41_Ant 2	20M_QPSK_50_0	Right Side	10mm	4	39750	2506	22.24	23.60	1.368	62.9	1.006	-0.19	0.620	0.853	
	1st	LTE Band 41_HPUE_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	41490	2680	24.00	25.20	1.318	42.9	1.009	-0.19	0.663	0.882	-2%
	2nd	LTE Band 41_HPUE_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	41490	2680	23.89	25.20	1.352	42.9	1.009	0.17	0.632	0.862	
	1st	LTE Band 41C_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	41490+41292	2680	12.07	12.80	1.183	62.9	1.006	0.15	0.071	0.084	-20%
	2nd	LTE Band 41C_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	41490+41292	2680	11.95	12.80	1.216	62.9	1.006	-0.04	0.055	0.067	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	41055	2636.5	22.93	23.40	1.114	62.9	1.006	-0.19	0.866	0.971	-2%
42	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	41055	2636.5	22.74	23.40	1.164	62.9	1.006	-0.04	0.809	0.947	
	1st	LTE Band 41_HPUE_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	41055	2636.5	24.08	25.00	1.236	42.9	1.009	-0.04	0.761	0.949	-1%
	2nd	LTE Band 41_HPUE_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	41055	2636.5	23.62	25.00	1.374	42.9	1.009	-0.03	0.677	0.939	
	1st	LTE Band 41C_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	41490+41292	2680	11.44	12.30	1.219	62.9	1.006	0.13	0.068	0.083	-17%
	2nd	LTE Band 41C_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	41490+41292	2680	11.35	12.30	1.245	62.9	1.006	0.07	0.055	0.069	
	1st	LTE Band 48_Ant 6	20M_QPSK_1_0	Front	10mm	4	56150	3641	22.66	22.70	1.009	62.9	1.006	0.17	0.599	0.608	-1%
	2nd	LTE Band 48_Ant 6	20M_QPSK_1_0	Front	10mm	4	56150	3641	22.40	22.70	1.072	62.9	1.006	-0.09	0.559	0.603	
	1st	LTE Band 48_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	55340	3560	22.00	22.90	1.230	62.9	1.006	0.13	0.672	0.832	-1%
43	2nd	LTE Band 48_Ant 2	20M_QPSK_1_0	Right Side	10mm	4	55340	3560	21.90	22.90	1.259	62.9	1.006	0.12	0.653	0.827	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 66_Ant 2	20M_QPSK_50_0	Right Side	10mm	4	132072	1720	22.62	23.90	1.343	0.19	0.615	0.826	-4%
44	2nd	LTE Band 66_Ant 2	20M_QPSK_50_0	Right Side	10mm	4	132072	1720	22.45	23.90	1.396	0.1	0.570	0.796	
	1st	LTE Band 66B_Ant 2	15M_QPSK_1_0	Right Side	10mm	4	132597+132504	1772.5	21.05	22.20	1.303	-0.08	0.392	0.511	-2%
	2nd	LTE Band 66C_Ant 2	15M_QPSK_1_0	Right Side	10mm	4	132597+132504	1772.5	21.00	22.20	1.318	0.08	0.380	0.501	
	1st	LTE Band 66C_Ant 2	20M_QPSK_1_99	Right Side	10mm	4	132072+132270	1720	20.97	22.20	1.327	-0.15	0.374	0.496	-2%
	2nd	LTE Band 66C_Ant 2	20M_QPSK_1_99	Right Side	10mm	4	132072+132270	1720	20.95	22.20	1.334	0.03	0.364	0.485	
	1st	LTE Band 66_Ant 0	20M_QPSK_50_0	Bottom Side	10mm	4	132572	1770	21.69	23.20	1.416	0.17	0.324	0.459	-13%
	2nd	LTE Band 66_Ant 0	20M_QPSK_50_0	Bottom Side	10mm	4	132572	1770	21.55	23.20	1.462	0.16	0.272	0.398	
	1st	LTE Band 66B_Ant 0	15M_QPSK_1_0	Bottom Side	10mm	4	132597+132504	1772.5	20.80	21.50	1.175	0.13	0.305	0.358	-2%
	2nd	LTE Band 66C_Ant 0	15M_QPSK_1_0	Bottom Side	10mm	4	132597+132504	1772.5	20.50	21.50	1.259	0.01	0.279	0.351	
	1st	LTE Band 66C_Ant 0	20M_QPSK_1_99	Bottom Side	10mm	4	132072+132270	1720	20.11	21.50	1.377	-0.12	0.289	0.398	-23%
	2nd	LTE Band 66C_Ant 0	20M_QPSK_1_99	Bottom Side	10mm	4	132072+132270	1720	20.08	21.50	1.387	-0.1	0.222	0.308	
	1st	LTE Band 66_Ant 1	20M_QPSK_50_0	Top Side	10mm	4	132572	1770	24.11	24.70	1.146	0.11	0.815	0.934	-21.20%
	2nd	LTE Band 66_Ant 1	20M_QPSK_50_0	Top Side	10mm	4	132572	1770	24.01	24.70	1.172	-0.06	0.628	0.736	
	1st	LTE Band 66_Ant 5	20M_QPSK_1_0	Right Side	10mm	4	132572	1770	21.46	22.40	1.242	-0.13	0.782	0.971	-22.97%
	2nd	LTE Band 66_Ant 5	20M_QPSK_1_0	Right Side	10mm	4	132572	1770	21.25	22.40	1.303	-0.03	0.574	0.748	
	1st	LTE Band 71_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	133297	680.5	24.57	25.70	1.297	-0.14	0.404	0.524	-2%
45	2nd	LTE Band 71_Ant 0	20M_QPSK_1_0	Left Side	10mm	4	133297	680.5	24.35	25.70	1.365	-0.18	0.377	0.514	
	1st	LTE Band 71_Ant 1	20M_QPSK_1_0	Back	10mm	4	133297	680.5	23.98	25.20	1.324	-0.12	0.207	0.274	-4%
	2nd	LTE Band 71_Ant 1	20M_QPSK_1_0	Back	10mm	4	133297	680.5	23.81	25.20	1.377	-0.18	0.191	0.263	
	1st	FR1 n5_Ant 0	20M_BPSK_50_28	Left Side	10mm	4	167300	836.5	24.70	25.70	1.259	0.03	0.588	0.740	-2%
46	2nd	FR1 n5_Ant 0	20M_BPSK_50_28	Left Side	10mm	4	167300	836.5	24.62	25.70	1.282	0.05	0.567	0.727	
	1st	FR1 n5_Ant 1	20M_BPSK_50_28	Back	10mm	4	167300	836.5	24.35	25.20	1.216	0.04	0.301	0.366	-1%
	2nd	FR1 n5_Ant 1	20M_BPSK_50_28	Back	10mm	4	167300	836.5	24.36	25.20	1.213	-0.12	0.300	0.364	
	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Right Side	10mm	4	507000	2535	20.61	21.40	1.199	-0.04	0.782	0.938	-4%
47	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Right Side	10mm	4	507000	2535	20.52	21.40	1.225	-0.09	0.732	0.896	
	1st	FR1 n7_Ant 0	50M_BPSK_270_0	Left Side	10mm	4	507000	2535	21.06	22.10	1.271	0.09	0.711	0.903	-4%
	2nd	FR1 n7_Ant 0	50M_BPSK_270_0	Left Side	10mm	4	507000	2535	21.20	22.10	1.230	0.04	0.703	0.865	
	1st	FR1 n12_Ant 0	15M_BPSK_1_1	Left Side	10mm	4	141500	707.5	24.66	25.70	1.271	-0.1	0.488	0.620	-3%
48	2nd	FR1 n12_Ant 0	15M_BPSK_1_1	Left Side	10mm	4	141500	707.5	24.48	25.70	1.324	0.02	0.456	0.604	
	1st	FR1 n12_Ant 1	15M_BPSK_36_22	Back	10mm	4	141500	707.5	24.27	25.20	1.239	-0.1	0.225	0.279	-8%
	2nd	FR1 n12_Ant 1	15M_BPSK_36_22	Back	10mm	4	141500	707.5	24.07	25.20	1.297	-0.12	0.197	0.256	
	1st	FR1 n14_Ant 0	10M_BPSK_25_14	Left Side	10mm	4	158600	793	24.74	25.70	1.247	0.05	0.671	0.837	0%
49	2nd	FR1 n14_Ant 0	10M_BPSK_25_14	Left Side	10mm	4	158600	793	24.66	25.70	1.271	0.08	0.657	0.835	
	1st	FR1 n14_Ant 1	10M_BPSK_25_14	Back	10mm	4	158600	793	24.34	25.20	1.219	-0.1	0.270	0.329	0%
	2nd	FR1 n14_Ant 1	10M_BPSK_25_14	Back	10mm	4	158600	793	24.27	25.20	1.239	-0.1	0.265	0.328	
	1st	FR1 n25_Ant 2	40M_BPSK_216_0	Front	10mm	4	376500	1882.5	20.91	22.40	1.409	-0.12	0.617	0.870	-2%
50	2nd	FR1 n25_Ant 2	40M_BPSK_216_0	Front	10mm	4	376500	1882.5	21.15	22.40	1.334	-0.05	0.637	0.849	
	1st	FR1 n25_Ant 0	40M_BPSK_108_54	Left Side	10mm	4	376500	1882.5	22.53	23.80	1.340	0.12	0.668	0.895	-22%
	2nd	FR1 n25_Ant 0	40M_BPSK_108_54	Left Side	10mm	4	376500	1882.5	22.58	23.80	1.324	0.17	0.526	0.697	
	1st	FR1 n30_Ant 2	10M_BPSK_50_0	Right Side	10mm	4	462000	2310	19.76	21.70	1.563	-0.03	0.601	0.939	-9%
51	2nd	FR1 n30_Ant 2	10M_BPSK_50_0	Right Side	10mm	4	462000	2310	19.70	21.70	1.585	-0.05	0.538	0.853	
	1st	FR1 n30_Ant 0	10M_BPSK_1_1	Left Side	10mm	4	462000	2310	23.60	23.60	1.000	-0.06	0.984	0.984	-14%
	2nd	FR1 n30_Ant 0	10M_BPSK_1_1	Left Side	10mm	4	462000	2310	23.50	23.60	1.023	-0.07	0.832	0.851	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	FR1 n41_Ant 2	100M_BPSK_135_69	Right Side	10mm	4	518598	2592.99	21.22	22.10	1.225	-0.01	0.810	0.992	-4%
52	2nd	FR1 n41_Ant 2	100M_BPSK_135_69	Right Side	10mm	4	518598	2592.99	21.08	22.10	1.265	-0.06	0.755	0.955	
	1st	FR1 n41_Ant 0	100M_BPSK_270_0	Left Side	10mm	4	518598	2592.99	20.08	21.60	1.419	-0.07	0.617	0.876	-1%
	2nd	FR1 n41_Ant 0	100M_BPSK_270_0	Left Side	10mm	4	518598	2592.99	20.06	21.60	1.426	-0.08	0.608	0.867	
	1st	FR1 n48_Ant 6	10M_BPSK_1_1	Left Side	10mm	4	637000	3555	19.32	20.50	1.312	0.13	0.494	0.648	-17%
	2nd	FR1 n48_Ant 6	10M_BPSK_1_1	Left Side	10mm	4	637000	3555	19.00	20.50	1.413	-0.05	0.383	0.541	
	1st	FR1 n48_Ant 2	10M_BPSK_1_1	Right Side	10mm	4	637000	3555	19.32	20.40	1.282	0.05	0.624	0.800	-5%
53	2nd	FR1 n48_Ant 2	10M_BPSK_1_1	Right Side	10mm	4	637000	3555	19.56	20.40	1.213	-0.15	0.629	0.763	
	1st	FR1 n66_Ant 2	40M_BPSK_1_1	Right Side	10mm	4	349000	1745	23.17	24.20	1.268	0.09	0.680	0.862	-6%
54	2nd	FR1 n66_Ant 2	40M_BPSK_1_1	Right Side	10mm	4	349000	1745	22.99	24.20	1.321	-0.04	0.611	0.807	
	1st	FR1 n66_Ant 0	40M_BPSK_1_1	Front	10mm	4	349000	1745	22.67	23.80	1.297	-0.06	0.352	0.457	-5%
	2nd	FR1 n66_Ant 0	40M_BPSK_1_1	Front	10mm	4	349000	1745	22.58	23.80	1.324	-0.1	0.326	0.432	
	1st	FR1 n71_Ant 0	20M_BPSK_50_28	Left Side	10mm	4	136100	680.5	24.92	25.70	1.197	0.02	0.452	0.541	-1%
55	2nd	FR1 n71_Ant 0	20M_BPSK_50_28	Left Side	10mm	4	136100	680.5	24.85	25.70	1.216	0.06	0.442	0.538	
	1st	FR1 n71_Ant 1	20M_BPSK_50_28	Back	10mm	4	136100	680.5	24.31	25.20	1.227	-0.11	0.229	0.281	-1%
	2nd	FR1 n71_Ant 1	20M_BPSK_50_28	Back	10mm	4	136100	680.5	24.05	25.20	1.303	-0.09	0.213	0.278	
	1st	FR1 n77_Ant 6	100M_BPSK_135_69	Left Side	10mm	4	656000	3840	19.01	20.30	1.346	0.1	0.505	0.680	-13%
	2nd	FR1 n77_Ant 6	100M_BPSK_135_69	Left Side	10mm	4	656000	3840	18.85	20.30	1.396	0.17	0.424	0.592	
	1st	FR1 n77_Ant 6	100M_BPSK_1_1	Left Side	10mm	4	633332	3499.98	19.30	20.30	1.259	0.15	0.489	0.616	0%
56	2nd	FR1 n77_Ant 6	100M_BPSK_1_1	Left Side	10mm	4	633332	3499.98	19.07	20.30	1.327	0.12	0.463	0.615	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Right Side	10mm	4	656000	3840	18.59	19.60	1.262	0.1	0.468	0.591	-0.34%
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Right Side	10mm	4	656000	3840	18.69	19.60	1.233	0.11	0.478	0.589	
	1st	FR1 n77_Ant 2	100M_BPSK_135_69	Right Side	10mm	4	633332	3499.98	18.22	19.60	1.374	0.15	0.394	0.541	-1%
	2nd	FR1 n77_Ant 2	100M_BPSK_135_69	Right Side	10mm	4	633332	3499.98	17.92	19.60	1.472	0.19	0.365	0.537	
	1st	FR1 n77_Ant 1	100M_BPSK_1_1	Left Side	10mm	4	656000	3840	21.97	22.80	1.211	0.18	0.336	0.407	0%
	2nd	FR1 n77_Ant 1	100M_BPSK_1_1	Left Side	10mm	4	656000	3840	21.95	22.80	1.216	0.12	0.333	0.405	
	1st	FR1 n77_Ant 1	100M_BPSK_135_69	Left Side	10mm	4	633332	3499.98	21.95	22.80	1.216	-0.03	0.282	0.343	-4%
	2nd	FR1 n77_Ant 1	100M_BPSK_135_69	Left Side	10mm	4	633332	3499.98	21.36	22.80	1.393	0.17	0.236	0.329	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Right Side	10mm	4	656000	3840	23.37	23.40	1.007	0.15	0.572	0.576	-24%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Right Side	10mm	4	656000	3840	23.00	23.40	1.096	-0.03	0.401	0.440	
	1st	FR1 n77_Ant 5	100M_BPSK_135_69	Right Side	10mm	4	633332	3499.98	23.36	23.40	1.009	0.07	0.486	0.490	-21%
	2nd	FR1 n77_Ant 5	100M_BPSK_135_69	Right Side	10mm	4	633332	3499.98	23.21	23.40	1.045	0.09	0.370	0.387	

14.3 Body-Worn SAR

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	189	836.4	29.18	30.50	1.355	-0.12	0.599	0.812	-6%
57	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	189	836.4	29.25	30.50	1.334	-0.09	0.570	0.760	
	1st	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	29.18	29.70	1.127	-0.12	0.599	0.675	-6%
	2nd	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	189	836.4	29.25	29.70	1.109	-0.09	0.570	0.632	
	1st	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5/6	251	848.8	30.69	32.50	1.517	-0.19	0.394	0.598	-19%
	2nd	GSM850_Ant 1	GPRS (2 Tx slots)	Back	10mm	5/6	251	848.8	30.91	32.50	1.442	-0.15	0.337	0.486	
	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5	661	1880	24.40	25.20	1.202	-0.11	0.759	0.913	-8%
58	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	5	661	1880	24.39	25.20	1.205	-0.15	0.696	0.839	
	1st	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	6	661	1880	24.40	24.40	1.000	-0.11	0.759	0.759	-8%
	2nd	GSM1900_Ant 2	GPRS (4 Tx slots)	Back	10mm	6	661	1880	24.39	24.40	1.002	-0.15	0.696	0.698	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	810	1909.8	25.27	26.10	1.211	-0.16	0.416	0.504	-1%
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	5	810	1909.8	25.30	26.10	1.202	-0.13	0.415	0.499	
	1st	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	810	1909.8	25.27	25.30	1.007	-0.16	0.416	0.419	-1%
	2nd	GSM1900_Ant 0	GPRS (4 Tx slots)	Back	10mm	6	810	1909.8	25.30	25.30	1.000	-0.13	0.415	0.415	
	1st	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	5/6	9400	1880	20.50	21.30	1.202	-0.15	0.558	0.671	-2%
59	2nd	WCDMA II_Ant 2	RMC 12.2Kbps	Front	10mm	5/6	9400	1880	20.45	21.30	1.216	-0.1	0.540	0.657	
	1st	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	9538	1907.6	22.02	23.20	1.312	0	0.399	0.524	-18%
	2nd	WCDMA II_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	9538	1907.6	22.34	23.20	1.219	-0.12	0.351	0.428	
	1st	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	5/6	1312	1712.4	22.32	23.30	1.253	-0.19	0.503	0.630	-9%
60	2nd	WCDMA IV_Ant 2	RMC 12.2Kbps	Front	10mm	5/6	1312	1712.4	22.36	23.30	1.242	-0.19	0.460	0.571	
	1st	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	1513	1752.6	21.95	23.60	1.462	-0.08	0.283	0.414	-25%
	2nd	WCDMA IV_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	1513	1752.6	22.62	23.60	1.253	-0.08	0.247	0.310	
	1st	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	4182	836.4	24.16	25.70	1.426	-0.09	0.436	0.622	-24%
61	2nd	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	5/6	4182	836.4	24.14	25.70	1.432	0.02	0.331	0.474	
	1st	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5/6	4233	846.6	23.94	25.20	1.337	-0.01	0.342	0.457	0%
	2nd	WCDMA V_Ant 1	RMC 12.2Kbps	Back	10mm	5/6	4233	846.6	23.51	25.20	1.476	-0.08	0.308	0.455	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 2_Ant 1	20M_QPSK_50_0	Front	10mm	5	18700	1860	22.75	23.30	1.135	-0.02	0.850	0.965	-28.60%
62	2nd	LTE Band 2_Ant 1	20M_QPSK_50_0	Front	10mm	5	18700	1860	22.12	23.30	1.312	0.06	0.525	0.689	
	1st	LTE Band 2_Ant 1	20M_QPSK_50_0	Front	10mm	6	18700	1860	21.74	22.50	1.191	-0.07	0.675	0.804	-28.98%
	2nd	LTE Band 2_Ant 1	20M_QPSK_50_0	Front	10mm	6	18700	1860	21.05	22.50	1.396	0.07	0.409	0.571	
	1st	LTE Band 2_Ant 5	20M_QPSK_1_0	Front	10mm	5	18700	1860	22.16	23.40	1.330	-0.13	0.646	0.859	-21.19%
	2nd	LTE Band 2_Ant 5	20M_QPSK_1_0	Front	10mm	5	18700	1860	21.85	23.40	1.429	0.03	0.474	0.677	
	1st	LTE Band 2_Ant 5	20M_QPSK_1_0	Front	10mm	6	18700	1860	22.16	22.60	1.107	-0.13	0.646	0.715	-21.26%
	2nd	LTE Band 2_Ant 5	20M_QPSK_1_0	Front	10mm	6	18700	1860	21.85	22.60	1.189	0.03	0.474	0.563	
	1st	LTE Band 7_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21350	2560	20.58	21.70	1.294	-0.1	0.459	0.594	-9%
63	2nd	LTE Band 7_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21350	2560	20.70	21.70	1.259	-0.11	0.428	0.539	
	1st	LTE Band 7C_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21100+20902	2535	19.11	20.00	1.227	0.03	0.451	0.554	-19%
	2nd	LTE Band 7C_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	21100+20902	2535	19.15	20.00	1.216	-0.09	0.370	0.450	
	1st	LTE Band 7_Ant 0	20M_QPSK_50_0	Front	10mm	5/6	21350	2560	20.30	22.00	1.479	-0.02	0.323	0.478	-12%
	2nd	LTE Band 7_Ant 0	20M_QPSK_50_0	Front	10mm	5/6	21350	2560	20.41	22.00	1.442	-0.07	0.292	0.421	
	1st	LTE Band 7C_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	21100+20902	2535	18.92	20.30	1.374	-0.06	0.262	0.360	-7%
	2nd	LTE Band 7C_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	21100+20902	2535	18.99	20.30	1.352	0.01	0.247	0.334	
	1st	LTE Band 12_Ant 0	10M_QPSK_1_0	Front	10mm	5/6	23095	707.5	24.34	25.70	1.368	-0.14	0.322	0.440	-5%
64	2nd	LTE Band 12_Ant 0	10M_QPSK_1_0	Front	10mm	5/6	23095	707.5	24.25	25.70	1.396	-0.07	0.298	0.416	
	1st	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	23095	707.5	24.17	25.20	1.268	-0.01	0.200	0.254	-7%
	2nd	LTE Band 12_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	23095	707.5	24.00	25.20	1.318	-0.1	0.179	0.236	
	1st	LTE Band 13_Ant 0	10M_QPSK_1_0	Front	10mm	5/6	23230	782	24.33	25.70	1.371	-0.14	0.381	0.522	-4%
65	2nd	LTE Band 13_Ant 0	10M_QPSK_1_0	Front	10mm	5/6	23230	782	24.14	25.70	1.432	-0.13	0.351	0.503	
	1st	LTE Band 13_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	23230	782	24.20	25.20	1.259	-0.19	0.247	0.311	0%
	2nd	LTE Band 13_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	23230	782	23.96	25.20	1.330	-0.1	0.233	0.310	
	1st	LTE Band 14_Ant 0	10M_QPSK_1_0	Front	10mm	5/6	23330	793	24.43	25.70	1.340	-0.15	0.360	0.482	-7%
66	2nd	LTE Band 14_Ant 0	10M_QPSK_1_0	Front	10mm	5/6	23330	793	24.27	25.70	1.390	-0.11	0.321	0.446	
	1st	LTE Band 14_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	23330	793	24.22	25.20	1.253	-0.19	0.261	0.327	-23%
	2nd	LTE Band 14_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	23330	793	23.84	25.20	1.368	-0.19	0.185	0.253	
	1st	LTE Band 25_Ant 2	20M_QPSK_50_0	Front	10mm	5/6	26340	1880	21.54	22.40	1.219	-0.14	0.813	0.991	-9%
67	2nd	LTE Band 25_Ant 2	20M_QPSK_50_0	Front	10mm	5/6	26340	1880	21.60	22.40	1.202	-0.17	0.753	0.905	
	1st	LTE Band 25_Ant 0	20M_QPSK_50_0	Back	10mm	5/6	26590	1905	21.33	23.10	1.503	-0.04	0.321	0.483	-5%
	2nd	LTE Band 25_Ant 0	20M_QPSK_50_0	Back	10mm	5/6	26590	1905	21.47	23.10	1.455	-0.04	0.314	0.457	
	1st	LTE Band 26_Ant 0	15M_QPSK_1_0	Back	10mm	5/6	26865	831.5	24.49	25.70	1.321	-0.15	0.346	0.457	-11%
68	2nd	LTE Band 26_Ant 0	15M_QPSK_1_0	Back	10mm	5/6	26865	831.5	24.45	25.70	1.334	-0.18	0.306	0.408	
	1st	LTE Band 5B_Ant 0	10M_QPSK_1_0	Back	10mm	5/6	20600+20501	844	22.86	24.00	1.300	-0.13	0.301	0.391	-3%
	2nd	LTE Band 5B_Ant 0	10M_QPSK_1_0	Back	10mm	5/6	20600+20501	844	22.72	24.00	1.343	-0.05	0.282	0.379	
	1st	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	5/6	26865	831.5	24.00	25.20	1.318	-0.17	0.290	0.382	-7%
	2nd	LTE Band 26_Ant 1	15M_QPSK_1_0	Back	10mm	5/6	26865	831.5	23.88	25.20	1.355	-0.1	0.262	0.355	
	1st	LTE Band 5B_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	20600+20501	844	22.32	23.50	1.312	0.1	0.250	0.328	-4%
	2nd	LTE Band 5B_Ant 1	10M_QPSK_1_0	Back	10mm	5/6	20600+20501	844	22.08	23.50	1.387	0.09	0.228	0.316	
	1st	LTE Band 30_Ant 2	10M_QPSK_1_0	Front	10mm	5/6	27710	2310	20.50	21.50	1.259	-0.17	0.507	0.638	-5%
	2nd	LTE Band 30_Ant 2	10M_QPSK_1_0	Front	10mm	5/6	27710	2310	20.58	21.50	1.236	0.16	0.489	0.604	
	1st	LTE Band 30_Ant 0	10M_QPSK_1_0	Front	10mm	5	27710	2310	23.14	24.20	1.276	0.18	0.502	0.641	-1%
69	2nd	LTE Band 30_Ant 0	10M_QPSK_1_0	Front	10mm	5	27710	2310	22.92	24.20	1.343	0.11	0.472	0.634	
	1st	LTE Band 30_Ant 0	10M_QPSK_25_0	Front	10mm	6	27710	2310	21.99	22.90	1.233	-0.11	0.433	0.534	-1%
	2nd	LTE Band 30_Ant 0	10M_QPSK_25_0	Front	10mm	6	27710	2310	22.92	23.40	1.117	0.11	0.472	0.527	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	LTE Band 41_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	40185	2549.5	22.52	23.80	1.343	62.9	1.006	-0.14	0.503	0.679	-10%
	2nd	LTE Band 41_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	40185	2549.5	22.36	23.80	1.393	62.9	1.006	-0.12	0.435	0.610	
	1st	LTE Band 41_HPUE_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	40185	2549.5	24.02	25.40	1.374	42.9	1.009	-0.16	0.477	0.661	-8%
70	2nd	LTE Band 41_HPUE_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	40185	2549.5	23.97	25.40	1.390	42.9	1.009	-0.16	0.435	0.610	
	1st	LTE Band 41C_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	41490+41292	2680	12.07	12.80	1.183	62.9	1.006	0.05	0.053	0.063	-21%
	2nd	LTE Band 41C_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	41490+41292	2680	11.95	12.80	1.216	62.9	1.006	0.11	0.041	0.050	
	1st	LTE Band 41_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	41055	2636.5	22.93	24.10	1.309	62.9	1.006	-0.17	0.474	0.624	-8%
	2nd	LTE Band 41_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	41055	2636.5	22.74	24.10	1.368	62.9	1.006	-0.01	0.419	0.577	
	1st	LTE Band 41_HPUE_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	40185	2549.5	24.29	25.70	1.384	42.9	1.009	-0.02	0.400	0.558	-10%
	2nd	LTE Band 41_HPUE_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	40185	2549.5	24.36	25.70	1.361	42.9	1.009	0.05	0.367	0.504	
	1st	LTE Band 41C_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	41490+41292	2680	11.44	12.30	1.219	62.9	1.006	0.06	0.039	0.048	-21%
	2nd	LTE Band 41C_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	41490+41292	2680	11.35	12.30	1.245	62.9	1.006	-0.03	0.030	0.038	
	1st	LTE Band 48_Ant 6	20M_QPSK_1_0	Front	10mm	5/6	56150	3641	22.66	22.70	1.009	62.9	1.006	0.17	0.599	0.608	-1%
71	2nd	LTE Band 48_Ant 6	20M_QPSK_1_0	Front	10mm	5/6	56150	3641	22.40	22.70	1.072	62.9	1.006	-0.09	0.559	0.603	
	1st	LTE Band 48_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	55340	3560	22.00	22.90	1.230	62.9	1.006	-0.18	0.394	0.488	-4%
	2nd	LTE Band 48_Ant 2	20M_QPSK_1_0	Back	10mm	5/6	55340	3560	21.90	22.90	1.259	62.9	1.006	-0.12	0.369	0.467	
	1st	LTE Band 66_Ant 2	20M_QPSK_50_0	Front	10mm	5/6	132572	1770	22.71	23.90	1.315			-0.1	0.590	0.776	-1%
72	2nd	LTE Band 66_Ant 2	20M_QPSK_50_0	Front	10mm	5/6	132572	1770	22.65	23.90	1.334			-0.13	0.578	0.771	
	1st	LTE Band 66C_Ant 2	15M_QPSK_1_0	Front	10mm	5/6	132597+132504	1772.5	21.05	22.20	1.303			-0.11	0.444	0.579	-3%
	2nd	LTE Band 66C_Ant 2	15M_QPSK_1_0	Front	10mm	5/6	132597+132504	1772.5	21.00	22.20	1.318			-0.12	0.428	0.564	
	1st	LTE Band 66C_Ant 2	20M_QPSK_1_99	Front	10mm	5/6	132072+132270	1720	20.97	22.20	1.327			0.08	0.403	0.535	-1%
	2nd	LTE Band 66C_Ant 2	20M_QPSK_1_99	Front	10mm	5/6	132072+132270	1720	20.95	22.20	1.334			-0.08	0.398	0.531	
	1st	LTE Band 66_Ant 0	20M_QPSK_50_0	Front	10mm	5/6	132322	1745	21.72	23.20	1.406			-0.1	0.281	0.395	-19%
	2nd	LTE Band 66_Ant 0	20M_QPSK_50_0	Front	10mm	5/6	132322	1745	21.46	23.20	1.493			-0.13	0.213	0.318	
	1st	LTE Band 66B_Ant 0	15M_QPSK_1_0	Front	10mm	5/6	132597+132504	1772.5	20.80	21.50	1.175			-0.12	0.327	0.384	-1%
	2nd	LTE Band 66B_Ant 0	15M_QPSK_1_0	Front	10mm	5/6	132597+132504	1772.5	20.50	21.50	1.259			0.07	0.302	0.380	
	1st	LTE Band 66C_Ant 0	20M_QPSK_1_99	Front	10mm	5/6	132072+132270	1720	20.11	21.50	1.377			0.1	0.280	0.386	0%
	2nd	LTE Band 66C_Ant 0	20M_QPSK_1_99	Front	10mm	5/6	132072+132270	1720	20.08	21.50	1.387			-0.13	0.279	0.387	
	1st	LTE Band 66_Ant 1	20M_QPSK_50_0	Front	10mm	5/6	132572	1770	24.11	24.70	1.146			0.16	0.594	0.680	-6.76%
	2nd	LTE Band 66_Ant 1	20M_QPSK_50_0	Front	10mm	5/6	132572	1770	24.01	24.70	1.172			0.01	0.541	0.634	
	1st	LTE Band 66_Ant 5	20M_QPSK_50_0	Front	10mm	5	132322	1745	22.65	23.60	1.245			0.01	0.586	0.729	-25.65%
	2nd	LTE Band 66_Ant 5	20M_QPSK_50_0	Front	10mm	5	132322	1745	22.48	23.60	1.294			0.08	0.419	0.542	
	1st	LTE Band 66_Ant 5	20M_QPSK_50_0	Front	10mm	6	132322	1745	22.65	22.80	1.035			0.01	0.586	0.607	-25.70%
	2nd	LTE Band 66_Ant 5	20M_QPSK_50_0	Front	10mm	6	132322	1745	22.48	22.80	1.076			0.08	0.419	0.451	
	1st	LTE Band 71_Ant 0	20M_QPSK_1_0	Front	10mm	5/6	133297	680.5	24.57	25.70	1.297			-0.13	0.320	0.415	-3%
73	2nd	LTE Band 71_Ant 0	20M_QPSK_1_0	Back	10mm	5/6	133297	680.5	24.35	25.70	1.365			-0.16	0.294	0.401	
	1st	LTE Band 71_Ant 1	20M_QPSK_1_0	Back	10mm	5/6	133297	680.5	23.98	25.20	1.324			-0.12	0.207	0.274	-4%
	2nd	LTE Band 71_Ant 1	20M_QPSK_1_0	Back	10mm	5/6	133297	680.5	23.81	25.20	1.377			-0.18	0.191	0.263	
	1st	FR1 n5_Ant 0	20M_BPSK_50_28	Front	10mm	5/6	167300	836.5	24.70	25.70	1.259			0	0.407	0.512	-10%
74	2nd	FR1 n5_Ant 0	20M_BPSK_50_28	Front	10mm	5/6	167300	836.5	24.62	25.70	1.282			-0.11	0.358	0.459	
	1st	FR1 n5_Ant 1	20M_BPSK_50_28	Back	10mm	5/6	167300	836.5	24.35	25.20	1.216			0.04	0.301	0.366	-1%
	2nd	FR1 n5_Ant 1	20M_BPSK_50_28	Back	10mm	5/6	167300	836.5	24.36	25.20	1.213			-0.12	0.300	0.364	
	1st	FR1 n7_Ant 2	50M_BPSK_1_1	Back	10mm	5/6	507000	2535	20.61	21.60	1.256			-0.05	0.527	0.662	-16%
75	2nd	FR1 n7_Ant 2	50M_BPSK_1_1	Back	10mm	5/6	507000	2535	20.52	21.60	1.282			-0.04	0.432	0.554	
	1st	FR1 n7_Ant 0	50M_BPSK_135_68	Front	10mm	5/6	507000	2535	21.04	22.10	1.276			0.02	0.385	0.491	-14%
	2nd	FR1 n7_Ant 0	50M_BPSK_135_68	Front	10mm	5/6	507000	2535	21.17	22.10	1.239			0.08	0.340	0.421	
	1st	FR1 n12_Ant 0	15M_BPSK_1_1	Back	10mm	5/6	141500	707.5	24.66	25.70	1.271			-0.11	0.353	0.449	-3%
76	2nd	FR1 n12_Ant 0	15M_BPSK_1_1	Back	10mm	5/6	141500	707.5	24.48	25.70	1.324			-0.1	0.329	0.436	
	1st	FR1 n12_Ant 1	15M_BPSK_36_22	Back	10mm	5/6	141500	707.5	24.27	25.20	1.239			-0.1	0.225	0.279	-8%
	2nd	FR1 n12_Ant 1	15M_BPSK_36_22	Back	10mm	5/6	141500	707.5	24.07	25.20	1.297			-0.12	0.197	0.256	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
	1st	FR1 n14_Ant 0	10M_BPSK_25_14	Front	10mm	5/6	158600	793	24.74	25.70	1.247	-0.07	0.425	0.530	-3%
77	2nd	FR1 n14_Ant 0	10M_BPSK_25_14	Front	10mm	5/6	158600	793	24.66	25.70	1.271	-0.06	0.406	0.516	
	1st	FR1 n14_Ant 1	10M_BPSK_25_14	Back	10mm	5/6	158600	793	24.34	25.20	1.219	-0.1	0.270	0.329	0%
	2nd	FR1 n14_Ant 1	10M_BPSK_25_14	Back	10mm	5/6	158600	793	24.27	25.20	1.239	-0.1	0.265	0.328	
	1st	FR1 n25_Ant 2	40M_BPSK_216_0	Front	10mm	5/6	376500	1882.5	20.91	22.40	1.409	-0.12	0.617	0.870	-2%
78	2nd	FR1 n25_Ant 2	40M_BPSK_216_0	Front	10mm	5/6	376500	1882.5	21.15	22.40	1.334	-0.05	0.637	0.849	
	1st	FR1 n25_Ant 0	40M_BPSK_108_54	Back	10mm	5/6	376500	1882.5	22.53	23.80	1.340	-0.17	0.377	0.505	-14%
	2nd	FR1 n25_Ant 0	40M_BPSK_108_54	Back	10mm	5/6	376500	1882.5	22.58	23.80	1.324	-0.13	0.327	0.433	
	1st	FR1 n30_Ant 2	10M_BPSK_25_14	Back	10mm	5/6	462000	2310	19.87	21.70	1.524	-0.13	0.469	0.715	-13%
	2nd	FR1 n30_Ant 2	10M_BPSK_25_14	Back	10mm	5/6	462000	2310	19.79	21.70	1.552	-0.17	0.400	0.621	
	1st	FR1 n30_Ant 0	10M_BPSK_25_14	Back	10mm	5/6	462000	2310	23.60	24.40	1.202	-0.11	0.654	0.786	-6%
79	2nd	FR1 n30_Ant 0	10M_BPSK_25_14	Back	10mm	5/6	462000	2310	23.45	24.40	1.245	-0.17	0.592	0.737	
	1st	FR1 n41_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	518598	2592.99	21.22	22.50	1.343	-0.04	0.581	0.780	-17%
80	2nd	FR1 n41_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	518598	2592.99	21.08	22.50	1.387	-0.06	0.468	0.649	
	1st	FR1 n41_Ant 0	100M_BPSK_135_69	Front	10mm	5/6	518598	2592.99	20.07	22.00	1.560	0.03	0.340	0.530	-1%
	2nd	FR1 n41_Ant 0	100M_BPSK_135_69	Front	10mm	5/6	518598	2592.99	20.06	22.00	1.563	0.02	0.336	0.525	
	1st	FR1 n48_Ant 6	10M_BPSK_12_6	Back	10mm	5/6	637000	3555	19.21	20.50	1.346	-0.12	0.207	0.279	0%
	2nd	FR1 n48_Ant 6	10M_BPSK_12_6	Back	10mm	5/6	637000	3555	19.00	20.50	1.413	-0.11	0.197	0.278	
	1st	FR1 n48_Ant 2	10M_BPSK_1_1	Back	10mm	5/6	637000	3555	19.32	20.80	1.406	-0.08	0.324	0.456	-15%
81	2nd	FR1 n48_Ant 2	10M_BPSK_1_1	Back	10mm	5/6	637000	3555	19.56	20.80	1.330	-0.13	0.290	0.386	
	1st	FR1 n66_Ant 2	40M_BPSK_1_1	Back	10mm	5/6	349000	1745	23.17	24.20	1.268	0	0.618	0.783	-4%
82	2nd	FR1 n66_Ant 2	40M_BPSK_1_1	Back	10mm	5/6	349000	1745	22.99	24.20	1.321	-0.01	0.571	0.754	
	1st	FR1 n66_Ant 0	40M_BPSK_1_1	Front	10mm	5/6	349000	1745	22.67	23.80	1.297	-0.06	0.352	0.457	-5%
	2nd	FR1 n66_Ant 0	40M_BPSK_1_1	Front	10mm	5/6	349000	1745	22.58	23.80	1.324	-0.1	0.326	0.432	
	1st	FR1 n71_Ant 0	20M_BPSK_50_28	Back	10mm	5/6	136100	680.5	24.92	25.70	1.197	-0.04	0.354	0.424	-8%
83	2nd	FR1 n71_Ant 0	20M_BPSK_50_28	Back	10mm	5/6	136100	680.5	24.85	25.70	1.216	-0.04	0.321	0.390	
	1st	FR1 n71_Ant 1	20M_BPSK_50_28	Back	10mm	5/6	136100	680.5	24.31	25.20	1.227	-0.11	0.229	0.281	-1%
	2nd	FR1 n71_Ant 1	20M_BPSK_50_28	Back	10mm	5/6	136100	680.5	24.05	25.20	1.303	-0.09	0.213	0.278	
	1st	FR1 n77_Ant 6	100M_BPSK_1_1	Front	10mm	5/6	656000	3840	19.35	20.30	1.245	-0.11	0.383	0.477	-5%
84	2nd	FR1 n77_Ant 6	100M_BPSK_1_1	Front	10mm	5/6	656000	3840	18.98	20.30	1.355	-0.11	0.333	0.451	
	1st	FR1 n77_Ant 6	100M_BPSK_1_1	Front	10mm	5/6	633332	3499.98	19.30	20.30	1.259	-0.18	0.263	0.331	-2%
	2nd	FR1 n77_Ant 6	100M_BPSK_1_1	Front	10mm	5/6	633332	3499.98	19.07	20.30	1.327	-0.17	0.245	0.325	
	1st	FR1 n77_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	633332	3499.98	18.22	19.60	1.374	-0.14	0.213	0.293	-1%
	2nd	FR1 n77_Ant 2	100M_BPSK_135_69	Back	10mm	5/6	633332	3499.98	17.92	19.60	1.472	-0.16	0.196	0.289	
	1st	FR1 n77_Ant 2	100M_BPSK_1_1	Back	10mm	5/6	656000	3840	18.59	19.60	1.262	-0.1	0.302	0.381	-2%
	2nd	FR1 n77_Ant 2	100M_BPSK_1_1	Back	10mm	5/6	656000	3840	18.69	19.60	1.233	-0.05	0.303	0.374	
	1st	FR1 n77_Ant 1	100M_BPSK_1_1	Back	10mm	5/6	656000	3840	21.97	22.80	1.211	-0.19	0.153	0.185	-5%
	2nd	FR1 n77_Ant 1	100M_BPSK_1_1	Back	10mm	5/6	656000	3840	21.95	22.80	1.216	-0.08	0.145	0.176	
	1st	FR1 n77_Ant 1	100M_BPSK_135_69	Front	10mm	5/6	633332	3499.98	21.95	22.80	1.216	-0.16	0.191	0.232	-28%
	2nd	FR1 n77_Ant 1	100M_BPSK_135_69	Front	10mm	5/6	633332	3499.98	21.12	22.80	1.472	-0.15	0.114	0.168	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Back	10mm	5/6	656000	3840	23.37	23.40	1.007	-0.03	0.264	0.266	-29%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Back	10mm	5/6	656000	3840	23.00	23.40	1.096	-0.09	0.172	0.189	
	1st	FR1 n77_Ant 5	100M_BPSK_1_1	Front	10mm	5/6	633332	3499.98	23.40	23.40	1.000	-0.14	0.313	0.313	-12%
	2nd	FR1 n77_Ant 5	100M_BPSK_1_1	Front	10mm	5/6	633332	3499.98	23.21	23.40	1.045	-0.16	0.263	0.275	

14.4 Product Specific SAR

Plot No.	No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Date
	1st	LTE Band 2_Ant 1	20M	QPSK	1	0	Top Side	0mm	5	19100	1900	22.63	23.30	1.167	0.06	2.540	2.964	-8.91%
	2nd	LTE Band 2_Ant 1	20M	QPSK	1	0	Top Side	0mm	5	19100	1900	22.45	23.30	1.216	0.04	2.220	2.700	
	1st	LTE Band 2_Ant 1	20M	QPSK	1	0	Top Side	0mm	6	19100	1900	21.59	22.50	1.233	-0.04	2.050	2.528	-10.32%
	2nd	LTE Band 2_Ant 1	20M	QPSK	1	0	Top Side	0mm	6	19100	1900	21.45	22.50	1.274	-0.14	1.780	2.267	
	1st	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	0mm	5	18700	1860	22.16	23.40	1.330	-0.02	2.220	2.954	-4.71%
85	2nd	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	0mm	5	18700	1860	21.85	23.40	1.429	-0.1	1.970	2.815	
	1st	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	0mm	6	18700	1860	22.16	22.60	1.107	-0.02	2.220	2.457	-4.72%
	2nd	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Side	0mm	6	18700	1860	21.85	22.60	1.189	-0.1	1.970	2.341	
	1st	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	0mm	5	132572	1770	22.57	23.60	1.268	-0.19	2.260	2.865	-3.60%
86	2nd	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	0mm	5	132572	1770	22.39	23.60	1.321	-0.07	2.090	2.762	
	1st	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	0mm	6	132572	1770	22.57	22.80	1.054	-0.19	2.260	2.383	-3.61%
	2nd	LTE Band 66_Ant 5	20M	QPSK	1	0	Right Side	0mm	6	132572	1770	22.39	22.80	1.099	-0.07	2.090	2.297	

Conclusion:

The spot check results don't show the SAR increase more than 30%, and all below 1.2W/kg for 1-g SAR, below 3W/kg for 10-g SAR. Referring to the guidance in the KDB inquiry, SAR data reuse is justified.

15. WLAN/BT 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 WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
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 ≥0.8W/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, UNII-4 and 6GHz WLAN product specific SAR is necessary too, due to an overall diagonal dimension is > 16cm.

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required when the WLAN5.3GHz band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for WLAN5.2GHz band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. WiFi 2.4/5/6GHz does not support SISO mode, so standalone SAR was only tested in MIMO mode operation
6. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain
7. 4+3(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3
8. 4+3(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4
9. During SAR testing the WLAN transmission was verified using a spectrum analyzer.
10. 0.001 represents SAR is very low and can't base on area scan measurement to find out SAR peak location to determine zoom scan measurement of 1g or 10g SAR.
11. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

WLAN PD Note:

1. The WiFi 6E PD was performed according 2020 TCB workshop RF Exposure 5G RFX Policies Interim Procedures.
2. First, evaluate SAR using 6-7 GHz parameters per IEC/IEEE 62209-1528:2020 and using highest SAR test configurations evaluate incident PD using the mmw near-field probe and total-field/power-density reconstruction method (2 mm closest meas. plane).
3. Per Interim Procedures. The power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor
4. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. The WiFi 6E RF Exposure results are used for simultaneous transmission analysis with the other transmitters and total exposure ratio, the analysis can be found in this report section 16.
6. Absorbed power density (APD) using a 4cm2 averaging area is reported based on SAR measurements.
7. Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
8. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
9. The measurement procedure consists of measuring the PDinc at two different distances: 2 mm (compliance distance) and λ/5. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPDn fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

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

RF Exposure position consideration

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

Positions for SAR / PD tests						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WLAN Ant 4+3	Yes	Yes	Yes	No	Yes	Yes
BT Ant 4	Yes	Yes	Yes	No	Yes	Yes
BT Ant 3	Yes	Yes	Yes	No	Yes	Yes

General Note:

1. Referring to KDB 941225 D06 v02r01 , when the overall device length and width are ≥ 9cm*5cm. RF Exposure 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 D.

15.1 Head SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	1	6	2437	13.40	13.50	1.023	98.24	1.018	0.14	0.166	0.173
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	1	6	2437	12.90	13.00	1.023	98.24	1.018	0.14	0.515	0.536
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	1	1	2412	13.40	13.50	1.023	98.24	1.018	-0.08	0.189	0.197
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	1	1	2412	12.70	13.00	1.072	98.24	1.018	-0.08	0.418	0.456
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	1	11	2462	13.40	13.50	1.023	98.24	1.018	-0.13	0.192	0.200
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	1	11	2462	12.90	13.00	1.023	98.24	1.018	-0.13	0.505	0.526
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	1	12	2467	13.10	13.50	1.096	98.24	1.018	0.02	0.143	0.160
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	1	12	2467	12.80	13.00	1.047	98.24	1.018	0.02	0.492	0.524
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	1	13	2472	12.00	12.50	1.122	98.24	1.018	-0.17	0.125	0.143
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	1	13	2472	12.40	12.50	1.023	98.24	1.018	-0.17	0.451	0.470
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(4)	1	6	2437	13.40	13.50	1.023	98.24	1.018	-0.12	0.260	0.271
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(3)	1	6	2437	12.90	13.00	1.023	98.24	1.018	-0.12	0.142	0.148
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	1	6	2437	13.40	13.50	1.023	98.24	1.018	-0.06	0.502	0.523
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	1	6	2437	12.90	13.00	1.023	98.24	1.018	-0.06	0.245	0.255
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	1	6	2437	13.40	13.50	1.023	98.24	1.018	-0.01	0.511	0.532
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	1	6	2437	12.90	13.00	1.023	98.24	1.018	-0.01	0.070	0.073

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	1	2412	16.40	16.50	1.023	98.24	1.018	-0.02	0.313	0.326
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	1	2412	15.20	15.50	1.072	98.24	1.018	-0.02	0.907	0.989
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	6	2437	16.40	16.50	1.023	98.24	1.018	-0.14	0.422	0.440
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	6	2437	15.10	15.50	1.096	98.24	1.018	-0.14	0.795	0.887
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	11	2462	16.30	16.50	1.047	98.24	1.018	-0.04	0.344	0.367
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	11	2462	15.10	15.50	1.096	98.24	1.018	-0.04	0.817	0.912
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	12	2467	16.10	16.50	1.096	98.24	1.018	-0.03	0.269	0.300
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	12	2467	15.20	15.50	1.072	98.24	1.018	-0.03	0.936	1.021
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(4)	2	13	2472	12.00	12.50	1.122	98.24	1.018	-0.12	0.134	0.153
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 4+3(3)	2	13	2472	12.40	12.50	1.023	98.24	1.018	-0.12	0.390	0.406
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(4)	2	1	2412	16.40	16.50	1.023	98.24	1.018	0.06	0.451	0.470
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 4+3(3)	2	1	2412	15.20	15.50	1.072	98.24	1.018	0.06	0.270	0.295
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	1	2412	16.40	16.50	1.023	98.24	1.018	-0.06	1.050	1.094
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	1	2412	15.20	15.50	1.072	98.24	1.018	-0.06	0.416	0.454
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	6	2437	16.40	16.50	1.023	98.24	1.018	-0.14	1.100	1.146
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	6	2437	15.10	15.50	1.096	98.24	1.018	-0.14	0.442	0.493
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	11	2462	16.30	16.50	1.047	98.24	1.018	-0.17	1.030	1.098
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	11	2462	15.10	15.50	1.096	98.24	1.018	-0.17	0.518	0.578
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	12	2467	16.10	16.50	1.096	98.24	1.018	-0.07	0.931	1.039
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	12	2467	15.20	15.50	1.072	98.24	1.018	-0.07	0.459	0.501
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(4)	2	13	2472	12.00	12.50	1.122	98.24	1.018	-0.13	0.373	0.426
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 4+3(3)	2	13	2472	12.40	12.50	1.023	98.24	1.018	-0.13	0.247	0.257
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	1	2412	16.40	16.50	1.023	98.24	1.018	-0.16	1.110	1.156
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	1	2412	15.20	15.50	1.072	98.24	1.018	-0.16	0.128	0.140
87	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	6	2437	16.40	16.50	1.023	98.24	1.018	-0.13	1.150	1.198
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	6	2437	15.10	15.50	1.096	98.24	1.018	-0.13	0.131	0.146
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	11	2462	16.30	16.50	1.047	98.24	1.018	-0.19	1.060	1.130
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	11	2462	15.10	15.50	1.096	98.24	1.018	-0.19	0.143	0.160
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	12	2467	16.10	16.50	1.096	98.24	1.018	-0.12	1.050	1.172
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	12	2467	15.20	15.50	1.072	98.24	1.018	-0.12	0.143	0.156
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	13	2472	12.00	12.50	1.122	98.24	1.018	-0.11	0.431	0.492
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	13	2472	12.40	12.50	1.023	98.24	1.018	-0.11	0.001	0.001

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1	58	5290	9.70	10.00	1.072	100	1.000	-0.06	0.044	0.047
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1	58	5290	7.70	8.00	1.072	100	1.000	-0.06	0.140	0.150
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	1	58	5290	9.70	10.00	1.072	100	1.000	-0.08	0.040	0.043
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	1	58	5290	7.70	8.00	1.072	100	1.000	-0.08	0.009	0.010
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1	58	5290	9.70	10.00	1.072	100	1.000	0.08	0.116	0.124
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1	58	5290	7.70	8.00	1.072	100	1.000	0.08	0.107	0.115
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	1	58	5290	9.70	10.00	1.072	100	1.000	-0.08	0.089	0.095
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	1	58	5290	7.70	8.00	1.072	100	1.000	-0.08	0.008	0.009
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	54	5270	17.50	18.00	1.122	100	1.000	-0.03	0.373	0.419
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	54	5270	16.50	16.50	1.000	100	1.000	-0.03	0.996	0.996
88	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	62	5310	17.60	18.00	1.096	100	1.000	-0.09	0.458	0.502
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	62	5310	16.00	16.50	1.122	100	1.000	-0.09	1.050	1.178
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	54	5270	17.50	18.00	1.122	100	1.000	-0.09	0.340	0.381
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	54	5270	16.50	16.50	1.000	100	1.000	-0.09	0.147	0.147
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	54	5270	17.50	18.00	1.122	100	1.000	0.13	0.680	0.763
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	54	5270	16.50	16.50	1.000	100	1.000	0.13	0.608	0.608
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	54	5270	17.50	18.00	1.122	100	1.000	-0.06	0.567	0.636
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	54	5270	16.50	16.50	1.000	100	1.000	-0.06	0.096	0.096

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1	122	5610	6.30	6.50	1.047	100	1.000	-0.13	0.026	0.027
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1	122	5610	8.90	9.00	1.023	100	1.000	-0.13	0.031	0.032
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	1	122	5610	6.30	6.50	1.047	100	1.000	-0.15	0.017	0.018
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	1	122	5610	8.90	9.00	1.023	100	1.000	-0.15	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1	122	5610	6.30	6.50	1.047	100	1.000	0.06	0.076	0.080
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1	122	5610	8.90	9.00	1.023	100	1.000	0.06	0.021	0.021
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1	106	5530	6.10	6.50	1.096	100	1.000	0.02	0.109	0.120
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1	106	5530	8.90	9.00	1.023	100	1.000	0.02	0.035	0.036
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1	138	5690	6.10	6.50	1.096	100	1.000	0.08	0.056	0.061
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1	138	5690	8.50	9.00	1.122	100	1.000	0.08	0.010	0.011
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	1	122	5610	6.30	6.50	1.047	100	1.000	-0.13	0.044	0.046
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	1	122	5610	8.90	9.00	1.023	100	1.000	-0.13	0.001	0.001
89	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	102	5510	14.40	15.50	1.288	100	1.000	-0.05	0.357	0.460
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	102	5510	16.80	17.50	1.175	100	1.000	-0.05	0.867	1.019
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	110	5550	14.30	15.50	1.318	100	1.000	0.08	0.363	0.479
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	110	5550	16.80	17.50	1.175	100	1.000	0.08	0.615	0.723
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	126	5630	14.20	15.50	1.349	100	1.000	-0.05	0.210	0.283
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	126	5630	16.80	17.50	1.175	100	1.000	-0.05	0.349	0.410
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	134	5670	14.30	15.50	1.318	100	1.000	0.15	0.195	0.257
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	134	5670	16.60	17.50	1.230	100	1.000	0.15	0.306	0.376
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	142	5710	14.40	15.50	1.288	100	1.000	0.13	0.232	0.299
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	142	5710	16.60	17.50	1.230	100	1.000	0.13	0.232	0.285
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(4)	2	102	5510	14.40	15.50	1.288	100	1.000	-0.04	0.330	0.425
	WLAN5GHz	802.11n-HT40 MCS0	Right Tilted	0mm	Ant 4+3(3)	2	102	5510	16.80	17.50	1.175	100	1.000	-0.04	0.076	0.089
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	102	5510	14.40	15.50	1.288	100	1.000	0.05	0.789	1.016
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	102	5510	16.80	17.50	1.175	100	1.000	0.05	0.567	0.666
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	110	5550	14.30	15.50	1.318	100	1.000	0.09	0.770	1.015
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	110	5550	16.80	17.50	1.175	100	1.000	0.09	0.472	0.555
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	126	5630	14.20	15.50	1.349	100	1.000	0.01	0.576	0.777
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	126	5630	16.80	17.50	1.175	100	1.000	0.01	0.211	0.248
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	134	5670	14.30	15.50	1.318	100	1.000	0.06	0.485	0.639
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	134	5670	16.60	17.50	1.230	100	1.000	0.06	0.183	0.225
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(4)	2	142	5710	14.40	15.50	1.288	100	1.000	0.13	0.482	0.621
	WLAN5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 4+3(3)	2	142	5710	16.60	17.50	1.230	100	1.000	0.13	0.482	0.593
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(4)	2	102	5510	14.40	15.50	1.288	100	1.000	-0.03	0.620	0.799
	WLAN5GHz	802.11n-HT40 MCS0	Left Tilted	0mm	Ant 4+3(3)	2	102	5510	16.80	17.50	1.175	100	1.000	-0.03	0.069	0.081

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1	155	5775	8.40	8.50	1.023	100	1.000	0.06	0.045	0.046
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1	155	5775	12.70	13.00	1.072	100	1.000	0.06	0.081	0.087
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	1	155	5775	8.40	8.50	1.023	100	1.000	-0.15	0.037	0.038
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	1	155	5775	12.70	13.00	1.072	100	1.000	-0.15	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1	155	5775	8.40	8.50	1.023	100	1.000	-0.03	0.129	0.132
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1	155	5775	12.70	13.00	1.072	100	1.000	-0.03	0.069	0.074
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	1	155	5775	8.40	8.50	1.023	100	1.000	0.17	0.070	0.072
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	1	155	5775	12.70	13.00	1.072	100	1.000	0.17	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	149	5745	15.90	16.50	1.148	100	1.000	-0.19	0.249	0.286
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	149	5745	18.80	19.00	1.047	100	1.000	-0.19	0.501	0.525
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3(4)	2	149	5745	15.90	16.50	1.148	100	1.000	-0.15	0.276	0.317
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3(3)	2	149	5745	18.80	19.00	1.047	100	1.000	-0.15	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	149	5745	15.90	16.50	1.148	100	1.000	0.18	0.716	0.822
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	149	5745	18.80	19.00	1.047	100	1.000	0.18	0.220	0.230
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	157	5785	15.80	16.50	1.175	100	1.000	-0.04	0.782	0.919
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	157	5785	18.80	19.00	1.047	100	1.000	-0.04	0.389	0.407
90	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	165	5825	15.60	16.50	1.230	100	1.000	-0.16	0.907	1.116
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	165	5825	18.60	19.00	1.096	100	1.000	-0.16	0.374	0.410
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3(4)	2	149	5745	15.90	16.50	1.148	100	1.000	-0.17	0.476	0.547
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3(3)	2	149	5745	18.80	19.00	1.047	100	1.000	-0.17	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1	171	5855	8.40	8.50	1.023	100	1.000	-0.04	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1	171	5855	11.80	12.00	1.047	100	1.000	-0.04	0.115	0.120
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(4)	1	171	5855	8.40	8.50	1.023	100	1.000	0.04	0.047	0.048
	WLAN5GHz	802.11ac-VHT80 MCS0	Right Tilted	0mm	Ant 4+3(3)	1	171	5855	11.80	12.00	1.047	100	1.000	0.04	0.001	0.001
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1	171	5855	8.40	8.50	1.023	100	1.000	0.09	0.142	0.145
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1	171	5855	11.80	12.00	1.047	100	1.000	0.09	0.069	0.072
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(4)	1	171	5855	8.40	8.50	1.023	100	1.000	0.18	0.110	0.113
	WLAN5GHz	802.11ac-VHT80 MCS0	Left Tilted	0mm	Ant 4+3(3)	1	171	5855	11.80	12.00	1.047	100	1.000	0.18	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	169	5845	15.90	16.00	1.023	100	1.000	-0.01	0.400	0.409
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	169	5845	18.80	19.00	1.047	100	1.000	-0.01	0.996	1.043
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	173	5865	15.70	16.00	1.072	100	1.000	-0.17	0.458	0.491
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	173	5865	18.90	19.00	1.023	100	1.000	-0.17	1.140	1.167
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	177	5885	15.60	16.00	1.096	100	1.000	-0.17	0.384	0.421
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	177	5885	16.40	17.00	1.148	100	1.000	-0.17	0.681	0.782
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3(4)	2	169	5845	15.90	16.00	1.023	100	1.000	-0.15	0.398	0.407
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 4+3(3)	2	169	5845	18.80	19.00	1.047	100	1.000	-0.15	0.061	0.064
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	169	5845	15.90	16.00	1.023	100	1.000	0.15	1.010	1.034
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	169	5845	18.80	19.00	1.047	100	1.000	0.15	0.577	0.604
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	173	5865	15.70	16.00	1.072	100	1.000	-0.03	1.090	1.168
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	173	5865	18.90	19.00	1.023	100	1.000	-0.03	0.486	0.497
91	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	177	5885	15.60	16.00	1.096	100	1.000	-0.15	1.080	1.184
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	177	5885	16.40	17.00	1.148	100	1.000	-0.15	0.350	0.402
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3(4)	2	169	5845	15.90	16.00	1.023	100	1.000	-0.17	0.637	0.652
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 4+3(3)	2	169	5845	18.80	19.00	1.047	100	1.000	-0.17	0.001	0.001

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	215	7025	8.30	9.00	1.175	100	1.000	-0.09	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	215	7025	8.70	9.00	1.072	100	1.000	-0.09	0.081	0.087	0.399	0.428
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	7	5985	8.30	9.00	1.175	100	1.000	0.15	0.054	0.063	0.142	0.167
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	7	5985	8.20	9.00	1.202	100	1.000	0.15	0.064	0.077	0.112	0.135
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	71	6305	8.90	9.00	1.023	100	1.000	-0.08	0.052	0.053	0.322	0.329
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	71	6305	8.00	9.00	1.259	100	1.000	-0.08	0.030	0.038	0.058	0.073
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	119	6545	7.10	9.00	1.549	100	1.000	0.08	0.001	0.002	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	119	6545	8.40	9.00	1.148	100	1.000	0.08	0.155	0.178	0.790	0.907
92	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(4)	1/2	167	6785	8.00	9.00	1.259	100	1.000	0.15	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Right Cheek	0mm	Ant 4+3(3)	1/2	167	6785	8.70	9.00	1.072	100	1.000	0.15	0.181	0.194	0.964	1.033
	WLAN6GHz	802.11ax-HE80 MCS0	Right Tilted	0mm	Ant 4+3(4)	1/2	215	7025	8.30	9.00	1.175	100	1.000	0.01	0.011	0.013	0.050	0.059
	WLAN6GHz	802.11ax-HE80 MCS0	Right Tilted	0mm	Ant 4+3(3)	1/2	215	7025	8.70	9.00	1.072	100	1.000	0.01	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4+3(4)	1/2	215	7025	8.30	9.00	1.175	100	1.000	0.05	0.038	0.045	0.152	0.179
	WLAN6GHz	802.11ax-HE80 MCS0	Left Cheek	0mm	Ant 4+3(3)	1/2	215	7025	8.70	9.00	1.072	100	1.000	0.05	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Left Tilted	0mm	Ant 4+3(4)	1/2	215	7025	8.30	9.00	1.175	100	1.000	0.01	0.029	0.034	0.159	0.187
	WLAN6GHz	802.11ax-HE80 MCS0	Left Tilted	0mm	Ant 4+3(3)	1/2	215	7025	8.70	9.00	1.072	100	1.000	0.01	0.001	0.001	0.000	0.000

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 4	1	39	2441	11.99	12.00	1.002	77.22	1.079	-0.1	0.134	0.145
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 4	1	39	2441	11.99	12.00	1.002	77.22	1.079	-0.11	0.169	0.183
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 4	1	39	2441	11.99	12.00	1.002	77.22	1.079	0.16	0.377	0.408
93	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	39	2441	11.99	12.00	1.002	77.22	1.079	-0.11	0.434	0.469
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	0	2402	11.52	12.00	1.117	77.22	1.079	0.14	0.377	0.454
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 4	1	78	2480	11.71	12.00	1.069	77.22	1.079	0.12	0.385	0.444
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	78	2480	11.88	12.00	1.028	76.83	1.084	-0.13	0.356	0.397
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	0	2402	11.51	12.00	1.119	76.83	1.084	0.12	0.232	0.282
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	1	39	2441	11.53	12.00	1.114	76.83	1.084	0.15	0.319	0.385
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 3	1	78	2480	11.88	12.00	1.028	76.83	1.084	0.16	0.030	0.033
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 3	1	78	2480	11.88	12.00	1.028	76.83	1.084	0.19	0.188	0.210
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 3	1	78	2480	11.88	12.00	1.028	76.83	1.084	0.14	0.019	0.021

15.2 Hotspot SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	3	1	2412	19.40	19.50	1.023	98.24	1.018	-0.12	0.397	0.414
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	3	1	2412	18.40	18.50	1.023	98.24	1.018	-0.12	0.337	0.351
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	3	1	2412	19.40	19.50	1.023	98.24	1.018	-0.11	0.367	0.382
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	3	1	2412	18.40	18.50	1.023	98.24	1.018	-0.11	0.292	0.304
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4+3(4)	3	1	2412	19.40	19.50	1.023	98.24	1.018	-0.14	0.001	0.001
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 4+3(3)	3	1	2412	18.40	18.50	1.023	98.24	1.018	-0.14	0.571	0.595
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4+3(4)	3	1	2412	19.40	19.50	1.023	98.24	1.018	-0.18	0.508	0.529
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 4+3(3)	3	1	2412	18.40	18.50	1.023	98.24	1.018	-0.18	0.001	0.001
94	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	1	2412	19.40	19.50	1.023	98.24	1.018	-0.14	0.572	0.596
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(3)	3	1	2412	18.40	18.50	1.023	98.24	1.018	-0.14	0.473	0.493
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	6	2437	19.30	19.50	1.047	98.24	1.018	-0.03	0.504	0.537
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(3)	3	6	2437	18.20	18.50	1.072	98.24	1.018	-0.03	0.314	0.343
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	11	2462	19.40	19.50	1.023	98.24	1.018	0.11	0.566	0.590
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(3)	3	11	2462	18.10	18.50	1.096	98.24	1.018	0.11	0.514	0.574
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	12	2467	16.00	16.50	1.122	98.24	1.018	-0.11	0.261	0.298
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(3)	3	12	2467	16.10	16.50	1.096	98.24	1.018	-0.11	0.229	0.256
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(4)	3	13	2472	12.00	12.50	1.122	98.24	1.018	-0.1	0.103	0.118
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 4+3(3)	3	13	2472	12.40	12.50	1.023	98.24	1.018	-0.1	0.098	0.102

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	36	5180	18.40	19.00	1.148	100	1.000	0.11	0.072	0.083
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	36	5180	18.10	19.00	1.230	100	1.000	0.11	0.182	0.224
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	36	5180	18.40	19.00	1.148	100	1.000	-0.01	0.107	0.123
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	36	5180	18.10	19.00	1.230	100	1.000	-0.01	0.245	0.301
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	40	5200	18.30	19.00	1.175	100	1.000	-0.08	0.121	0.142
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	40	5200	18.00	19.00	1.259	100	1.000	-0.08	0.252	0.317
95	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	44	5220	18.40	19.00	1.148	100	1.000	-0.17	0.166	0.191
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	44	5220	18.10	19.00	1.230	100	1.000	-0.17	0.331	0.407
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	48	5240	18.40	19.00	1.148	100	1.000	-0.12	0.134	0.154
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	48	5240	18.00	19.00	1.259	100	1.000	-0.12	0.262	0.330
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(4)	3	36	5180	18.40	19.00	1.148	100	1.000	0.06	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	36	5180	18.10	19.00	1.230	100	1.000	0.06	0.177	0.218
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(4)	3	36	5180	18.40	19.00	1.148	100	1.000	0.09	0.068	0.078
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(3)	3	36	5180	18.10	19.00	1.230	100	1.000	0.09	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(4)	3	36	5180	18.40	19.00	1.148	100	1.000	0.18	0.164	0.188
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(3)	3	36	5180	18.10	19.00	1.230	100	1.000	0.18	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	3	157	5785	18.90	19.00	1.023	100	1.000	-0.18	0.187	0.191
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	3	157	5785	18.80	19.00	1.047	100	1.000	-0.18	0.076	0.080
96	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	157	5785	18.90	19.00	1.023	100	1.000	-0.1	0.415	0.425
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	157	5785	18.80	19.00	1.047	100	1.000	-0.1	0.095	0.099
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	149	5745	18.70	19.00	1.072	100	1.000	-0.14	0.238	0.255
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	149	5745	18.80	19.00	1.047	100	1.000	-0.14	0.065	0.068
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	3	165	5825	18.60	19.00	1.096	100	1.000	-0.09	0.283	0.310
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	3	165	5825	18.60	19.00	1.096	100	1.000	-0.09	0.090	0.099
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(4)	3	157	5785	18.90	19.00	1.023	100	1.000	0.15	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	10mm	Ant 4+3(3)	3	157	5785	18.80	19.00	1.047	100	1.000	0.15	0.113	0.118
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(4)	3	157	5785	18.90	19.00	1.023	100	1.000	-0.17	0.210	0.215
	WLAN5GHz	802.11a 6Mbps	Right Side	10mm	Ant 4+3(3)	3	157	5785	18.80	19.00	1.047	100	1.000	-0.17	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(4)	3	157	5785	18.90	19.00	1.023	100	1.000	-0.1	0.290	0.297
	WLAN5GHz	802.11a 6Mbps	Top Side	10mm	Ant 4+3(3)	3	157	5785	18.80	19.00	1.047	100	1.000	-0.1	0.001	0.001

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.11	0.122	0.132
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.19	0.121	0.131
	Bluetooth	1Mbps	Left Side	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.12	0.002	0.002
	Bluetooth	1Mbps	Right Side	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.1	0.086	0.093
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.05	0.227	0.245
	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	0	2402	14.53	15.00	1.114	77.22	1.079	-0.07	0.222	0.267
97	Bluetooth	1Mbps	Top Side	10mm	Ant 4	4	78	2480	14.62	15.00	1.091	77.22	1.079	-0.04	0.242	0.285
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	-0.03	0.128	0.139
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	-0.12	0.111	0.121
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	-0.06	0.200	0.218
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	0	2402	14.51	15.00	1.119	76.83	1.084	-0.02	0.125	0.152
	Bluetooth	1Mbps	Left Side	10mm	Ant 3	4	39	2441	14.53	15.00	1.114	76.83	1.084	-0.12	0.196	0.237
	Bluetooth	1Mbps	Right Side	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	-0.05	0.001	0.001
	Bluetooth	1Mbps	Top Side	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	0.1	0.017	0.019

15.3 Body Worn Accessory SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	4/5/6	11	2462	19.90	20.00	1.023	98.24	1.018	-0.16	0.370	0.385
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	4/5/6	11	2462	19.80	20.00	1.047	98.24	1.018	-0.16	0.474	0.505
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	4/5/6	1	2412	19.90	20.00	1.023	98.24	1.018	-0.13	0.306	0.319
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	4/5/6	1	2412	19.50	20.00	1.122	98.24	1.018	-0.13	0.446	0.509
98	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	4/5/6	6	2437	19.80	20.00	1.047	98.24	1.018	-0.17	0.420	0.448
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	4/5/6	6	2437	19.80	20.00	1.047	98.24	1.018	-0.17	0.522	0.556
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	4/5/6	12	2467	16.00	16.50	1.122	98.24	1.018	0.05	0.162	0.185
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	4/5/6	12	2467	16.10	16.50	1.096	98.24	1.018	0.05	0.228	0.254
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(4)	4/5/6	13	2472	12.00	12.50	1.122	98.24	1.018	-0.06	0.061	0.070
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 4+3(3)	4/5/6	13	2472	12.40	12.50	1.023	98.24	1.018	-0.06	0.093	0.097
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(4)	4/5/6	11	2462	19.90	20.00	1.023	98.24	1.018	-0.09	0.470	0.490
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 4+3(3)	4/5/6	11	2462	19.80	20.00	1.047	98.24	1.018	-0.09	0.453	0.483

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	5	36	5180	18.40	19.00	1.148	100	1.000	0.11	0.072	0.083
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	5	36	5180	18.10	19.00	1.230	100	1.000	0.11	0.182	0.224
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	36	5180	18.40	19.00	1.148	100	1.000	-0.01	0.107	0.123
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	36	5180	18.10	19.00	1.230	100	1.000	-0.01	0.245	0.301
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	40	5200	18.30	19.00	1.175	100	1.000	-0.08	0.121	0.142
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	40	5200	18.00	19.00	1.259	100	1.000	-0.08	0.252	0.317
99	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	44	5220	18.40	19.00	1.148	100	1.000	-0.17	0.166	0.191
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	44	5220	18.10	19.00	1.230	100	1.000	-0.17	0.331	0.407
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	48	5240	18.40	19.00	1.148	100	1.000	-0.12	0.134	0.154
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	48	5240	18.00	19.00	1.259	100	1.000	-0.12	0.262	0.330
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	-0.11	0.155	0.174
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	-0.11	0.282	0.347
100	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	-0.13	0.177	0.199
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	-0.13	0.375	0.461
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	52	5260	18.50	19.00	1.122	100	1.000	-0.15	0.157	0.176
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	52	5260	18.10	19.00	1.230	100	1.000	-0.15	0.295	0.363
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	56	5280	18.50	19.00	1.122	100	1.000	-0.12	0.157	0.176
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	56	5280	18.00	19.00	1.259	100	1.000	-0.12	0.311	0.392
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	64	5320	18.50	19.00	1.122	100	1.000	-0.19	0.204	0.229
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	64	5320	18.10	19.00	1.230	100	1.000	-0.19	0.350	0.431
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	0.03	0.246	0.310
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	0.03	0.255	0.314
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	0.11	0.293	0.369
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	0.11	0.299	0.368
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	116	5580	17.80	19.00	1.318	100	1.000	-0.1	0.227	0.299
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	116	5580	18.10	19.00	1.230	100	1.000	-0.1	0.118	0.145
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	124	5620	17.90	19.00	1.288	100	1.000	0.09	0.147	0.189
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	124	5620	18.00	19.00	1.259	100	1.000	0.09	0.076	0.096
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	132	5660	18.00	19.00	1.259	100	1.000	-0.1	0.127	0.160
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	132	5660	17.80	19.00	1.318	100	1.000	-0.1	0.053	0.070
101	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	144	5720	18.10	19.00	1.230	100	1.000	-0.12	0.339	0.417
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	144	5720	17.90	19.00	1.288	100	1.000	-0.12	0.062	0.080
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	4/5/6	157	5785	18.90	19.00	1.023	100	1.000	-0.18	0.187	0.191
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	4/5/6	157	5785	18.80	19.00	1.047	100	1.000	-0.18	0.076	0.080
102	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	157	5785	18.90	19.00	1.023	100	1.000	-0.1	0.415	0.425
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	157	5785	18.80	19.00	1.047	100	1.000	-0.1	0.095	0.099
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	149	5745	18.70	19.00	1.072	100	1.000	-0.14	0.238	0.255
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	149	5745	18.80	19.00	1.047	100	1.000	-0.14	0.065	0.068
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/5/6	165	5825	18.60	19.00	1.096	100	1.000	-0.09	0.283	0.310
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/5/6	165	5825	18.60	19.00	1.096	100	1.000	-0.09	0.283	0.310

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	0.07	0.187	0.290
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	0.07	0.101	0.133
103	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	-0.13	0.356	0.551
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	-0.13	0.128	0.169
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	169	5845	17.10	19.00	1.549	100	1.000	-0.17	0.230	0.356
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	169	5845	17.70	19.00	1.349	100	1.000	-0.17	0.107	0.144
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	4/6	177	5885	15.60	17.00	1.380	100	1.000	-0.14	0.175	0.242
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	4/6	177	5885	16.40	17.00	1.148	100	1.000	-0.14	0.101	0.116
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	0.07	0.187	0.230
	WLAN5GHz	802.11a 6Mbps	Front	10mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	0.07	0.101	0.133
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	-0.13	0.356	0.438
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	-0.13	0.128	0.169
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	169	5845	17.10	18.00	1.230	100	1.000	-0.17	0.230	0.283
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	169	5845	17.70	19.00	1.349	100	1.000	-0.17	0.107	0.144
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(4)	5	177	5885	15.60	17.00	1.380	100	1.000	-0.14	0.175	0.242
	WLAN5GHz	802.11a 6Mbps	Back	10mm	Ant 4+3(3)	5	177	5885	16.40	17.00	1.148	100	1.000	-0.14	0.101	0.116

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Repored APD (W/m^2)
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	0.07	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Front	10mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	0.07	0.019	0.020	0.138	0.148
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	-0.05	0.025	0.029	0.209	0.246
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	-0.05	0.090	0.096	0.632	0.678
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	4/5/6	7	5985	8.30	9.00	1.175	100	1.000	0.16	0.027	0.032	0.067	0.079
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(3)	4/5/6	7	5985	8.20	9.00	1.202	100	1.000	0.16	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	4/5/6	71	6305	8.90	9.00	1.023	100	1.000	0.1	0.015	0.015	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(3)	4/5/6	71	6305	8.00	9.00	1.259	100	1.000	0.1	0.001	0.001	0.136	0.171
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	4/5/6	119	6545	7.10	9.00	1.549	100	1.000	0.06	0.001	0.002	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(3)	4/5/6	119	6545	8.40	9.00	1.148	100	1.000	0.06	0.078	0.090	0.672	0.771
104	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	4/5/6	167	6785	8.00	9.00	1.259	100	1.000	-0.09	0.001	0.001	0.000	0.000
	WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(3)	4/5/6	167	6785	8.70	9.00	1.072	100	1.000	-0.09	0.106	0.114	0.856	0.918

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	10mm	Ant 4	2/3	78	2480	18.83	20.00	1.310	77.1	1.080	-0.03	0.276	0.391
	Bluetooth	1Mbps	Front	10mm	Ant 4	2/3	0	2402	18.44	20.00	1.434	77.1	1.080	-0.06	0.304	0.471
	Bluetooth	1Mbps	Front	10mm	Ant 4	2/3	39	2441	18.66	20.00	1.363	77.1	1.080	-0.15	0.312	0.459
	Bluetooth	1Mbps	Back	10mm	Ant 4	2/3	78	2480	18.83	20.00	1.310	77.1	1.080	0.03	0.230	0.326
105	Bluetooth	1Mbps	Front	10mm	Ant 3	2/3	78	2480	18.33	20.00	1.468	77.1	1.080	0	0.353	0.560
	Bluetooth	1Mbps	Front	10mm	Ant 3	2/3	39	2441	18.31	20.00	1.475	77.1	1.080	-0.1	0.326	0.519
	Bluetooth	1Mbps	Front	10mm	Ant 3	2/3	0	2402	18.01	20.00	1.581	77.1	1.080	0	0.223	0.381
	Bluetooth	1Mbps	Back	10mm	Ant 3	2/3	78	2480	18.33	20.00	1.468	77.1	1.080	-0.1	0.280	0.443
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.11	0.122	0.132
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	0	2402	14.53	15.00	1.114	77.22	1.079	-0.09	0.100	0.120
	Bluetooth	1Mbps	Front	10mm	Ant 4	4	78	2480	14.62	15.00	1.091	77.22	1.079	-0.05	0.090	0.106
	Bluetooth	1Mbps	Back	10mm	Ant 4	4	39	2441	14.99	15.00	1.002	77.22	1.079	-0.19	0.121	0.131
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	-0.03	0.128	0.139
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	0	2402	14.51	15.00	1.119	76.83	1.084	-0.07	0.070	0.085
	Bluetooth	1Mbps	Front	10mm	Ant 3	4	39	2441	14.53	15.00	1.114	76.83	1.084	-0.01	0.107	0.129
	Bluetooth	1Mbps	Back	10mm	Ant 3	4	78	2480	14.98	15.00	1.005	76.83	1.084	-0.12	0.111	0.121

15.4 Product Specific SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	-0.14	0.544	0.610
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	-0.14	1.340	1.649
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	-0.11	0.336	0.377
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	-0.11	0.692	0.851
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	0.18	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	0.18	1.510	1.858
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/6	52	5260	18.50	19.00	1.122	100	1.000	0.15	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/6	52	5260	18.10	19.00	1.230	100	1.000	0.15	1.610	1.981
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/6	56	5280	18.50	19.00	1.122	100	1.000	0.1	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/6	56	5280	18.00	19.00	1.259	100	1.000	0.1	1.690	2.128
106	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/6	64	5320	18.50	19.00	1.122	100	1.000	0.13	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/6	64	5320	18.10	19.00	1.230	100	1.000	0.13	1.820	2.239
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	0.03	0.498	0.559
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	0.03	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	4/6	60	5300	18.50	19.00	1.122	100	1.000	-0.02	0.622	0.698
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(3)	4/6	60	5300	18.10	19.00	1.230	100	1.000	-0.02	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	5	60	5300	18.80	19.00	1.047	100	1.000	-0.1	0.558	0.584
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	5	60	5300	17.90	18.00	1.023	100	1.000	-0.1	1.270	1.300
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	5	60	5300	18.80	19.00	1.047	100	1.000	-0.13	0.368	0.385
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	5	60	5300	17.90	18.00	1.023	100	1.000	-0.13	0.932	0.954
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	5	60	5300	18.80	19.00	1.047	100	1.000	0.01	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	5	60	5300	17.90	18.00	1.023	100	1.000	0.01	1.700	1.740
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	5	60	5300	18.80	19.00	1.047	100	1.000	-0.06	0.311	0.326
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(3)	5	60	5300	17.90	18.00	1.023	100	1.000	-0.06	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	5	60	5300	18.80	19.00	1.047	100	1.000	-0.18	0.564	0.591
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(3)	5	60	5300	17.90	18.00	1.023	100	1.000	-0.18	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	0.1	0.773	0.973
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	0.1	0.640	0.787
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	0.15	0.327	0.412
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	0.15	0.454	0.559
107	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	-0.13	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	-0.13	0.861	1.059
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/5/6	116	5580	17.80	19.00	1.318	100	1.000	-0.18	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/5/6	116	5580	18.10	19.00	1.230	100	1.000	-0.18	0.460	0.566
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/5/6	124	5620	17.90	19.00	1.288	100	1.000	-0.12	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/5/6	124	5620	18.00	19.00	1.259	100	1.000	-0.12	0.443	0.558
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/5/6	132	5660	18.00	19.00	1.259	100	1.000	-0.15	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/5/6	132	5660	17.80	19.00	1.318	100	1.000	-0.15	0.374	0.493
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/5/6	144	5720	18.10	19.00	1.230	100	1.000	-0.19	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/5/6	144	5720	17.90	19.00	1.288	100	1.000	-0.19	0.391	0.504
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	-0.14	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	-0.14	0.538	0.662
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	4/5/6	100	5500	18.00	19.00	1.259	100	1.000	-0.01	0.823	1.036
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(3)	4/5/6	100	5500	18.10	19.00	1.230	100	1.000	-0.01	0.001	0.001

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
108	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	-0.04	1.120	1.735
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	-0.04	0.664	0.875
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	4/6	169	5845	17.10	19.00	1.549	100	1.000	-0.18	0.884	1.369
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	4/6	169	5845	17.70	19.00	1.349	100	1.000	-0.18	0.469	0.633
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	4/6	177	5885	15.60	17.00	1.380	100	1.000	-0.11	0.734	1.013
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	4/6	177	5885	16.40	17.00	1.148	100	1.000	-0.11	0.348	0.400
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	-0.06	0.605	0.937
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	-0.06	0.423	0.558
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	-0.08	0.001	0.002
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	-0.08	0.885	1.167
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	-0.19	0.861	1.334
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	-0.19	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	4/6	173	5865	17.10	19.00	1.549	100	1.000	-0.16	0.580	0.898
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(3)	4/6	173	5865	17.80	19.00	1.318	100	1.000	-0.16	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	-0.04	1.120	1.378
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	-0.04	0.664	0.875
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	5	169	5845	17.10	18.00	1.230	100	1.000	-0.18	0.884	1.088
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	5	169	5845	17.70	19.00	1.349	100	1.000	-0.18	0.469	0.633
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(4)	5	177	5885	15.60	17.00	1.380	100	1.000	-0.11	0.734	1.013
	WLAN5GHz	802.11a 6Mbps	Front	0mm	Ant 4+3(3)	5	177	5885	16.40	17.00	1.148	100	1.000	-0.11	0.348	0.400
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	-0.06	0.605	0.744
	WLAN5GHz	802.11a 6Mbps	Back	0mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	-0.06	0.423	0.558
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	-0.08	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Left Side	0mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	-0.08	0.885	1.167
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	-0.19	0.861	1.059
	WLAN5GHz	802.11a 6Mbps	Right Side	0mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	-0.19	0.001	0.001
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(4)	5	173	5865	17.10	18.00	1.230	100	1.000	-0.16	0.580	0.714
	WLAN5GHz	802.11a 6Mbps	Top Side	0mm	Ant 4+3(3)	5	173	5865	17.80	19.00	1.318	100	1.000	-0.16	0.001	0.001

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
	WLAN6GHz	802.11ax-HE80 MCS0	Front	0mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	0.19	0.028	0.033	0.672	0.790
	WLAN6GHz	802.11ax-HE80 MCS0	Front	0mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	0.19	0.060	0.064	1.460	1.565
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	0.19	0.026	0.031	0.603	0.709
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	0.19	0.110	0.118	2.580	2.766
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(4)	4/5/6	7	5985	8.30	9.00	1.175	100	1.000	0.18	0.033	0.039	0.819	0.962
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(3)	4/5/6	7	5985	8.20	9.00	1.202	100	1.000	0.18	0.033	0.040	0.818	0.983
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(4)	4/5/6	71	6305	8.90	9.00	1.023	100	1.000	0.14	0.046	0.047	1.130	1.156
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(3)	4/5/6	71	6305	8.00	9.00	1.259	100	1.000	0.14	0.033	0.042	0.833	1.049
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(4)	4/5/6	119	6545	7.10	9.00	1.549	100	1.000	0.16	0.026	0.040	0.594	0.920
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(3)	4/5/6	119	6545	8.40	9.00	1.148	100	1.000	0.16	0.106	0.122	2.470	2.836
109	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(4)	4/5/6	167	6785	8.00	9.00	1.259	100	1.000	0.14	0.033	0.042	0.745	0.938
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 4+3(3)	4/5/6	167	6785	8.70	9.00	1.072	100	1.000	0.14	0.166	0.178	3.880	4.159
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	0mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	0.01	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	0mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	0.01	0.069	0.074	1.610	1.726
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	0mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	-0.16	0.010	0.012	0.224	0.263
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	0mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	-0.16	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	0mm	Ant 4+3(4)	4/5/6	215	7025	8.30	9.00	1.175	100	1.000	0.01	0.015	0.018	0.365	0.429
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	0mm	Ant 4+3(3)	4/5/6	215	7025	8.70	9.00	1.072	100	1.000	0.01	0.001	0.001	0.001	0.001

15.5 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m^2)	Total psPD (W/m^2)
WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(4)	7	5985	8.30	0.0625	1.09	-0.07896481	1.54	1.83
WLAN6GHz	802.11ax-HE80 MCS0	Back	10mm	Ant 4+3(4)	7	5985	8.30	0.25	1.11		0.424	0.485
WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(3)	215	7025	8.70	0.0625	1.73	-0.75821117	1.62	1.93
WLAN6GHz	802.11ax-HE80 MCS0	Back	8.59mm	Ant 4+3(3)	215	7025	8.70	0.25	2.06		0.667	0.781

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)
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(4)	7	5985	8.30	9.00	1.175	100.00	1.000	0.0625	1.5535	-0.17	1.54	2.81	1.83	3.34
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(4)	71	6305	8.90	9.00	1.023	100.00	1.000	0.0625	1.5535	-0.16	1.67	2.65	1.93	3.07
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(3)	119	6545	8.40	9.00	1.148	100.00	1.000	0.0625	1.5535	-0.12	1.88	3.35	2.25	4.01
01	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(3)	167	6785	8.70	9.00	1.072	100.00	1.000	0.0625	1.5535	-0.16	3.33	5.54	3.66	6.09
	WLAN6GHz	802.11ax-HE80 MCS0	Back	2mm	Ant 4+3(3)	215	7025	8.70	9.00	1.072	100.00	1.000	0.0625	1.5535	-0.17	1.62	2.70	1.93	3.21
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	7	5985	8.30	9.00	1.175	100.00	1.000	0.0625	1.5535	-0.07	2.1	3.83	2.29	4.18
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(4)	71	6305	8.90	9.00	1.023	100.00	1.000	0.0625	1.5535	0.07	1.76	2.80	1.87	2.97
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(3)	119	6545	8.40	9.00	1.148	100.00	1.000	0.0625	1.5535	-0.1	2.87	5.12	3.01	5.37
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(3)	167	6785	8.70	9.00	1.072	100.00	1.000	0.0625	1.5535	0.09	0.787	1.31	1.06	1.76
	WLAN6GHz	802.11ax-HE80 MCS0	Front	2mm	Ant 4+3(3)	215	7025	8.70	9.00	1.072	100.00	1.000	0.0625	1.5535	0.06	0.71	1.18	0.861	1.43
	WLAN6GHz	802.11ax-HE80 MCS0	Left Side	2mm	Ant 4+3(3)	215	7025	8.70	9.00	1.072	100.00	1.000	0.0625	1.5535	0.15	1.65	2.75	1.81	3.01
	WLAN6GHz	802.11ax-HE80 MCS0	Right Side	2mm	Ant 4+3(4)	215	7025	8.30	9.00	1.175	100.00	1.000	0.0625	1.5535	0.1	1.62	2.96	1.75	3.19
	WLAN6GHz	802.11ax-HE80 MCS0	Top Side	2mm	Ant 4+3(4)	215	7025	8.30	9.00	1.175	100.00	1.000	0.0625	1.5535	-0.08	0.24	0.44	0.256	0.47

15.6 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power Index	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	6	2437	16.40	16.50	1.023	98.24	1.018	-0.13	1.150	-	1.198
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	6	2437	15.10	15.50	1.096	98.24	1.018	-0.13	0.131		0.146
2nd	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(4)	2	6	2437	16.40	16.50	1.023	98.24	1.018	0.11	1.132	1.02	1.179
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 4+3(3)	2	6	2437	15.10	15.50	1.096	98.24	1.018	0.11	0.109		0.122
1st	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	62	5310	17.60	18.00	1.096	100	1.000	-0.09	0.458	-	0.502
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	62	5310	16.00	16.50	1.122	100	1.000	-0.09	1.050		1.178
2nd	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	62	5310	17.60	18.00	1.096	100	1.000	-0.05	0.451	1.01	0.495
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	62	5310	16.00	16.50	1.122	100	1.000	-0.05	1.039		1.166
1st	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	102	5510	14.40	15.50	1.288	100	1.000	-0.05	0.357	-	0.460
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	102	5510	16.80	17.50	1.175	100	1.000	-0.05	0.867		1.019
2nd	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(4)	2	102	5510	14.40	15.50	1.288	100	1.000	-0.19	0.355	1.01	0.457
	WLAN5GHz	802.11n-HT40 MCS0	Right Cheek	0mm	Ant 4+3(3)	2	102	5510	16.80	17.50	1.175	100	1.000	-0.19	0.862		1.013
1st	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	165	5825	15.60	16.50	1.230	100	1.000	-0.16	0.907	-	1.116
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	165	5825	18.60	19.00	1.096	100	1.000	-0.16	0.374		0.410
2nd	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(4)	2	165	5825	15.60	16.50	1.230	100	1.000	-0.11	0.905	1.00	1.113
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 4+3(3)	2	165	5825	18.60	19.00	1.096	100	1.000	-0.11	0.371		0.407
1st	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	173	5865	15.70	16.00	1.072	100	1.000	-0.17	0.458	-	0.491
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	173	5865	18.90	19.00	1.023	100	1.000	-0.17	1.140		1.167
2nd	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(4)	2	173	5865	15.70	16.00	1.072	100	1.000	0.18	0.423	1.05	0.453
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 4+3(3)	2	173	5865	18.90	19.00	1.023	100	1.000	0.18	1.090		1.115

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥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. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

16. Simultaneous Transmission Analysis

Exposure Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi Power	BT Power
Head	WWAN standalone	WWAN	Index 2		
	WiFi standalone	WiFi 2.4G MIMO/CDD (Ant4+3)		Index 2	
		WiFi 5G MIMO (Ant4+3)			
		WiFi 6E MIMO (Ant4+3)			
	WiFi +BT	WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)		Index 2	Index 1
		WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)			
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)			
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)			
	WWAN + WiFi	WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)	Index 3	Index 1	
		WWAN + WiFi 5G MIMO (Ant4+3)			
		WWAN + WiFi 6E MIMO (Ant4+3)			
	WWAN + BT	WWAN + Bluetooth (Ant4)			Index 1
		WWAN + Bluetooth (Ant3)			
	WWAN + WiFi +BT	WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)		Index 1	Index 1
		WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)			
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)			
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)			
Body	WWAN standalone	WWAN	Index 5		
	WiFi standalone	WiFi 2.4G MIMO/CDD (Ant4+3)		Index 6	
		WiFi 5G MIMO (Ant4+3)			
		WiFi 6E MIMO (Ant4+3)			
	BT standalone	Bluetooth (Ant4)			Index 2
		Bluetooth (Ant3)			
	WiFi +BT	WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)		Index 6	Index 3
		WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)			
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)			
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)			
	WWAN + WiFi	WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)	Index 6 / Index 4 (Hotspot)	Index 4	
		WWAN + WiFi 5G MIMO (Ant4+3)			
		WWAN + WiFi 6E MIMO (Ant4+3)			
	WWAN + BT	WWAN + Bluetooth (Ant4)	Index 6		Index 3
		WWAN + Bluetooth (Ant3)			
	WWAN + WiFi +BT	WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)	Index 6 / Index 4 (Hotspot)	Index 5 / Index 3 (Hotspot)	Index 4
		WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)			
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)			
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)			

General Note:

1. 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 no.: FA280208-01A
2. The Sim-Tx configuration combination include in operation description will be match the title in the below Sum-Tx evaluation table.
3. This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
4. The worst case reported SAR from each transmit antennas were using for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission configuration.
5. The SAR summation is calculated based on the same exposure configuration and test position from each transmit antenna worst case reported SAR results.
6. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   ii) SPLSR = (SAR1 + SAR2)^1.5 / (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.
   iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
7. 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.
8. WiFi 2.4/5/6 GHz does not support SISO mode, so standalone SAR was only tested in MIMO mode operation

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

Samsung proprietary TAS feature manages transmitting power effectively in real time and ensures that overall average RF exposure from 4G/5G NR WWAN including 5GNR EN-DC, and LTE intra-band/inter-band uplink CA are in compliance with FCC requirements, while the RF exposure from 2G, 3G and WLAN/BT radios is managed using the legacy approach, i.e., through a fixed power back-off if needed. The test device features a TAS function to keep average RF exposure below the given limit for all cases while allowing temporarily high power transmission for better performance.

For the 5GNR EN-DC, 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.

$g_1 * LTE_{exposure} + g_2 * NR_{exposure} \leq 1.0,$
$then,\ g_1 * LTE_{exposure} + g_2 * NR_{exposure} \leq max\ (\ LTE_{exposure}\ ,\ NR_{exposure}\ )$

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

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

WWAN Band	Exposure Position	1	2	3	4	5	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
WWAN Ant 0	Right Cheek	0.480	0.536	0.194	0.145	0.397	**1.016**	**0.674**	**0.819**	**1.071**
	Right Tilted	0.370	0.271	0.048	0.183	0.033	**0.641**	**0.418**	**0.601**	**0.451**
	Left Cheek	0.846	0.523	0.145	0.408	0.210	**1.369**	**0.991**	**1.399**	**1.201**
	Left Tilted	0.277	0.532	0.113	0.469	0.021	**0.809**	**0.390**	**0.859**	**0.411**
WWAN Ant 1	Right Cheek	0.992	0.536	0.194	0.145	0.397	**1.528**	**1.186**	**1.331**	**1.583**
	Right Tilted	0.950	0.271	0.048	0.183	0.033	**1.221**	**0.998**	**1.181**	**1.031**
	Left Cheek	0.822	0.523	0.145	0.408	0.210	**1.345**	**0.967**	**1.375**	**1.177**
	Left Tilted	0.640	0.532	0.113	0.469	0.021	**1.172**	**0.753**	**1.222**	**0.774**
WWAN Ant 2	Right Cheek	0.994	0.536	0.194	0.145	0.397	**1.530**	**1.188**	**1.333**	**1.585**
	Right Tilted	0.435	0.271	0.048	0.183	0.033	**0.706**	**0.483**	**0.666**	**0.516**
	Left Cheek	0.570	0.523	0.145	0.408	0.210	**1.093**	**0.715**	**1.123**	**0.925**
	Left Tilted	0.706	0.532	0.113	0.469	0.021	**1.238**	**0.819**	**1.288**	**0.840**
WWAN Ant 5	Right Cheek	0.585	0.536	0.194	0.145	0.397	**1.121**	**0.779**	**0.924**	**1.176**
	Right Tilted	0.112	0.271	0.048	0.183	0.033	**0.383**	**0.160**	**0.343**	**0.193**
	Left Cheek	0.980	0.523	0.145	0.408	0.210	**1.503**	**1.125**	**1.533**	**1.335**
	Left Tilted	0.288	0.532	0.113	0.469	0.021	**0.820**	**0.401**	**0.870**	**0.422**
WWAN Ant 6	Right Cheek	0.410	0.536	0.194	0.145	0.397	**0.946**	**0.604**	**0.749**	**1.001**
	Right Tilted	0.312	0.271	0.048	0.183	0.033	**0.583**	**0.360**	**0.543**	**0.393**
	Left Cheek	0.753	0.523	0.145	0.408	0.210	**1.276**	**0.898**	**1.306**	**1.108**
	Left Tilted	0.237	0.532	0.113	0.469	0.021	**0.769**	**0.350**	**0.819**	**0.371**

<WLAN Index 2, BT Index 1>

Exposure Position	1	2	3	4	2+3 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Right Cheek	1.021	1.178	0.145	0.397	**1.323**	**1.575**
Right Tilted	0.470	0.425	0.183	0.033	**0.608**	**0.458**
Left Cheek	1.146	1.184	0.408	0.210	**1.592**	**1.394**
Left Tilted	1.198	0.799	0.469	0.021	**1.268**	**0.820**

16.3 Hotspot Exposure Conditions

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

WWAN Band	Exposure Position	1	2	3	4	5	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 4+3	WLAN5GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
WWAN Ant 0	Front	0.650	0.414	0.224	0.132	0.139	**1.064**	**0.874**	**1.006**	**1.013**
	Back	0.654	0.382	0.425	0.131	0.121	**1.036**	**1.079**	**1.210**	**1.200**
	Left side	0.984	0.595	0.218	0.002	0.237	**1.579**	**1.202**	**1.204**	**1.439**
	Right side	0.455	0.529	0.215	0.093	0.001	**0.984**	**0.670**	**0.763**	**0.671**
	Top side		0.596	0.297	0.285	0.019	**0.596**	**0.297**	**0.582**	**0.316**
	Bottom side	0.641					**0.641**	**0.641**	**0.641**	**0.641**
WWAN Ant 1	Front	0.617	0.414	0.224	0.132	0.139	**1.031**	**0.841**	**0.973**	**0.980**
	Back	0.598	0.382	0.425	0.131	0.121	**0.980**	**1.023**	**1.154**	**1.144**
	Left side	0.407	0.595	0.218	0.002	0.237	**1.002**	**0.625**	**0.627**	**0.862**
	Right side	0.254	0.529	0.215	0.093	0.001	**0.783**	**0.469**	**0.562**	**0.470**
	Top side	0.988	0.596	0.297	0.285	0.019	**1.584**	**1.285**	**1.570**	**1.304**
	Bottom side						**0.000**	**0.000**	**0.000**	**0.000**
WWAN Ant 2	Front	0.991	0.414	0.224	0.132	0.139	**1.405**	**1.215**	**1.347**	**1.354**
	Back	0.913	0.382	0.425	0.131	0.121	**1.295**	**1.338**	**1.469**	**1.459**
	Left side	0.170	0.595	0.218	0.002	0.237	**0.765**	**0.388**	**0.390**	**0.625**
	Right side	0.992	0.529	0.215	0.093	0.001	**1.521**	**1.207**	**1.300**	**1.208**
	Top side		0.596	0.297	0.285	0.019	**0.596**	**0.297**	**0.582**	**0.316**
	Bottom side	0.684					**0.684**	**0.684**	**0.684**	**0.684**
WWAN Ant 5	Front	0.688	0.414	0.224	0.132	0.139	**1.102**	**0.912**	**1.044**	**1.051**
	Back	0.613	0.382	0.425	0.131	0.121	**0.995**	**1.038**	**1.169**	**1.159**
	Left side	0.077	0.595	0.218	0.002	0.237	**0.672**	**0.295**	**0.297**	**0.532**
	Right side	0.984	0.529	0.215	0.093	0.001	**1.513**	**1.199**	**1.292**	**1.200**
	Top side	0.232	0.596	0.297	0.285	0.019	**0.828**	**0.529**	**0.814**	**0.548**
	Bottom side						**0.000**	**0.000**	**0.000**	**0.000**
WWAN Ant 6	Front	0.608	0.414	0.224	0.132	0.139	**1.022**	**0.832**	**0.964**	**0.971**
	Back	0.430	0.382	0.425	0.131	0.121	**0.812**	**0.855**	**0.986**	**0.976**
	Left side	0.680	0.595	0.218	0.002	0.237	**1.275**	**0.898**	**0.900**	**1.135**
	Right side	0.028	0.529	0.215	0.093	0.001	**0.557**	**0.243**	**0.336**	**0.244**
	Top side		0.596	0.297	0.285	0.019	**0.596**	**0.297**	**0.582**	**0.316**
	Bottom side	0.344					**0.344**	**0.344**	**0.344**	**0.344**

16.4 Body-Worn Accessory Exposure Conditions

<WWAN Index 6, WLAN Index 5, BT Index 4>

WWAN Band	Exposure Position	1	2	3	4	5	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
WWAN Ant 0	Front	0.781	0.556	0.314	0.132	0.139	**1.337**	**1.095**	**1.227**	**1.234**
	Back	0.786	0.490	0.438	0.131	0.121	**1.276**	**1.224**	**1.355**	**1.345**
WWAN Ant 1	Front	0.804	0.556	0.314	0.132	0.139	**1.360**	**1.118**	**1.250**	**1.257**
	Back	0.734	0.490	0.438	0.131	0.121	**1.224**	**1.172**	**1.303**	**1.293**
WWAN Ant 2	Front	0.991	0.556	0.314	0.132	0.139	**1.547**	**1.305**	**1.437**	**1.444**
	Back	0.783	0.490	0.438	0.131	0.121	**1.273**	**1.221**	**1.352**	**1.342**
WWAN Ant 5	Front	0.715	0.556	0.314	0.132	0.139	**1.271**	**1.029**	**1.161**	**1.168**
	Back	0.528	0.490	0.438	0.131	0.121	**1.018**	**0.966**	**1.097**	**1.087**
WWAN Ant 6	Front	0.608	0.556	0.314	0.132	0.139	**1.164**	**0.922**	**1.054**	**1.061**
	Back	0.430	0.490	0.438	0.131	0.121	**0.920**	**0.868**	**0.999**	**0.989**

<WLAN Index 6, BT Index 3>

Exposure Position	1	2	3	4	2+3 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Front	0.556	0.347	0.471	0.560	**0.818**	**0.907**
Back	0.490	0.551	0.326	0.443	**0.877**	**0.994**

<WWAN Index 6, WLAN Index 4>

WWAN Band	Exposure Position	1	2	3	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)
		WWAN	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
WWAN Ant 0	Front	0.781	0.556	0.347	**1.337**	**1.128**
	Back	0.786	0.490	0.551	**1.276**	**1.337**
WWAN Ant 1	Front	0.804	0.556	0.347	**1.360**	**1.151**
	Back	0.734	0.490	0.551	**1.224**	**1.285**
WWAN Ant 2	Front	0.991	0.556	0.347	**1.547**	**1.338**
	Back	0.783	0.490	0.551	**1.273**	**1.334**
WWAN Ant 5	Front	0.715	0.556	0.347	**1.271**	**1.062**
	Back	0.528	0.490	0.551	**1.018**	**1.079**
WWAN Ant 6	Front	0.608	0.556	0.347	**1.164**	**0.955**
	Back	0.430	0.490	0.551	**0.920**	**0.981**

<WWAN Index 6, BT Index 3>

WWAN Band	Exposure Position	1	2	3	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)
		WWAN	Bluetooth Ant 4	Bluetooth Ant 3		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
WWAN Ant 0	Front	0.781	0.471	0.560	**1.252**	**1.341**
	Back	0.786	0.326	0.443	**1.112**	**1.229**
WWAN Ant 1	Front	0.804	0.471	0.560	**1.275**	**1.364**
	Back	0.734	0.326	0.443	**1.060**	**1.177**
WWAN Ant 2	Front	0.991	0.471	0.560	**1.462**	**1.551**
	Back	0.783	0.326	0.443	**1.109**	**1.226**
WWAN Ant 5	Front	0.715	0.471	0.560	**1.186**	**1.275**
	Back	0.528	0.326	0.443	**0.854**	**0.971**
WWAN Ant 6	Front	0.608	0.471	0.560	**1.079**	**1.168**
	Back	0.430	0.326	0.443	**0.756**	**0.873**

16.5 Product Specific Exposure Conditions

<WWAN Index 6, WLAN Index 4>

WWAN Band	Exposure Position	1 WWAN 10g SAR (W/kg)	2 WLAN5/6GHz Ant 4+3 10g SAR (W/kg)	1+2 Summed 10g SAR (W/kg)
WWAN Ant 1	Front		1.735	**1.735**
	Back		0.937	**0.937**
	Left side		2.239	**2.239**
	Right side		1.334	**1.334**
	Top side	2.528	1.036	**3.564**
	Bottom side			**0.000**
WWAN Ant 5	Front		1.735	**1.735**
	Back		0.937	**0.937**
	Left side		2.239	**2.239**
	Right side	2.457	1.334	**3.791**
	Top side		1.036	**1.036**
	Bottom side			**0.000**

Test Engineer：David Lin, Wilson Lin, White Huang, Jordar Jhuang, Willie Huang, Ray Sun, Chris Yang, Charles Shen, Iran Wang, Jerry Hsu, Ryan Lee and Tommy Chen

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

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

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

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

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

(b) 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 dependance	0.00	R	1.732	1	0.00
Amplitude and phase drift	0.00	R	1.732	1	0.00
Amplitude and phase noise	0.04	R	1.732	1	0.02
Measurement area truncation	0.00	R	1.732	1	0.00
Data acquisition	0.03	N	1	1	0.03
Sampling	0.00	R	1.732	1	0.00
Field reconstruction	2.00	R	1.732	1	1.15
Forward transformation	0.00	R	1.732	1	0.00
Power density scaling	0.00	R	1.732	1	0.00
Spatial averaging	0.10	R	1.732	1	0.06
System detection limit	0.04	R	1.732	1	0.02
Uncertainty terms dep endent 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**

18. 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)