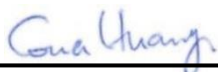


FCC SAR TEST REPORT

FCC ID : A4RG4HCD
Equipment : Phone
Model Name : G4HCD
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, CA, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Dec. 03, 2025 and testing was started from Jan. 02, 2026 and completed on Apr. 10, 2026. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

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



Approved by: Cona Huang / Deputy Manager



Sporton International Inc. Wensan Laboratory

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Table of Contents

1. Statement of Compliance.....	4
2. Equipment Under Test (EUT) Information.....	5
2.1 General Information.....	5
2.2 Maximum Tune-up Limit.....	6
2.3 General LTE SAR Test and Reporting Considerations.....	25
2.4 General 5G NR SAR Test and Reporting Considerations.....	28
3. TAS feature for RF Exposure compliance.....	31
3.1 SAR Characterization – Power Table.....	32
4. RF Exposure Limits.....	36
4.1 Uncontrolled Environment.....	36
4.2 Controlled Environment.....	36
4.3 RF Exposure limit for above 6GHz.....	37
5. Guidance Applied.....	38
6. Specific Absorption Rate (SAR).....	38
6.1 Introduction.....	38
6.2 SAR Definition.....	38
7. System Description and Setup.....	39
7.1 Test Site Location.....	39
7.2 E-Field Probe.....	40
7.3 Data Acquisition Electronics (DAE).....	40
7.4 Phantom.....	41
7.5 Device Holder.....	42
8. Measurement Procedures.....	43
8.1 Spatial Peak SAR Evaluation.....	43
8.2 Power Reference Measurement.....	44
8.3 Area Scan.....	44
8.4 Zoom Scan.....	45
8.5 Volume Scan Procedures.....	45
8.6 Power Drift Monitoring.....	45
9. Test Equipment List.....	46
10. System Verification.....	47
10.1 Tissue Verification.....	47
10.2 System Performance Check Results.....	50
10.3 PD System Performance Check Results.....	53
11. RF Exposure Positions.....	54
11.1 Ear and handset reference point.....	54
11.2 Definition of the cheek position.....	55
11.3 Definition of the tilt position.....	56
11.4 Body Worn Accessory.....	56
11.5 Product Specific Exposure.....	57
11.6 Wireless Router.....	57
12. Data Reuse Approach.....	58
13. Spot Check SAR Results.....	59
13.1 Head SAR.....	59
13.2 Hotspot SAR.....	60
13.3 Body-Worn SAR.....	61
13.4 Product Specific SAR.....	62
14. WiFi Output Power (Unit: dBm).....	67
15. RF Exposure position consideration.....	77
16. SAR Test Results.....	78
16.1 Head SAR.....	79
16.2 Hotspot SAR.....	80
16.3 Body-Worn SAR.....	80
16.4 Product Specific SAR.....	81
16.5 6GHz PD Test Result.....	81
17. Uncertainty Assessment.....	82
18. References.....	85
Appendix A. Plots of System Performance Check	
Appendix B. Plots of High SAR Measurement	
Appendix C. DASY Calibration Certificate	
Appendix D. Sim-Tx SAR consideration	
Appendix E. Test Setup Photos and Antenna Location	

History of this test report

Report No.	Version	Description	Issued Date
FA5N0805-01B	01	Initial issue of report	Apr. 21, 2026
FA5N0805-01B	03	Update section 2.2, 3.1	Apr. 29, 2026



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for Google LLC, Phone, G4HCD, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)
		Head (Separation 0mm)	Hotspot (Separation 5mm)	Body-Worn (Separation 5mm)	Product Specific (Separation 0mm) 10g SAR (W/kg)	
Licensed	GSM850	0.99	0.79	0.79		1.59
	GSM1900	0.41	0.82	0.73		
	WCDMA II	0.74	0.85	0.78		
	WCDMA IV	0.38	0.84	0.84		
	WCDMA V	0.80	0.84	0.84		
	LTE Band 7	0.99	0.85	0.78		
	LTE Band 12/17	0.90	0.74	0.74		
	LTE Band 13	0.90	0.78	0.78		
	LTE Band 14	0.91	0.79	0.79		
	LTE Band 2/25	0.90	0.85	0.99		
	LTE Band 5/26	0.99	0.78	0.78		
	LTE Band 30	0.73	0.83	0.79		
	LTE Band 4/66	0.99	0.85	0.98		
	LTE Band 71	0.96	0.77	0.78		
	LTE Band 38/41	0.99	0.85	0.91		
	LTE Band 48	0.99	0.84	0.99		
	FR1 n7	0.99	0.80	0.78		
	FR1 n12	0.93	0.78	0.78		
	FR1 n13	0.83	0.78	0.78		
	FR1 n14	0.90	0.74	0.78		
	FR1 n2/n25	0.99	0.84	0.97		
	FR1 n5/n26	0.82	0.76	0.76		
	FR1 n30	0.71	0.81	0.79	1.32	
	FR1 n66	0.97	0.84	0.99		
	FR1 n71	0.87	0.72	0.78		
	FR1 n38/n41	0.96	0.84	0.89	1.38	
	FR1 n77/n78	0.93	0.83	0.89		
	NTN Band 23				2.45	
	NTN Band 255				2.49	
DTS	2.4GHz WLAN	0.77	0.20	0.74		1.59
NII	5GHz WLAN	0.74	0.25	0.77	0.90	1.59
6CD/6VL	6GHz WLAN	0.75	0.24	0.76	0.68	1.59
DSS	Bluetooth	0.25	0.48	1.12		1.59
DTS	Thread	0.23	0.31	1.12		1.59
DXX	NFC				0.01	
Equipment Class	Frequency Band	Reported IPD (mW/cm ²)				
5GM	6GHz WLAN	0.73				
Date of Testing:		2026/01/02 ~ 2026/04/10				

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

Reviewed by: Jason Wang

Report Producer: Carlie Tsai



2. Equipment Under Test (EUT) Information

2.1 General Information

Product Feature & Specification	
Applicant Name	Google LLC
Equipment Name	Phone
Model Name	G4HCD
FCC ID	A4RG4HCD
S/N	61061FDDV0001Y, 61061FDDV00024, 5B061FDDV0004W
Frequency Band	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 n13 : 777 MHz ~ 787 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450 MHz ~ 3550 MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450 MHz ~ 3550 MHz NTN NB IoT B23: 2000 MHz ~ 2020 MHz NTN NB IoT B255: 1626.5 MHz ~ 1660.5 MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 5.9 GHz Band: 5850 MHz ~ 5895 MHz WLAN 6GHz Band: 5925 MHz ~ 6425 MHz, 6425 MHz~6525 MHz, 6525 MHz~6875 MHz, 6875 MHz~7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC: 13.56 MHz WPC: 110 kHz ~ 148.5 kHz(Rx) UWB: 6489.6 MHz, 7987.2 MHz Thread: 2405 MHz ~ 2480 MHz

Mode	GSM/GPRS/EGPRS UMTS: RMC/AMR 12.2Kbps, HSDPA, HSUPA LTE: QPSK, 16QAM, 64QAM, 256QAM NTN: BPSK, QPSK 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac/ax/be HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160/EHT20/EHT40/EHT80/EHT160 Bluetooth BR/EDR/LE/CS NFC: ASK WPC: ASK UWB: BPM-BPSK/HPSK Thread: QPSK
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
Remark:	- Dynamic antenna tuning mechanism is available at Ant. 0, for its < 1GHz LTE and NR band, and the supplemental antenna tuner test results were included in parent model FCC ID: A4RGBC0H Part1 SAR report appendix G, details are illustrated in the operational description. - This device WLAN 2.4GHz / 5.2GHz / 5.8GHz and 6GHz VLP supports Hotspot operation and Bluetooth support tethering applications. - The device implements the power management and power reduction mechanism for SAR compliance at different exposure conditions (head, body, hotspot and product specific), the TAS feature will manage to ensure the power level not exceeding the associated power table. Also device support RTAs antenna group to analysis simultaneous transmission include in parent model FCC ID: A4RGBC0H Part1 SAR report appendix F. - The device implements power reduction mechanism for SAR compliance, the power reduction verification results are provided in parent model FCC ID: A4RGBC0H Part1 SAR report appendix E. - The device supports uplink MIMO. Since the uplink MIMO antennas operate on different antenna groups, TAS validation is not required. - Power Class 1.5 (PC1.5) supports only uplink MIMO configurations. - The UWB output power is -11.04 dBm and it is less than 1mW and exempt from power density testing.

2.2 Maximum Tune-up Limit

General Note:

- In this report, PC3, PC2, and PC1.5 refer to Power Class 3, Power Class 2, and Power Class 1.5, respectively.
- For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition.
- The following table shows maximum output power configurations for various exposure conditions (output power index) with tune-up tolerance accounted. For TAS enabled bands, the values associate with Plimit plus the total uncertainty, or Pmax plus total uncertainty when the derived Plimit is higher than Pmax.
- Thread only transmits using antenna 3, and it cannot operate concurrently with Bluetooth transmission.
- PC1.5 supports only uplink MIMO configurations. In this mode, the target power per transmit chain is set equivalent to the PC2 standalone (SA) power level, such that the total combined output power across all chains achieves the aggregate power level defined for Power Class 1.5 (i.e., PC2 SA level + 3 dB).

Antenna	Support Transmit Band
Ant 0	GSM850/1900, UMTS B2/ B4/ B5, LTE B2/ B4/ B5/ B7/ B12/ B13/ B14/ B17/ B25/ B26/ B30 / B38/ B41 / B66 / B71 FR1 n2/ n5/ n7/ n12/ n13/ n14/ n25/ n26/ n30/ n38/ n41/ n66/ n71
Ant 1	GSM850, UMTS B5, LTE B2/ B4/ B5/ B12/ B13/ B14/ B17/ B25/ B26 / B38/ B41 / B48/ B66 / B71 FR1 n2/ n5/ n12/ n13/ n14/ n25/ n26/ n38/ n41/ n66/ n71/n77/n78
Ant 2	GSM1900, UMTS B2/ B4, LTE B2/ B4/ B7 / B25/ B30/ B38 / B41 / B66, FR1 n2/ n7/ n25/ n30/ n38/ n41/ n66
Ant 5	LTE B2/ B4/ B25/ B38 / B41 / B48/ B66, FR1 n2/ n25/ n38/ n41 / n66/ n77/n78, NTN B23 / B255
Ant 6	LTE B48, FR1 n77/n78
Ant 7	LTE B48, FR1 n77/n78



Maximum Transmit Burst Average Power (dBm)									
Wireless technology	Mode	Mode	Antenna	Maximum Power Condition	Head	Head	Hotspot	Body-worn/ Extremity	Body-worn/ Extremity
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
					ECI 2	ECI 3	ECI 6	ECI 4	ECI 5
GSM	B850	1TX	Ant0	33.50	33.50	33.50	31.40	31.40	31.40
GPRS	B850	1TX	Ant0	33.50	33.50	33.50	31.40	31.40	31.40
GPRS	B850	2TX	Ant0	32.30	32.30	32.30	28.40	28.40	28.40
GPRS	B850	3TX	Ant0	31.30	31.30	31.30	26.60	26.60	26.60
GPRS	B850	4TX	Ant0	30.30	30.30	30.30	25.40	25.40	25.40
EGPRS	B850	1TX	Ant0	27.30	27.30	27.30	27.30	27.30	27.30
EGPRS	B850	2TX	Ant0	26.30	26.30	26.30	26.30	26.30	26.30
EGPRS	B850	3TX	Ant0	25.30	25.30	25.30	25.30	25.30	25.30
EGPRS	B850	4TX	Ant0	24.30	24.30	24.30	24.30	24.30	24.30
GSM	B850	1TX	Ant1	33.30	32.40	31.70	33.30	33.30	33.30
GPRS	B850	1TX	Ant1	33.30	32.40	31.70	33.30	33.30	33.30
GPRS	B850	2TX	Ant1	32.10	29.40	28.70	31.90	32.10	31.90
GPRS	B850	3TX	Ant1	31.10	27.60	26.90	30.10	30.60	30.10
GPRS	B850	4TX	Ant1	30.10	26.40	25.70	28.90	29.40	28.90
EGPRS	B850	1TX	Ant1	27.10	27.10	27.10	27.10	27.10	27.10
EGPRS	B850	2TX	Ant1	26.10	26.10	26.10	26.10	26.10	26.10
EGPRS	B850	3TX	Ant1	25.10	25.10	25.10	25.10	25.10	25.10
EGPRS	B850	4TX	Ant1	24.10	24.10	24.10	24.10	24.10	24.10
GSM	B1900	1TX	Ant2	30.40	30.40	30.40	29.50	30.30	29.50
GPRS	B1900	1TX	Ant2	30.40	30.40	30.40	29.50	30.30	29.50
GPRS	B1900	2TX	Ant2	28.90	28.90	28.90	26.50	27.30	26.50
GPRS	B1900	3TX	Ant2	28.40	28.40	28.40	24.70	25.50	24.70
GPRS	B1900	4TX	Ant2	27.40	27.40	27.40	23.50	24.30	23.50
EGPRS	B1900	1TX	Ant2	26.40	26.40	26.40	26.40	26.40	26.40
EGPRS	B1900	2TX	Ant2	25.40	25.40	25.40	25.40	25.40	25.40
EGPRS	B1900	3TX	Ant2	24.40	24.40	24.40	24.40	24.40	24.40
EGPRS	B1900	4TX	Ant2	23.40	23.40	23.40	23.40	23.40	23.40
GSM	B1900	1TX	Ant0	30.20	30.20	30.20	24.40	25.80	24.40
GPRS	B1900	1TX	Ant0	30.20	30.20	30.20	24.40	25.80	24.40
GPRS	B1900	2TX	Ant0	28.70	28.70	28.70	21.40	22.80	21.40
GPRS	B1900	3TX	Ant0	28.20	28.20	28.20	19.60	21.00	19.60
GPRS	B1900	4TX	Ant0	27.20	27.20	27.20	18.40	19.80	18.40
EGPRS	B1900	1TX	Ant0	26.20	26.20	26.20	24.40	25.80	24.40
EGPRS	B1900	2TX	Ant0	25.20	25.20	25.20	21.40	22.80	21.40
EGPRS	B1900	3TX	Ant0	24.20	24.20	24.20	19.60	21.00	19.60
EGPRS	B1900	4TX	Ant0	23.20	23.20	23.20	18.40	19.80	18.40



Maximum Transmit Burst Average Power (dBm)									
Wireless technology	Mode	Mode	Antenna	Maximum Power Condition	Head	Head	Hotspot	Body-worn/ Extremity	Body-worn/ Extremity
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
					ECI 2	ECI 3	ECI 6	ECI 4	ECI 5
WCDMA	B2	RMC12.2	Ant2	25.50	25.50	25.40	19.30	20.20	19.30
WCDMA	B2	RMC12.2	Ant0	24.90	24.90	24.90	15.00	15.90	15.00
WCDMA	B4	RMC12.2	Ant2	25.50	25.50	25.50	20.70	21.90	20.70
WCDMA	B4	RMC12.2	Ant0	24.90	24.90	24.90	15.20	16.60	15.20
WCDMA	B5	RMC12.2	Ant0	25.50	25.50	25.50	21.50	21.50	21.50
WCDMA	B5	RMC12.2	Ant1	24.90	22.70	22.00	24.90	24.90	24.90
LTE	B2	PC3	Ant2	25.00	25.00	24.90	18.70	20.10	18.70
LTE	B2	PC3	Ant0	24.90	24.90	24.90	15.20	16.00	15.20
LTE	B2	PC3	Ant1	25.00	17.40	17.20	18.70	19.40	18.70
LTE	B2	PC3	Ant5	24.90	17.90	16.70	17.20	18.60	17.20
LTE	B4	PC3	Ant2	25.00	25.00	25.00	20.40	20.70	20.40
LTE	B4	PC3	Ant0	24.90	24.90	24.90	14.90	16.90	14.90
LTE	B4	PC3	Ant1	25.00	21.00	20.20	21.50	22.20	21.50
LTE	B4	PC3	Ant5	24.90	18.60	17.30	17.40	18.80	17.40
LTE	B5	PC3	Ant0	25.00	25.00	25.00	21.50	21.50	21.50
LTE	B5	PC3	Ant1	24.90	23.80	23.00	24.90	24.90	24.90
LTE	B7	PC3	Ant2	25.00	24.40	23.00	16.80	18.20	16.80
LTE	B7	PC3	Ant0	25.00	25.00	25.00	16.40	18.10	16.40
LTE	B12	PC3	Ant0	25.00	25.00	25.00	23.20	23.20	23.20
LTE	B12	PC3	Ant1	24.80	24.80	24.40	24.80	24.80	24.80
LTE	B13	PC3	Ant0	25.00	25.00	25.00	21.60	21.60	21.60
LTE	B13	PC3	Ant1	24.80	24.80	24.40	24.80	24.80	24.80
LTE	B14	PC3	Ant0	25.00	25.00	25.00	21.90	21.90	21.90
LTE	B14	PC3	Ant1	24.80	24.80	24.40	24.80	24.80	24.80
LTE	B17	PC3	Ant0	25.00	25.00	25.00	23.20	23.20	23.20
LTE	B17	PC3	Ant1	24.80	24.80	24.40	24.80	24.80	24.80
LTE	B25	PC3	Ant2	25.00	25.00	24.90	18.70	20.60	18.70
LTE	B25	PC3	Ant0	24.90	24.90	24.90	15.20	16.00	15.20
LTE	B25	PC3	Ant1	25.00	17.40	17.20	18.70	19.40	18.70
LTE	B25	PC3	Ant5	24.90	17.90	16.70	17.20	18.60	17.20
LTE	B26	PC3	Ant0	25.00	25.00	25.00	21.50	21.50	21.50
LTE	B26	PC3	Ant1	24.90	23.80	23.00	24.90	24.90	24.90
LTE	B30	PC3	Ant2	24.50	24.50	24.50	17.30	18.70	17.30
LTE	B30	PC3	Ant0	23.60	23.60	23.60	15.30	18.20	15.30
LTE	B38	PC3	Ant2	25.00	25.00	24.90	19.00	19.30	19.00
LTE	B38	PC2	Ant2	26.90	26.90	26.50	20.60	20.90	20.60
LTE	B38	PC3	Ant0	24.90	24.90	24.90	18.10	18.90	18.10
LTE	B38	PC2	Ant0	26.80	26.80	26.80	19.70	20.50	19.70
LTE	B38	PC3	Ant1	25.00	19.00	18.30	18.70	20.60	18.70
LTE	B38	PC2	Ant1	26.90	20.60	19.90	20.30	22.20	20.30
LTE	B38	PC3	Ant5	24.90	18.80	18.10	18.10	21.50	18.10
LTE	B38	PC2	Ant5	26.70	20.40	19.70	19.70	23.10	19.70
LTE	B41	PC3	Ant2	25.00	25.00	24.90	19.00	19.30	19.00
LTE	B41	PC2	Ant2	26.90	26.90	26.50	20.60	20.90	20.60
LTE	B41	PC3	Ant0	24.90	24.90	24.90	18.10	18.90	18.10
LTE	B41	PC2	Ant0	26.80	26.80	26.80	19.70	20.50	19.70
LTE	B41	PC3	Ant1	25.00	19.00	18.30	18.70	20.60	18.70
LTE	B41	PC2	Ant1	26.90	20.60	19.90	20.30	22.20	20.30
LTE	B41	PC3	Ant5	25.00	18.80	18.10	18.10	21.50	18.10
LTE	B41	PC2	Ant5	26.90	20.40	19.70	19.70	23.10	19.70
LTE	B48	PC3	Ant6	22.00	22.00	22.00	17.60	19.00	17.60
LTE	B48	PC3	Ant7	22.70	22.70	22.70	18.40	19.80	18.40
LTE	B48	PC3	Ant1	22.60	18.70	18.00	16.30	18.90	16.30
LTE	B48	PC3	Ant5	25.00	20.90	20.20	20.10	20.80	20.10
LTE	B66	PC3	Ant2	25.00	25.00	25.00	20.40	20.70	20.40
LTE	B66	PC3	Ant0	24.90	24.90	24.90	14.90	16.90	14.90
LTE	B66	PC3	Ant1	25.00	21.00	20.20	21.50	22.20	21.50
LTE	B66	PC3	Ant5	25.00	18.60	17.30	17.40	18.80	17.40
LTE	B71	PC3	Ant0	25.00	25.00	25.00	24.70	24.80	24.70
LTE	B71	PC3	Ant1	24.80	24.10	23.40	24.80	24.80	24.80
NR	n2	PC3	Ant2	25.00	25.00	25.00	19.10	19.80	19.10
NR	n2	PC3	Ant0	24.90	24.90	24.90	15.00	16.00	15.00
NR	n2	PC3	Ant1	25.00	17.90	17.70	18.70	19.40	18.70
NR	n2	PC3	Ant5	24.90	18.60	17.90	17.90	19.30	17.90
NR	n5	PC3	Ant0	25.00	25.00	25.00	21.70	21.70	21.70
NR	n5	PC3	Ant1	24.90	23.80	23.80	24.90	24.90	24.90
NR	n7	PC3	Ant2	25.00	24.60	23.20	16.80	17.80	16.80



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

NR	n7	PC3	Ant0	25.00	25.00	25.00	16.50	17.90	16.50
NR	n12	PC3	Ant0	25.00	25.00	25.00	23.80	23.80	23.80
NR	n12	PC3	Ant1	24.80	24.30	23.60	24.80	24.80	24.80
NR	n13	PC3	Ant0	25.00	25.00	25.00	22.30	22.30	22.30
NR	n13	PC3	Ant1	24.80	24.80	24.70	24.70	24.80	24.70
NR	n14	PC3	Ant0	25.00	25.00	25.00	22.40	22.60	22.40
NR	n14	PC3	Ant1	24.80	24.30	23.90	24.80	24.80	24.80
NR	n25	PC3	Ant2	25.00	25.00	25.00	19.10	19.80	19.10
NR	n25	PC3	Ant0	24.90	24.90	24.90	15.00	16.00	15.00
NR	n25	PC3	Ant1	25.00	17.90	17.70	18.70	19.40	18.70
NR	n25	PC3	Ant5	24.90	18.60	17.90	17.90	19.30	17.90
NR	n26	PC3	Ant0	25.00	25.00	25.00	21.70	21.70	21.70
NR	n26	PC3	Ant1	24.90	23.80	23.80	24.90	24.90	24.90
NR	n30	PC3	Ant2	24.50	24.50	24.50	17.20	19.20	17.20
NR	n30	PC3	Ant0	23.60	23.60	23.60	15.50	18.10	15.50
NR	n38	PC3	Ant2	25.00	24.80	23.60	17.20	18.60	17.20
NR	n38	PC3	Ant0	24.90	24.90	24.90	15.80	17.10	15.80
NR	n38	PC3	Ant1	25.00	18.30	17.60	18.20	21.00	18.20
NR	n38	PC3	Ant5	24.90	17.50	17.50	16.70	19.30	16.70
NR	n41	PC3	Ant2	25.00	24.80	23.60	17.20	18.60	17.20
NR	n41	PC2	Ant2	26.90	26.90	26.60	20.20	21.60	20.20
NR	n41	PC1.5	Ant2	26.90	26.90	26.60	20.20	21.60	20.20
NR	n41	PC3	Ant0	24.90	24.90	24.90	15.80	17.10	15.80
NR	n41	PC2	Ant0	26.80	26.80	26.80	18.80	20.10	18.80
NR	n41	PC1.5	Ant0	26.80	26.80	26.80	18.80	20.10	18.80
NR	n41	PC3	Ant1	25.00	18.30	17.60	18.20	21.00	18.20
NR	n41	PC2	Ant1	26.90	21.30	20.60	21.20	24.00	21.20
NR	n41	PC1.5	Ant1	26.90	21.30	20.60	21.20	24.00	21.20
NR	n41	PC3	Ant5	25.00	17.50	17.50	16.70	19.30	16.70
NR	n41	PC2	Ant5	26.90	20.50	20.50	19.70	22.30	19.70
NR	n41	PC1.5	Ant5	26.90	20.50	20.50	19.70	22.30	19.70
NR	n66	PC3	Ant2	25.00	25.00	25.00	20.30	21.00	20.30
NR	n66	PC3	Ant0	24.90	24.90	24.90	15.40	16.80	15.40
NR	n66	PC3	Ant1	25.00	20.30	19.60	21.70	22.40	21.70
NR	n66	PC3	Ant5	24.90	19.80	19.10	18.10	19.00	18.10
NR	n71	PC3	Ant0	25.00	25.00	25.00	23.80	24.20	23.80
NR	n71	PC3	Ant1	24.80	24.80	24.50	24.80	24.80	24.80
NR	n77	PC3	Ant6	25.00	25.00	22.50	14.00	15.40	14.00
NR	n77	PC2	Ant6	27.00	27.00	25.50	17.00	18.40	17.00
NR	n77	PC1.5	Ant6	27.00	27.00	25.50	17.00	18.40	17.00
NR	n77	PC3	Ant7	24.50	24.50	24.50	15.70	18.20	15.70
NR	n77	PC2	Ant7	26.50	26.50	26.50	18.70	21.20	18.70
NR	n77	PC1.5	Ant7	26.50	26.50	26.50	18.70	21.20	18.70
NR	n77	PC3	Ant1	25.00	15.60	14.90	14.30	17.30	14.30
NR	n77	PC2	Ant1	27.00	18.60	17.90	17.30	20.30	17.30
NR	n77	PC1.5	Ant1	27.00	18.60	17.90	17.30	20.30	17.30
NR	n77	PC3	Ant5	25.00	18.30	17.60	18.20	18.90	18.20
NR	n77	PC2	Ant5	27.00	21.30	20.60	21.20	21.90	21.20
NR	n77	PC1.5	Ant5	27.00	21.30	20.60	21.20	21.90	21.20
NR	n78	PC3	Ant6	25.00	25.00	22.50	14.00	15.40	14.00
NR	n78	PC2	Ant6	27.00	27.00	25.50	17.00	18.40	17.00
NR	n78	PC1.5	Ant6	27.00	27.00	25.50	17.00	18.40	17.00
NR	n78	PC3	Ant7	24.50	24.50	24.50	15.70	18.20	15.70
NR	n78	PC2	Ant7	26.50	26.50	26.50	18.70	21.20	18.70
NR	n78	PC1.5	Ant7	26.50	26.50	26.50	18.70	21.20	18.70
NR	n78	PC3	Ant1	25.00	15.60	14.90	14.30	17.30	14.30
NR	n78	PC2	Ant1	27.00	18.60	17.90	17.30	20.30	17.30
NR	n78	PC1.5	Ant1	27.00	18.60	17.90	17.30	20.30	17.30
NR	n78	PC3	Ant5	25.00	18.30	17.60	18.20	18.90	18.20
NR	n78	PC2	Ant5	27.00	21.30	20.60	21.20	21.90	21.20
NR	n78	PC1.5	Ant5	27.00	21.30	20.60	21.20	21.90	21.20
NTN	B23	PC3	Ant5	25.00				24.10	
NTN	B255	PC3	Ant5	25.00				22.50	

< WLAN Maximum Power >
General Note:

1. The device implements power management mechanisms to ensure WLAN SAR compliance under various exposure conditions and user scenarios. For each exposure condition, the transmit power index is selected based on the specific user scenario. Detailed information regarding the proprietary power management logic is provided in the operational description.
2. The designation "4+3(3)" refers to a 2TX transmission configuration in which antennas 4 and 3 are simultaneously active, and the SAR or output power measurement is specifically attributed to antenna 3.
3. The designation "4+3(4)" refers to a 2TX transmission configuration in which antennas 4 and 3 are simultaneously active, and the SAR or output power measurement is specifically attributed to antenna 4.

< 2.4GHz WLAN >

Burst Average Power (dBm)												
2.4GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11b (SISO)	1	2412	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	6	2437	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	11	2462	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	12	2467	21.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
802.11g (SISO)	13	2472	17.50	21.00	17.50	17.50	11.00	11.00	17.50	18.00	10.50	10.50
	1	2412	20.00	20.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	6	2437	22.00	22.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	11	2462	20.00	20.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	12	2467	17.50	17.50	17.50	17.50	11.00	11.00	17.50	17.50	10.50	10.50
	13	2472	15.00	15.00	15.00	15.00	11.00	11.00	15.00	15.00	10.50	10.50

Burst Average Power (dBm)												
2.4GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11b (MIMO)	1	2412	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	6	2437	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	11	2462	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	12	2467	22.50	22.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
802.11g (MIMO)	13	2472	18.00	18.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	1	2412	20.00	20.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	6	2437	22.00	22.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	11	2462	20.00	20.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	12	2467	17.50	17.50	17.50	17.50	11.00	11.00	17.50	17.50	10.50	10.50
802.11n HT20 (MIMO)	13	2472	15.00	15.00	15.00	15.00	11.00	11.00	15.00	15.00	10.50	10.50
	1	2412	19.50	19.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	6	2437	21.00	21.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	11	2462	19.00	19.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
802.11ac VHT20 (MIMO)	12	2467	17.00	17.00	17.00	17.00	11.00	11.00	17.00	17.00	10.50	10.50
	13	2472	15.00	15.00	15.00	15.00	11.00	11.00	15.00	15.00	10.50	10.50
	1	2412	19.50	19.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	6	2437	21.00	21.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
802.11ax HE20 (MIMO)	11	2462	19.00	19.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	12	2467	17.00	17.00	17.00	17.00	11.00	11.00	17.00	17.00	10.50	10.50
	13	2472	15.50	15.50	15.50	15.50	11.00	11.00	15.50	15.50	10.50	10.50
	1	2412	19.00	19.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
802.11be EHT20 (MIMO)	6	2437	21.00	21.00	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	11	2462	18.50	18.50	17.50	17.50	11.00	11.00	18.00	18.00	10.50	10.50
	12	2467	17.00	17.00	17.00	17.00	11.00	11.00	17.00	17.00	10.50	10.50
	13	2472	15.50	15.50	15.50	15.50	11.00	11.00	15.50	15.50	10.50	10.50

< 5GHz WLAN >

5.2GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Burst Average Power (dBm)									
			Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	36	5180	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	40	5200	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	44	5220	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	48	5240	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11n HT20 (MIMO)	36	5180	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	40	5200	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	44	5220	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	48	5240	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11n HT40 (MIMO)	38	5190	17.00	17.00	15.00	15.00	11.50	11.50	17.00	17.00	12.50	12.50
	46	5230	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ac VHT20 (MIMO)	36	5180	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	40	5200	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	44	5220	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	48	5240	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ac VHT40 (MIMO)	38	5190	17.00	17.00	15.00	15.00	11.50	11.50	17.00	17.00	12.50	12.50
	46	5230	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ac VHT80 (MIMO)	42	5210	15.50	15.50	15.00	15.00	11.50	11.50	15.50	15.50	12.50	12.50
802.11ax HE20 (MIMO)	36	5180	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	40	5200	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	44	5220	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	48	5240	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ax HE40 (MIMO)	38	5190	17.50	17.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	46	5230	20.00	20.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ax HE80 (MIMO)	42	5210	15.50	15.50	15.00	15.00	11.50	11.50	15.50	15.50	12.50	12.50
802.11be EHT20 (MIMO)	36	5180	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	40	5200	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	44	5220	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	48	5240	18.50	18.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11be EHT40 (MIMO)	38	5190	17.50	17.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	46	5230	20.00	20.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11be EHT80 (MIMO)	42	5210	15.50	15.50	15.00	15.00	11.50	11.50	15.50	15.50	12.50	12.50

5.3GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Burst Average Power (dBm)									
			Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	52	5260	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	56	5280	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	60	5300	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	64	5320	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11n HT20 (MIMO)	52	5260	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	56	5280	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	60	5300	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	64	5320	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11n HT40 (MIMO)	54	5270	20.00	20.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	62	5310	17.00	17.00	15.00	15.00	11.50	11.50	17.00	17.00	12.50	12.50
802.11ac VHT20 (MIMO)	52	5260	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	56	5280	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	60	5300	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	64	5320	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ac VHT40 (MIMO)	54	5270	20.00	20.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	62	5310	17.00	17.00	15.00	15.00	11.50	11.50	17.00	17.00	12.50	12.50
802.11ac VHT80 (MIMO)	58	5290	16.00	16.00	15.00	15.00	11.50	11.50	16.00	16.00	12.50	12.50
802.11ac VHT160 (MIMO)	50	5250	13.00	13.00	13.00	13.00	11.50	11.50	13.00	13.00	12.50	12.50
802.11ax HE20 (MIMO)	52	5260	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	56	5280	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	60	5300	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	64	5320	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11ax HE40 (MIMO)	54	5270	20.00	20.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	62	5310	16.50	16.50	15.00	15.00	11.50	11.50	16.50	16.50	12.50	12.50
802.11ax HE80 (MIMO)	58	5290	16.00	16.00	15.00	15.00	11.50	11.50	16.00	16.00	12.50	12.50
802.11ax HE160 (MIMO)	50	5250	13.00	13.00	13.00	13.00	11.50	11.50	13.00	13.00	12.50	12.50
802.11be EHT20 (MIMO)	52	5260	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	56	5280	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	60	5300	19.50	19.50	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	64	5320	19.00	19.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
802.11be EHT40 (MIMO)	54	5270	20.00	20.00	15.00	15.00	11.50	11.50	17.50	17.50	12.50	12.50
	62	5310	16.50	16.50	15.00	15.00	11.50	11.50	16.50	16.50	12.50	12.50
802.11be EHT80 (MIMO)	58	5290	16.00	16.00	15.00	15.00	11.50	11.50	16.00	16.00	12.50	12.50
802.11be EHT160 (MIMO)	50	5250	13.00	13.00	13.00	13.00	11.50	11.50	13.00	13.00	12.50	12.50



5.5GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Burst Average Power (dBm)									
			Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	100	5500	18.50	18.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	104	5520	18.50	18.50								
	116	5580	18.50	18.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	124	5620	18.50	18.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	132	5660	18.50	18.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	136	5680	18.50	18.50								
	140	5700	18.50	18.50								
802.11n HT20 (MIMO)	144	5720	18.50	18.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	100	5500	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	104	5520	19.00	19.00								
	116	5580	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	124	5620	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	132	5660	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	136	5680	19.00	19.00								
802.11n HT40 (MIMO)	140	5700	19.00	19.00								
	144	5720	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	102	5510	17.00	17.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	110	5550	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	126	5630	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	134	5670	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	142	5710	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
802.11ac VHT20 (MIMO)	100	5500	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	104	5520	19.00	19.00								
	116	5580	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	124	5620	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	132	5660	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	136	5680	19.00	19.00								
	140	5700	19.00	19.00								
802.11ac VHT40 (MIMO)	144	5720	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	102	5510	17.00	17.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	110	5550	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	126	5630	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	134	5670	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	142	5710	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	106	5530	15.50	15.50	15.50	15.50	9.50	9.50	15.50	15.50	12.50	12.50
802.11ac VHT80 (MIMO)	122	5610	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	138	5690	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
802.11ac VHT160 (MIMO)	114	5570	13.00	13.00	13.00	13.00	9.50	9.50	13.00	13.00	12.50	12.50
802.11ax HE20 (MIMO)	100	5500	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	104	5520	19.50	19.50								
	116	5580	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	124	5620	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	132	5660	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	136	5680	18.50	18.50								
	140	5700	17.50	17.50								
802.11ax HE40 (MIMO)	144	5720	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	102	5510	16.50	16.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	110	5550	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	126	5630	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	134	5670	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	142	5710	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	106	5530	15.50	15.50	15.50	15.50	9.50	9.50	15.50	15.50	12.50	12.50
802.11ax HE80 (MIMO)	122	5610	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	138	5690	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
802.11ax HE160 (MIMO)	114	5570	13.00	13.00	13.00	13.00	9.50	9.50	13.00	13.00	12.50	12.50
802.11be EHT20 (MIMO)	100	5500	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	104	5520	19.50	19.50								
	116	5580	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	124	5620	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	132	5660	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	136	5680	18.50	18.50								
	140	5700	17.50	17.50								
802.11be EHT40 (MIMO)	144	5720	19.00	19.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	102	5510	16.50	16.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	110	5550	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	126	5630	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50

	134	5670	19.50	19.50	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	142	5710	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
802.11be EHT80 (MIMO)	106	5530	15.50	15.50	15.50	15.50	9.50	9.50	15.50	15.50	12.50	12.50
	122	5610	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
	138	5690	20.00	20.00	16.50	16.50	9.50	9.50	16.00	16.00	12.50	12.50
802.11be EHT160 (MIMO)	114	5570	13.00	13.00	13.00	13.00	9.50	9.50	13.00	13.00	12.50	12.50

Burst Average Power (dBm)												
5.8GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	149	5745	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	157	5785	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	165	5825	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11n HT20 (MIMO)	149	5745	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	157	5785	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	165	5825	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11n HT40 (MIMO)	151	5755	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	159	5795	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11ac VHT20 (MIMO)	149	5745	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	157	5785	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	165	5825	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11ac VHT40 (MIMO)	151	5755	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	159	5795	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11ac VHT80 (MIMO)	155	5775	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11ax HE20 (MIMO)	149	5745	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	157	5785	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	165	5825	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11ax HE40 (MIMO)	151	5755	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	159	5795	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11ax HE80 (MIMO)	155	5775	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11be EHT20 (MIMO)	149	5745	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	157	5785	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	165	5825	21.00	21.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11be EHT40 (MIMO)	151	5755	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
	159	5795	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50
802.11be EHT80 (MIMO)	155	5775	20.00	20.00	17.00	17.00	11.50	11.50	16.00	16.00	11.50	11.50

5.9GHz Mode (CDD/SDM)	Channel	Frequency (MHz)	Burst Average Power (dBm)									
			Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	169	5845	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	173	5865	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	177	5885	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11n HT20 (MIMO)	169	5845	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	173	5865	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	177	5885	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11n HT40 (MIMO)	167	5835	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	175	5875	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ac VHT20 (MIMO)	169	5845	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	173	5865	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	177	5885	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ac VHT40 (MIMO)	167	5835	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	175	5875	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ac VHT80 (MIMO)	171	5855	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ac VHT160 (MIMO)	163	5815	19.00	19.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ax HE20 (MIMO)	169	5845	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	173	5865	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	177	5885	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ax HE40 (MIMO)	167	5835	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	175	5875	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ax HE80 (MIMO)	171	5855	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11ax HE160 (MIMO)	163	5815	19.00	19.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11be EHT20 (MIMO)	169	5845	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	173	5865	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	177	5885	21.00	21.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11be EHT40 (MIMO)	167	5835	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
	175	5875	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11be EHT80 (MIMO)	171	5855	20.00	20.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00
802.11be EHT160 (MIMO)	163	5815	19.00	19.00	17.00	17.00	11.50	11.50	15.50	15.50	12.00	12.00

**< 6GHz WLAN >****Standard Power (SP)**

Maximum Transmit Burst Average Power (dBm)					
6GHz Mode (SDM/CDD)	Band	Channel	Frequency (MHz)	Maximum power	
				Ant 3	Ant 4
802.11a (MIMO)	UNII 5	1	5955	21.00	21.00
	UNII 5	49	6195	21.00	21.00
	UNII 5	93	6415	21.00	21.00
	UNII 7	117	6535	21.00	21.00
	UNII 7	149	6695	21.00	21.00
	UNII 7	181	6855	21.00	21.00
802.11ax-HE20 (MIMO)	UNII 5	1	5955	21.00	21.00
	UNII 5	49	6195	21.00	21.00
	UNII 5	93	6415	21.00	21.00
	UNII 7	117	6535	21.00	21.00
	UNII 7	149	6695	21.00	21.00
	UNII 7	181	6855	21.00	21.00
802.11ax-HE40 (MIMO)	UNII 5	3	5965	20.00	20.00
	UNII 5	51	6205	20.00	20.00
	UNII 5	91	6405	20.00	20.00
	UNII 7	123	6565	20.00	20.00
	UNII 7	147	6685	20.00	20.00
	UNII 7	179	6845	20.00	20.00
802.11ax-HE80 (MIMO)	UNII 5	7	5985	20.00	20.00
	UNII 5	55	6225	20.00	20.00
	UNII 5	87	6385	20.00	20.00
	UNII 7	135	6625	20.00	20.00
	UNII 7	151	6705	20.00	20.00
	UNII 7	167	6785	20.00	20.00
802.11ax-HE160 (MIMO)	UNII 5	15	6025	20.00	20.00
	UNII 5	47	6185	20.00	20.00
	UNII 5	79	6345	19.00	19.00
	UNII 7	143	6665	19.50	19.50
802.11be-EHT20 (MIMO)	UNII 5	1	5955	21.00	21.00
	UNII 5	49	6195	21.00	21.00
	UNII 5	93	6415	21.00	21.00
	UNII 7	117	6535	21.00	21.00
	UNII 7	149	6695	21.00	21.00
	UNII 7	181	6855	21.00	21.00
802.11be-EHT40 (MIMO)	UNII 5	3	5965	20.00	20.00
	UNII 5	51	6205	20.00	20.00
	UNII 5	91	6405	20.00	20.00
	UNII 7	123	6565	20.00	20.00
	UNII 7	147	6685	20.00	20.00
	UNII 7	179	6845	20.00	20.00
802.11be-EHT80 (MIMO)	UNII 5	7	5985	20.00	20.00
	UNII 5	55	6225	20.00	20.00
	UNII 5	87	6385	20.00	20.00
	UNII 7	135	6625	20.00	20.00
	UNII 7	151	6705	20.00	20.00
	UNII 7	167	6785	20.00	20.00
802.11be-EHT160 (MIMO)	UNII 5	15	6025	20.00	20.00
	UNII 5	47	6185	20.00	20.00
	UNII 5	79	6345	19.00	19.00
	UNII 7	143	6665	19.50	19.50

6GHz Mode (CDD/SDM)	Band	Channel	Frequency (MHz)	Burst Average Power (dBm)									
				Maximum power		Index 1		Index 2		Index 3		Index 4	
				Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	UNII 5	1	5955	21.00	21.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	57	6235	21.00	21.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	173	6815	21.00	21.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11ax HE20 (MIMO)	UNII 5	1	5955	21.00	21.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	57	6235	21.00	21.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	173	6815	21.00	21.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11ax HE40 (MIMO)	UNII 5	3	5965	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	59	6245	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	171	6805	20.00	20.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11ax HE80 (MIMO)	UNII 5	7	5985	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	71	6305	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	167	6785	20.00	20.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11ax HE160 (MIMO)	UNII 5	15	6025	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	47	6185	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	143	6665	19.50	19.50	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11be EHT20 (MIMO)	UNII 5	1	5955	21.00	21.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	57	6235	21.00	21.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	173	6815	21.00	21.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11be EHT40 (MIMO)	UNII 5	3	5965	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	59	6245	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	171	6805	20.00	20.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11be EHT80 (MIMO)	UNII 5	7	5985	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	71	6305	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	167	6785	20.00	20.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11be EHT160 (MIMO)	UNII 5	15	6025	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	47	6185	20.00	20.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 7	143	6665	19.50	19.50	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00



Standard Power (LPI)

Maximum Transmit Burst Average Power (dBm)							
6GHz Mode (SDM/CDD)	Band	Channel	Frequency (MHz)	SDM		CDD	
				Maximum power		Maximum power	
				Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	UNII 5	1	5955	10.50	10.50	6.00	6.00
	UNII 5	49	6195	10.50	10.50	6.00	6.00
	UNII 5	93	6415	10.50	10.50	6.00	6.00
	UNII 6	97	6435	7.50	7.50	7.50	7.50
	UNII 6	105	6475	9.50	9.50	7.50	7.50
	UNII 6	113	6515	7.50	7.50	7.50	7.50
	UNII 7	117	6535	10.50	10.50	7.00	7.00
	UNII 7	149	6695	10.50	10.50	7.00	7.00
	UNII 7	181	6855	8.00	8.00	7.00	7.00
	UNII 7	185	6875	8.00	8.00	7.00	7.00
	UNII 8	189	6895	12.00	12.00	8.00	8.00
	UNII 8	209	6995	12.00	12.00	7.00	7.00
802.11ax-HE20 (MIMO)	UNII 5	1	5955	11.00	11.00	6.50	6.50
	UNII 5	49	6195	11.00	11.00	6.50	6.50
	UNII 5	93	6415	11.00	11.00	6.50	6.50
	UNII 6	97	6435	10.50	10.50	7.50	7.50
	UNII 6	105	6475	10.50	10.50	7.00	7.00
	UNII 6	113	6515	10.50	10.50	7.00	7.00
	UNII 7	117	6535	11.00	11.00	7.50	7.50
	UNII 7	149	6695	11.00	11.00	7.50	7.50
	UNII 7	181	6855	8.50	8.50	7.50	7.50
	UNII 7	185	6875	8.50	8.50	7.50	7.50
	UNII 8	189	6895	12.50	12.50	8.50	8.50
	UNII 8	209	6995	12.00	12.00	8.00	8.00
802.11ax-HE40 (MIMO)	UNII 5	3	5965	13.50	13.50	10.50	10.50
	UNII 5	51	6205	13.50	13.50	10.50	10.50
	UNII 5	91	6405	13.50	13.50	10.50	10.50
	UNII 6	99	6445	12.50	12.50	11.50	11.50
	UNII 6	107	6485	13.00	13.00	11.50	11.50
	UNII 6	115	6525	12.50	12.50	11.50	11.50
	UNII 7	123	6565	14.00	14.00	11.00	11.00
	UNII 7	147	6685	14.00	14.00	11.00	11.00
	UNII 7	179	6845	14.00	14.00	9.00	9.00
	UNII 7	187	6885	14.00	14.00	9.00	9.00
	UNII 8	195	6925	15.50	15.50	12.00	12.00
	UNII 8	211	7005	15.50	15.50	12.00	12.00
802.11ax-HE80 (MIMO)	UNII 5	7	5985	16.50	16.50	13.50	13.50
	UNII 5	55	6225	16.50	16.50	13.50	13.50
	UNII 5	87	6385	16.50	16.50	13.50	13.50
	UNII 6	103	6465	16.00	16.00	14.00	14.00
	UNII 6	119	6545	15.50	15.50	14.00	14.00
	UNII 7	135	6625	17.00	17.00	14.00	14.00
	UNII 7	151	6705	17.00	17.00	14.00	14.00
	UNII 7	167	6785	17.00	17.00	14.00	14.00
	UNII 7	183	6865	17.00	17.00	14.00	14.00
	UNII 8	199	6945	18.00	18.00	15.00	15.00
802.11ax-HE160 (MIMO)	UNII 5	15	6025	19.00	19.00	16.50	16.50
	UNII 5	47	6185	19.00	19.00	16.50	16.50
	UNII 5	79	6345	19.00	19.00	16.50	16.50
	UNII 6	111	6505	17.50	17.50	17.00	17.00
	UNII 7	143	6665	18.50	18.50	17.00	17.00
	UNII 7	175	6825	18.50	18.50	17.00	17.00
802.11be-EHT20 (MIMO)	UNII 5	207	6985	17.00	17.00	17.00	17.00
	UNII 5	1	5955	11.00	11.00	6.50	6.50
	UNII 5	49	6195	11.00	11.00	6.50	6.50
	UNII 5	93	6415	11.00	11.00	6.50	6.50
	UNII 6	97	6435	10.50	10.50	7.50	7.50
	UNII 6	105	6475	10.50	10.50	7.00	7.00
	UNII 6	113	6515	10.50	10.50	7.00	7.00
	UNII 7	117	6535	11.00	11.00	7.50	7.50

	UNII 8	189	6895	12.50	12.50	8.50	8.50
	UNII 8	209	6995	12.00	12.00	8.00	8.00
	UNII 8	229	7095	12.00	12.00	8.00	8.00
802.11be-EHT40 (MIMO)	UNII 5	3	5965	13.50	13.50	10.50	10.50
	UNII 5	51	6205	13.50	13.50	10.50	10.50
	UNII 5	91	6405	13.50	13.50	10.50	10.50
	UNII 6	99	6445	12.50	12.50	11.50	11.50
	UNII 6	107	6485	13.00	13.00	11.50	11.50
	UNII 6	115	6525	12.50	12.50	11.50	11.50
	UNII 7	123	6565	14.00	14.00	11.00	11.00
	UNII 7	147	6685	14.00	14.00	11.00	11.00
	UNII 7	179	6845	14.00	14.00	9.00	9.00
	UNII 7	187	6885	14.00	14.00	9.00	9.00
	UNII 8	195	6925	15.50	15.50	12.00	12.00
	UNII 8	211	7005	15.50	15.50	12.00	12.00
	UNII 8	227	7085	15.50	15.50	12.00	12.00
802.11be-EHT80 (MIMO)	UNII 5	7	5985	16.50	16.50	13.50	13.50
	UNII 5	55	6225	16.50	16.50	13.50	13.50
	UNII 5	87	6385	16.50	16.50	13.50	13.50
	UNII 6	103	6465	16.00	16.00	14.00	14.00
	UNII 6	119	6545	15.50	15.50	14.00	14.00
	UNII 7	135	6625	17.00	17.00	14.00	14.00
	UNII 7	151	6705	17.00	17.00	14.00	14.00
	UNII 7	167	6785	17.00	17.00	14.00	14.00
	UNII 7	183	6865	17.00	17.00	14.00	14.00
	UNII 8	199	6945	18.00	18.00	15.00	15.00
	UNII 8	215	7025	18.00	18.00	15.00	15.00
802.11be-EHT160 (MIMO)	UNII 5	15	6025	19.00	19.00	16.50	16.50
	UNII 5	47	6185	19.00	19.00	16.50	16.50
	UNII 5	79	6345	19.00	19.00	16.50	16.50
	UNII 6	111	6505	17.50	17.50	17.00	17.00
	UNII 7	143	6665	18.50	18.50	17.00	17.00
	UNII 7	175	6825	18.50	18.50	17.00	17.00
	UNII 8	207	6985	17.00	17.00	17.00	17.00

6GHz Mode (CDD/SDM)	Band	Channel	Frequency (MHz)	Burst Average Power (dBm)									
				Maximum power		Index 1		Index 2		Index 3		Index 4	
				Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	UNII 5	1	5955	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	UNII 5	57	6235	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	UNII 6	113	6515	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
	UNII 7	173	6815	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
802.11ax HE20 (MIMO)	UNII 5	1	5955	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	UNII 5	57	6235	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	UNII 6	113	6515	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	UNII 7	173	6815	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50
802.11ax HE40 (MIMO)	UNII 5	3	5965	13.50	13.50	13.50	13.50	11.50	11.50	13.50	13.50	11.00	11.00
	UNII 5	59	6245	13.50	13.50	13.50	13.50	11.50	11.50	13.50	13.50	11.00	11.00
	UNII 6	107	6485	13.00	13.00	13.00	13.00	12.50	12.50	13.00	13.00	11.50	11.50
	UNII 7	171	6805	14.00	14.00	14.00	14.00	12.50	12.50	13.50	13.50	10.00	10.00
802.11ax HE80 (MIMO)	UNII 8	227	7085	15.50	15.50	15.50	15.50	12.50	12.50	15.50	15.50	12.50	12.50
	UNII 5	7	5985	16.50	16.50	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	71	6305	16.50	16.50	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 6	119	6545	15.50	15.50	15.50	15.50	12.50	12.50	14.50	14.50	11.50	11.50
802.11ax HE160 (MIMO)	UNII 7	167	6785	17.00	17.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
	UNII 8	215	7025	18.00	18.00	17.00	17.00	12.50	12.50	18.00	18.00	12.50	12.50
	UNII 5	15	6025	19.00	19.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	47	6185	19.00	19.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
802.11be EHT20 (MIMO)	UNII 6	111	6505	17.50	17.50	17.50	17.50	12.50	12.50	14.50	14.50	11.50	11.50
	UNII 7	143	6665	18.50	18.50	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
	UNII 8	207	6985	17.00	17.00	17.00	17.00	12.50	12.50	17.00	17.00	12.50	12.50
	UNII 5	1	5955	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
802.11be EHT40 (MIMO)	UNII 5	57	6235	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	UNII 6	113	6515	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	UNII 7	173	6815	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50
	UNII 5	3	5965	13.50	13.50	13.50	13.50	11.50	11.50	13.50	13.50	11.00	11.00
802.11be EHT80 (MIMO)	UNII 5	59	6245	13.50	13.50	13.50	13.50	11.50	11.50	13.50	13.50	11.00	11.00
	UNII 6	107	6485	13.00	13.00	13.00	13.00	12.50	12.50	13.00	13.00	11.50	11.50
	UNII 7	171	6805	14.00	14.00	14.00	14.00	12.50	12.50	13.50	13.50	10.00	10.00
	UNII 8	227	7085	15.50	15.50	15.50	15.50	12.50	12.50	15.50	15.50	12.50	12.50
802.11be EHT160 (MIMO)	UNII 5	7	5985	16.50	16.50	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	71	6305	16.50	16.50	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 6	119	6545	15.50	15.50	15.50	15.50	12.50	12.50	14.50	14.50	11.50	11.50
	UNII 7	167	6785	17.00	17.00	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
802.11be EHT160 (MIMO)	UNII 8	215	7025	18.00	18.00	17.00	17.00	12.50	12.50	18.00	18.00	12.50	12.50
	UNII 5	15	6025	19.00	19.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 5	47	6185	19.00	19.00	16.50	16.50	11.50	11.50	15.50	15.50	11.00	11.00
	UNII 6	111	6505	17.50	17.50	17.50	17.50	12.50	12.50	14.50	14.50	11.50	11.50
802.11be EHT160 (MIMO)	UNII 7	143	6665	18.50	18.50	15.50	15.50	12.50	12.50	13.50	13.50	10.00	10.00
	UNII 8	207	6985	17.00	17.00	17.00	17.00	12.50	12.50	17.00	17.00	12.50	12.50

**Standard Power (VLP)**

Maximum Transmit Burst Average Power (dBm)							
6GHz Mode (CDD/SDM)	Band	Channel	Frequency (MHz)	SDM		CDD	
				Maximum power		Maximum power	
				Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	UNII 5	1	5955	5.00	5.00	2.00	2.00
	UNII 5	49	6195	5.00	5.00	2.00	2.00
	UNII 5	93	6415	5.00	5.00	2.00	2.00
	UNII 6	97	6435	4.50	4.50	2.50	2.50
	UNII 6	105	6475	4.50	4.50	3.00	3.00
	UNII 6	113	6515	5.00	5.00	3.00	3.00
	UNII 7	117	6535	5.50	5.50	2.50	2.50
	UNII 7	149	6695	5.50	5.50	2.50	2.50
	UNII 7	181	6855	5.50	5.50	2.50	2.50
	UNII 7	185	6875	5.50	5.50	2.50	2.50
	UNII 8	189	6895	8.00	8.00	4.00	4.00
	UNII 8	209	6995	6.50	6.50	4.00	4.00
802.11ax-HE20 (MIMO)	UNII 8	229	7095	6.50	6.50	4.00	4.00
	UNII 5	1	5955	6.00	6.00	2.50	2.50
	UNII 5	49	6195	6.00	6.00	2.50	2.50
	UNII 5	93	6415	6.00	6.00	2.50	2.50
	UNII 6	97	6435	5.00	5.00	2.50	2.50
	UNII 6	105	6475	5.00	5.00	3.00	3.00
	UNII 6	113	6515	5.00	5.00	3.50	3.50
	UNII 7	117	6535	6.00	6.00	3.50	3.50
	UNII 7	149	6695	6.00	6.00	3.50	3.50
	UNII 7	181	6855	6.00	6.00	3.50	3.50
	UNII 7	185	6875	6.00	6.00	3.50	3.50
	UNII 8	189	6895	7.50	7.50	4.50	4.50
802.11ax-HE40 (MIMO)	UNII 8	209	6995	7.50	7.50	4.50	4.50
	UNII 8	229	7095	7.50	7.50	4.50	4.50
	UNII 5	3	5965	7.50	7.50	5.50	5.50
	UNII 5	51	6205	7.50	7.50	5.50	5.50
	UNII 5	91	6405	7.50	7.50	5.50	5.50
	UNII 6	99	6445	7.50	7.50	6.50	6.50
	UNII 6	107	6485	7.00	7.00	6.50	6.50
	UNII 6	115	6525	7.50	7.50	6.50	6.50
	UNII 7	123	6565	7.50	7.50	6.50	6.50
	UNII 7	147	6685	7.50	7.50	6.50	6.50
	UNII 7	179	6845	8.50	8.50	6.50	6.50
	UNII 7	187	6885	8.50	8.50	6.50	6.50
802.11ax-HE80 (MIMO)	UNII 8	195	6925	11.00	11.00	7.50	7.50
	UNII 8	211	7005	11.00	11.00	7.50	7.50
	UNII 8	227	7085	11.00	11.00	7.50	7.50
	UNII 5	7	5985	12.50	12.50	7.50	7.50
	UNII 5	55	6225	12.50	12.50	7.50	7.50
	UNII 5	87	6385	12.50	12.50	7.50	7.50
	UNII 6	103	6465	11.50	11.50	10.00	10.00
	UNII 6	119	6545	11.50	11.50	10.00	10.00
	UNII 7	135	6625	12.50	12.50	7.50	7.50
	UNII 7	151	6705	12.50	12.50	7.50	7.50
	UNII 7	167	6785	12.50	12.50	8.50	8.50
	UNII 7	183	6865	12.50	12.50	8.50	8.50
802.11ax-HE160 (MIMO)	UNII 8	199	6945	13.50	13.50	11.00	11.00
	UNII 8	215	7025	13.50	13.50	11.00	11.00
	UNII 5	15	6025	15.00	15.00	12.00	12.00
	UNII 5	47	6185	15.00	15.00	12.00	12.00
	UNII 5	79	6345	15.00	15.00	12.00	12.00
	UNII 6	111	6505	14.00	14.00	12.50	12.50
	UNII 7	143	6665	15.50	15.50	13.00	13.00
802.11be-EHT20 (MIMO)	UNII 7	175	6825	15.50	15.50	13.00	13.00
	UNII 8	207	6985	16.50	16.50	14.00	14.00
	UNII 5	1	5955	6.00	6.00	2.50	2.50
	UNII 5	49	6195	6.00	6.00	2.50	2.50
	UNII 5	93	6415	6.00	6.00	2.50	2.50
	UNII 6	97	6435	5.00	5.00	2.50	2.50
	UNII 6	105	6475	5.00	5.00	3.00	3.00
	UNII 6	113	6515	5.00	5.00	3.50	3.50
	UNII 7	117	6535	6.00	6.00	3.50	3.50
	UNII 7	149	6695	6.00	6.00	3.50	3.50
	UNII 7	181	6855	6.00	6.00	3.50	3.50
	UNII 7	185	6875	6.00	6.00	3.50	3.50

	UNII 8	189	6895	7.50	7.50	4.50	4.50
	UNII 8	209	6995	7.50	7.50	4.50	4.50
	UNII 8	229	7095	7.50	7.50	4.50	4.50
802.11be-EHT40 (MIMO)	UNII 5	3	5965	7.50	7.50	5.50	5.50
	UNII 5	51	6205	7.50	7.50	5.50	5.50
	UNII 5	91	6405	7.50	7.50	5.50	5.50
	UNII 6	99	6445	7.50	7.50	6.50	6.50
	UNII 6	107	6485	7.00	7.00	6.50	6.50
	UNII 6	115	6525	7.50	7.50	6.50	6.50
	UNII 7	123	6565	7.50	7.50	6.50	6.50
	UNII 7	147	6685	7.50	7.50	6.50	6.50
	UNII 7	179	6845	8.50	8.50	6.50	6.50
	UNII 7	187	6885	8.50	8.50	6.50	6.50
	UNII 8	195	6925	11.00	11.00	7.50	7.50
	UNII 8	211	7005	11.00	11.00	7.50	7.50
	UNII 8	227	7085	11.00	11.00	7.50	7.50
802.11be-EHT80 (MIMO)	UNII 5	7	5985	12.50	12.50	7.50	7.50
	UNII 5	55	6225	12.50	12.50	7.50	7.50
	UNII 5	87	6385	12.50	12.50	7.50	7.50
	UNII 6	103	6465	11.50	11.50	10.00	10.00
	UNII 6	119	6545	11.50	11.50	10.00	10.00
	UNII 7	135	6625	12.50	12.50	7.50	7.50
	UNII 7	151	6705	12.50	12.50	7.50	7.50
	UNII 7	167	6785	12.50	12.50	8.50	8.50
	UNII 7	183	6865	12.50	12.50	8.50	8.50
	UNII 8	199	6945	13.50	13.50	11.00	11.00
	UNII 8	215	7025	13.50	13.50	11.00	11.00
802.11be-EHT160 (MIMO)	UNII 5	15	6025	15.00	15.00	12.00	12.00
	UNII 5	47	6185	15.00	15.00	12.00	12.00
	UNII 5	79	6345	15.00	15.00	12.00	12.00
	UNII 6	111	6505	14.00	14.00	12.50	12.50
	UNII 7	143	6665	15.50	15.50	13.00	13.00
	UNII 7	175	6825	15.50	15.50	13.00	13.00
	UNII 8	207	6985	16.50	16.50	14.00	14.00

6GHz Mode (CDD/SDM)	Band	Channel	Frequency (MHz)	Burst Average Power (dBm)			
				Maximum power		Index 4	
				Ant 3	Ant 4	Ant 3	Ant 4
802.11a (MIMO)	UNII 5	1	5955	5.00	5.00	5.00	5.00
	UNII 5	57	6235	5.00	5.00	5.00	5.00
	UNII 6	113	6515	5.00	5.00	5.00	5.00
	UNII 7	173	6815	5.50	5.50	5.50	5.50
802.11ax HE20 (MIMO)	UNII 5	1	5955	6.00	6.00	6.00	6.00
	UNII 5	57	6235	6.00	6.00	6.00	6.00
	UNII 6	113	6515	5.00	5.00	5.00	5.00
	UNII 7	173	6815	6.00	6.00	6.00	6.00
802.11ax HE40 (MIMO)	UNII 5	3	5965	7.50	7.50	7.50	7.50
	UNII 5	59	6245	7.50	7.50	7.50	7.50
	UNII 6	107	6485	7.00	7.00	7.00	7.00
	UNII 7	171	6805	8.50	8.50	8.50	8.50
802.11ax HE80 (MIMO)	UNII 8	227	7085	11.00	11.00	11.00	11.00
	UNII 5	7	5985	12.50	12.50	11.00	11.00
	UNII 5	71	6305	12.50	12.50	11.00	11.00
	UNII 6	119	6545	11.50	11.50	11.50	11.50
802.11ax HE160 (MIMO)	UNII 7	167	6785	12.50	12.50	10.00	10.00
	UNII 8	215	7025	13.50	13.50	12.50	12.50
	UNII 5	15	6025	15.00	15.00	11.00	11.00
	UNII 5	47	6185	15.00	15.00	11.00	11.00
802.11be EHT20 (MIMO)	UNII 6	111	6505	14.00	14.00	11.50	11.50
	UNII 7	143	6665	15.50	15.50	10.00	10.00
	UNII 8	207	6985	16.50	16.50	12.50	12.50
	UNII 5	1	5955	6.00	6.00	6.00	6.00
802.11be EHT40 (MIMO)	UNII 5	57	6235	6.00	6.00	6.00	6.00
	UNII 6	113	6515	5.00	5.00	5.00	5.00
	UNII 7	173	6815	6.00	6.00	6.00	6.00
	UNII 5	3	5965	7.50	7.50	7.50	7.50
802.11be EHT80 (MIMO)	UNII 5	59	6245	7.50	7.50	7.50	7.50
	UNII 6	107	6485	7.00	7.00	7.00	7.00
	UNII 7	171	6805	8.50	8.50	8.50	8.50
	UNII 8	227	7085	11.00	11.00	11.00	11.00
802.11be EHT160 (MIMO)	UNII 5	7	5985	12.50	12.50	11.00	11.00
	UNII 5	71	6305	12.50	12.50	11.00	11.00
	UNII 6	119	6545	11.50	11.50	11.50	11.50
	UNII 7	167	6785	12.50	12.50	10.00	10.00
802.11be EHT20 (MIMO)	UNII 8	215	7025	13.50	13.50	12.50	12.50
	UNII 5	15	6025	15.00	15.00	11.00	11.00
	UNII 5	47	6185	15.00	15.00	11.00	11.00
	UNII 6	111	6505	14.00	14.00	11.50	11.50
802.11be EHT40 (MIMO)	UNII 7	143	6665	15.50	15.50	10.00	10.00
	UNII 8	207	6985	16.50	16.50	12.50	12.50
	UNII 5	1	5955	6.00	6.00	6.00	6.00
	UNII 5	57	6235	6.00	6.00	6.00	6.00
802.11be EHT80 (MIMO)	UNII 6	113	6515	5.00	5.00	5.00	5.00
	UNII 7	173	6815	6.00	6.00	6.00	6.00
	UNII 5	3	5965	7.50	7.50	7.50	7.50
	UNII 5	59	6245	7.50	7.50	7.50	7.50
802.11be EHT160 (MIMO)	UNII 6	107	6485	7.00	7.00	7.00	7.00
	UNII 7	171	6805	8.50	8.50	8.50	8.50
	UNII 8	227	7085	11.00	11.00	11.00	11.00
	UNII 5	7	5985	12.50	12.50	11.00	11.00
802.11be EHT20 (MIMO)	UNII 5	71	6305	12.50	12.50	11.00	11.00
	UNII 6	119	6545	11.50	11.50	11.50	11.50
	UNII 7	167	6785	12.50	12.50	10.00	10.00
	UNII 8	215	7025	13.50	13.50	12.50	12.50
802.11be EHT40 (MIMO)	UNII 5	15	6025	15.00	15.00	11.00	11.00
	UNII 5	47	6185	15.00	15.00	11.00	11.00
	UNII 6	111	6505	14.00	14.00	11.50	11.50
	UNII 7	143	6665	15.50	15.50	10.00	10.00
802.11be EHT80 (MIMO)	UNII 8	207	6985	16.50	16.50	12.50	12.50
	UNII 5	1	5955	6.00	6.00	6.00	6.00
	UNII 5	57	6235	6.00	6.00	6.00	6.00
	UNII 6	113	6515	5.00	5.00	5.00	5.00
802.11be EHT160 (MIMO)	UNII 7	173	6815	6.00	6.00	6.00	6.00
	UNII 5	3	5965	7.50	7.50	7.50	7.50
	UNII 5	59	6245	7.50	7.50	7.50	7.50
	UNII 6	107	6485	7.00	7.00	7.00	7.00
802.11be EHT20 (MIMO)	UNII 7	171	6805	8.50	8.50	8.50	8.50
	UNII 8	227	7085	11.00	11.00	11.00	11.00
	UNII 5	7	5985	12.50	12.50	11.00	11.00
	UNII 5	71	6305	12.50	12.50	11.00	11.00
802.11be EHT40 (MIMO)	UNII 6	119	6545	11.50	11.50	11.50	11.50
	UNII 7	167	6785	12.50	12.50	10.00	10.00
	UNII 8	215	7025	13.50	13.50	12.50	12.50
	UNII 5	15	6025	15.00	15.00	11.00	11.00
802.11be EHT80 (MIMO)	UNII 5	47	6185	15.00	15.00	11.00	11.00
	UNII 6	111	6505	14.00	14.00	11.50	11.50
	UNII 7	143	6665	15.50	15.50	10.00	10.00
	UNII 8	207	6985	16.50	16.50	12.50	12.50

<Bluetooth/Thread/UWB Maximum Power>
General Note:

- The device implements the power management for Bluetooth/Thread SAR compliance for different exposure conditions and user cases. In each exposure condition, the power index selection is determined by the user cases. Full details about the proprietary power management decision are illustrated in the operational description.

Burst Average Power (dBm)												
Bluetooth Mode	Channel	Frequency (MHz)	Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
BR / EDR 1Mbps (SISO)	0	2402	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
	39	2441	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
	78	2480	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
BR / EDR 2Mbps (SISO)	0	2402	19.00	19.00	14.50	13.00	19.00	19.00	15.00	18.00	13.50	15.00
	39	2441	19.00	19.00	14.50	13.00	19.00	19.00	15.00	18.00	13.50	15.00
	78	2480	19.00	19.00	14.50	13.00	19.00	19.00	15.00	18.00	13.50	15.00
BR / EDR 3Mbps (SISO)	0	2402	19.00	19.00	14.50	13.00	19.00	19.00	15.00	18.00	13.50	15.00
	39	2441	19.00	19.00	14.50	13.00	19.00	19.00	15.00	18.00	13.50	15.00
	78	2480	19.00	19.00	14.50	13.00	19.00	19.00	15.00	18.00	13.50	15.00
LE 1Mbps (SISO)	0	2402	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
	19	2440	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
	39	2480	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
LE 2Mbps (SISO)	1	2404	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
	19	2440	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
	38	2478	21.00	21.00	14.50	13.00	20.50	21.00	15.00	18.00	13.50	15.00
BLE CS GFSK 1Mbps (SISO)	2	2404	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	38	2440	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	76	2478	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
BLE CS GFSK 2Mbps (SISO)	2	2404	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	38	2440	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	76	2478	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
BLE CS ASK 1Mbps (SISO)	2	2404	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	38	2440	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	76	2478	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
BLE CS ASK 2Mbps (SISO)	2	2404	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	38	2440	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00
	76	2478	20.00	20.00	14.50	13.00	20.00	20.00	15.00	18.00	13.50	15.00

Burst Average Power (dBm)												
Bluetooth Mode	Channel	Frequency (MHz)	Maximum power		Index 1		Index 2		Index 3		Index 4	
			Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
BR / EDR 1Mbps (MIMO)	0	2402	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	39	2441	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	78	2480	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
BR / EDR 2Mbps (MIMO)	0	2402	19.00	19.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	39	2441	19.00	19.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	78	2480	19.00	19.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
BR / EDR 3Mbps (MIMO)	0	2402	19.00	19.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	39	2441	19.00	19.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	78	2480	19.00	19.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
LE 1Mbps (MIMO)	0	2402	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	19	2440	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	39	2480	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
LE 2Mbps (MIMO)	1	2404	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	19	2440	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50
	38	2478	21.00	21.00	13.50	13.50	19.00	19.00	15.50	15.50	13.50	13.50

Burst Average Power (dBm)							
Thread Mode	Channel	Frequency (MHz)	Maximum power	Index 1	Index 2	Index 3	Index 4
			Ant 3	Ant 3	Ant 3	Ant 3	Ant 3
250K (SISO)	11	2405	22.00	14.00	21.00	14.00	13.00
	18	2440	22.00	14.00	21.00	14.00	13.00
	25	2475	22.00	14.00	21.00	14.00	13.00
	26	2480	22.00	14.00	21.00	14.00	13.00

Maximum Tune up Power (dBm)			
UWB	Ant 5 (CH05)	Patch Antenna (CH09)	Ant 5 (CH09)
	-13.36	-14.93	-11.04
			-13.6

2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																																													
FCC ID	A4RG4HCD																																																																												
Equipment Name	Phone																																																																												
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																																												
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																																												
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																																												
LTE Voice / Data requirements	Voice and Data																																																																												
LTE MPR permanently built-in by design	<table><tr><th colspan="8">Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</th></tr><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 2</td></tr><tr><td>64 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 3</td></tr><tr><td>256 QAM</td><td colspan="6">≥ 1</td><td>≤ 5</td></tr></table>							Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3								Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3																																																																													
Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)																																																																						
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																																																							
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																																																						
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																																						
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																																																						
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2																																																																						
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3																																																																						
256 QAM	≥ 1						≤ 5																																																																						
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																																												
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																												
Power reduction applied to satisfy SAR compliance	The device has several different power modes for each exposure conditions SAR compliance; power selection is determined by the device's positioning and usage scenarios. Detail refer to operational description.																																																																												
LTE Carrier Aggregation Combinations	The UL CA include in parent model GBC0H part 1 SAR Report section 12																																																																												
LTE Carrier Aggregation Additional Information	Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA																																																																												



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829				
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844				
LTE Band 7												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510				
M	21100	2535	21100	2535	21100	2535	21100	2535				
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560				
LTE Band 12												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704				
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5				
H	23173	715.3	23165	714.5	23115	713.5	23130	711				
LTE Band 13												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23205	779.5	23230	782	23230	782	23230	782	23230	782	23230	782
M	23230	782	23230	782	23230	782	23230	782	23230	782	23230	782
H	23255	784.5	23255	784.5	23255	784.5	23255	784.5	23255	784.5	23255	784.5
LTE Band 14												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23305	790.5	23330	793	23330	793	23330	793	23330	793	23330	793
M	23330	793	23330	793	23330	793	23330	793	23330	793	23330	793
H	23355	795.5	23355	795.5	23355	795.5	23355	795.5	23355	795.5	23355	795.5
LTE Band 17												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23755	706.5	23780	709	23780	709	23780	709	23780	709	23780	709
M	23790	710	23790	710	23790	710	23790	710	23790	710	23790	710
H	23825	713.5	23800	711	23800	711	23800	711	23800	711	23800	711
LTE Band 25												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905
LTE Band 26												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5	26790	824
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5	26940	839



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

LTE Band 30												
	Bandwidth 5MHz				Bandwidth 10MHz							
	Ch. #		Freq. (MHz)		Ch. #				Freq. (MHz)			
L	27685		2307.5		27710				2310			
M	27710		2310									
H	27735		2312.5									
LTE Band 38												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580				
M	38000	2595	38000	2595	38000	2595	38000	2595				
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610				
LTE Band 41												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506				
LMM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5				
M	40620	2593	40620	2593	40620	2593	40620	2593				
HMM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5				
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680				
LTE Band 48												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560				
LMM	55810	3607	55815	3607.5	55820	3608	55830	3609				
M	55990	3625	55990	3625	55990	3625	55990	3625				
HMM	56170	3643	56165	3642.5	56160	3642	56150	3641				
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690				
LTE Band 66												
	Bandwidth 1.4MHz		Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770
LTE Band 71												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz					
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)				
L	133147	665.5	133172	668	133197	670.5	133222	673				
M	133297	680.5	133297	680.5	133297	680.5	133297	680.5				
H	133447	695.5	133422	693	133397	690.5	133372	688				

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

5G NR Information	
FCC ID	A4RG4HCD
Equipment Name	Phone
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n13 : 777 MHz ~ 787 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450 MHz ~ 3550 MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450 MHz ~ 3550 MHz
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz, 25MHz, 30MHz, 35MHz, 40MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 35MHz, 40MHz, 50MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n13: 5MHz, 10MHz 5G NR n14: 5MHz, 10MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 35MHz, 40MHz 5G NR n26: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz 5G NR n41: 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 35MHz, 40MHz, 45MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 35MHz 5G NR n77/n78: 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Band 2	FR1 n2/5/7/12/25/30/38/41/66/71/77/78
LTE Anchor Band 4	FR1 n2/7/38/41/78
LTE Anchor Band 5	FR1 n2/7/30/38/41/66/77/78
LTE Anchor Band 7	FR1 n2/5/12/25/26/66/71/77/78
LTE Anchor Band 12	FR1 n2/7/25/30/38/41/66/77/78
LTE Anchor Band 13	FR1 n2/7/25/66/77/78
LTE Anchor Band 14	FR1 n2/30/66/77
LTE Anchor Band 25	FR1 n41/77/78
LTE Anchor Band 26	FR1 n41/78
LTE Anchor Band 30	FR1 n2/5/66/77
LTE Anchor Band 38	FR1 n78
LTE Anchor Band 41	FR1 n77/78
LTE Anchor Band 48	FR1 n2/5/12/25/66/71
LTE Anchor Band 66	FR1 n2/5/7/12/25/38/41/66/71/77/78
LTE Anchor Band 71	FR1 n2/7/38/41/66/77/78



Transmission (H, M, L) channel numbers and frequencies in each FR1 band																
FR1 n2																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895	378500	1892.5	378000	1890
FR1 n5																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5			165800		829		166300		831.5		166800		834	
M	167300	836.5			167300		836.5		167300		836.5		167300		836.5	
H	169300	846.5			168800		844		168300		841.5		167800		839	
FR1 n7																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	503500	2517.5	504000	2520
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510500	2552.5	510000	2550
FR1 n12																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	140300			701.5			140800			704			141300			706.5
M	141500			707.5			141500			707.5			141500			707.5
H	142700			713.5			142200			711			141700			708.5
FR1 n13																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	155900			779.5												
M	156400			782												
H	156900			784.5												
FR1 n14																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	158100			790.5												
M	158600			793												
H	159100			795.5												
FR1 n25																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	373500	1867.5	374000	1870
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379500	1897.5	379000	1895
FR1 n26																
	Bandwidth 3MHz		Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	163100	815.5	163300	816.5	163800	819	164300	821.5	164800	824	165300	826.5	165800	829	166300	831.5
M	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5	166300	831.5
H	169500	847.5	169300	846.5	168800	844	168300	841.5	167800	839	167300	836.5	166800	834	166300	831.5
FR1 n30																
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	461500			2307.5												
M	462000			2310												
H	462500			2312.5												
FR1 n38																
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515000	2575	515500	2577.5	516000	2580	516500	2582.5	517000	2585	517500	2587.5	518000	2590	518500	2592.5
M	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595	519000	2595
H	523000	2615	522500	2612.5	522000	2610	521500	2607.5	521000	2605	520500	2602.5	520000	2600	519500	2597.5



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

FR1 n41																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	501702	2508.51	502200	2511	503202	2516.01	504204	2521.02	505200	2526	506202	2531.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	537000	2685	536496	2682.48	535998	2679.99	535500	2677.5	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640
FR1 n66																								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz		Bandwidth 40MHz		Bandwidth 45MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)						
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	345500	1727.5	346000	1730	346500	1732.5						
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745						
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352500	1765	352500	1762.5	352000	1760						
FR1 n71																								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 35MHz											
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)										
L	133100	665.5	133600	668	134100	670.5	134600	673	135100	675.5	135600	678	136100	680.5										
M	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5	136100	680.5												
H	139100	695.5	138600	693	138100	690.5	137600	688	137100	685.5	136600	683												
FR1 n77 (27Q)																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	633332	3499.98
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98		
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		
FR1 n77 (27O)																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	665000	3975	664832	3972.48	664666	3969.99	664500	3967.5	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930
FR1 n78 (27Q)																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	633332	3499.98
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98		
H	636332	3544.98	636166	3542.49	636000	3540	635832	3537.48	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99		
FR1 n78 (27O)																								
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)		
L	647000	3705	647168	3707.52	647334	3710.01	647500	3712.5	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750		
H	653000	3795	652832	3792.48	652666	3789.99	652500	3787.5	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98		

3. TAS feature for RF Exposure compliance

The FCC RF exposure limit is based on time-averaged RF exposure. Both SAR regulatory specifications are defined over certain measurement duration allowing for time-averaging. The MediaTek TA-SAR v2 algorithm has been designed to meet the compliance limits over the required duration, while still allowing dynamic control of transmit power for meeting system performance. Under the control of TAS algorithm, the device can transmit at high power up to Pmax for certain interval, but the average power will be maintained not exceeding the pre-defined averaged level (Plimit), and thus maintain the time-averaged RF exposure compliance

Pmax	Maximum Tx power that can be transmitted physically from RFIC for a given RAT
SAR_FCC_limit	SAR limit specified by FCC 1.6 W/kg averaged over 1-gram, for head and body exposure
SAR_target	Target SAR level used in TAS algorithm. This SAR value should be less than FCC limit and should be determined after accounting for all uncertainties and other design considerations.
Plimit	The time-averaged RF power that corresponds to SAR_target.
SAR characterization	Characterization of SAR value for all sub6GHz technologies

3.1 SAR Characterization – Power Table

General Note:

1. Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + device uncertainty.
2. All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM& LTE TDD & NR TDD).
3. The max allowed output power is the Plimit + device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.

<P_{limit} for supported technologies and bands>

Wireless Technology	Mode	Mode	Antenna	Duty cycle	Head		Hotspot	Body-worn/Extremity		P Max Time-average power (dBm)
					ECI 2	ECI 3	ECI 6	ECI 4	ECI 5	
					Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	
					P limit					
Time-average power (dBm)										
GSM	B850	1TX	Ant0	12.50%	30.80	30.80	21.40	21.40	21.40	23.50
GPRS	B850	1TX	Ant0	12.50%	30.80	30.80	21.40	21.40	21.40	23.50
GPRS	B850	2TX	Ant0	25.00%	30.80	30.80	21.40	21.40	21.40	25.30
GPRS	B850	3TX	Ant0	37.50%	30.80	30.80	21.40	21.40	21.40	26.10
GPRS	B850	4TX	Ant0	50.00%	30.80	30.80	21.40	21.40	21.40	26.30
EGPRS	B850	1TX	Ant0	12.50%	30.80	30.80	21.40	21.40	21.40	17.30
EGPRS	B850	2TX	Ant0	25.00%	30.80	30.80	21.40	21.40	21.40	19.30
EGPRS	B850	3TX	Ant0	37.50%	30.80	30.80	21.40	21.40	21.40	20.10
EGPRS	B850	4TX	Ant0	50.00%	30.80	30.80	21.40	21.40	21.40	20.30
GSM	B850	1TX	Ant1	12.50%	22.40	21.70	24.90	25.40	24.90	23.30
GPRS	B850	1TX	Ant1	12.50%	22.40	21.70	24.90	25.40	24.90	23.30
GPRS	B850	2TX	Ant1	25.00%	22.40	21.70	24.90	25.40	24.90	25.10
GPRS	B850	3TX	Ant1	37.50%	22.40	21.70	24.90	25.40	24.90	25.90
GPRS	B850	4TX	Ant1	50.00%	22.40	21.70	24.90	25.40	24.90	26.10
EGPRS	B850	1TX	Ant1	12.50%	22.40	21.70	24.90	25.40	24.90	17.10
EGPRS	B850	2TX	Ant1	25.00%	22.40	21.70	24.90	25.40	24.90	19.10
EGPRS	B850	3TX	Ant1	37.50%	22.40	21.70	24.90	25.40	24.90	19.90
EGPRS	B850	4TX	Ant1	50.00%	22.40	21.70	24.90	25.40	24.90	20.10
GSM	B1900	1TX	Ant2	12.50%	27.40	27.40	19.50	20.30	19.50	20.40
GPRS	B1900	1TX	Ant2	12.50%	27.40	27.40	19.50	20.30	19.50	20.40
GPRS	B1900	2TX	Ant2	25.00%	27.40	27.40	19.50	20.30	19.50	21.90
GPRS	B1900	3TX	Ant2	37.50%	27.40	27.40	19.50	20.30	19.50	23.20
GPRS	B1900	4TX	Ant2	50.00%	27.40	27.40	19.50	20.30	19.50	23.40
EGPRS	B1900	1TX	Ant2	12.50%	27.40	27.40	19.50	20.30	19.50	16.40
EGPRS	B1900	2TX	Ant2	25.00%	27.40	27.40	19.50	20.30	19.50	18.40
EGPRS	B1900	3TX	Ant2	37.50%	27.40	27.40	19.50	20.30	19.50	19.20
EGPRS	B1900	4TX	Ant2	50.00%	27.40	27.40	19.50	20.30	19.50	19.40
GSM	B1900	1TX	Ant0	12.50%	35.40	35.40	14.40	15.80	14.40	20.20
GPRS	B1900	1TX	Ant0	12.50%	35.40	35.40	14.40	15.80	14.40	20.20
GPRS	B1900	2TX	Ant0	25.00%	35.40	35.40	14.40	15.80	14.40	21.70
GPRS	B1900	3TX	Ant0	37.50%	35.40	35.40	14.40	15.80	14.40	23.00
GPRS	B1900	4TX	Ant0	50.00%	35.40	35.40	14.40	15.80	14.40	23.20
EGPRS	B1900	1TX	Ant0	12.50%	35.40	35.40	14.40	15.80	14.40	16.20
EGPRS	B1900	2TX	Ant0	25.00%	35.40	35.40	14.40	15.80	14.40	18.20
EGPRS	B1900	3TX	Ant0	37.50%	35.40	35.40	14.40	15.80	14.40	19.00
EGPRS	B1900	4TX	Ant0	50.00%	35.40	35.40	14.40	15.80	14.40	19.20
WCDMA	B2	RMC12.2	Ant2	100.00%	25.70	24.40	18.30	19.20	18.30	24.50
WCDMA	B2	RMC12.2	Ant0	100.00%	34.80	34.80	14.00	14.90	14.00	23.90
WCDMA	B4	RMC12.2	Ant2	100.00%	28.30	28.30	19.70	20.90	19.70	24.50
WCDMA	B4	RMC12.2	Ant0	100.00%	33.20	33.20	14.20	15.60	14.20	23.90
WCDMA	B5	RMC12.2	Ant0	100.00%	30.00	30.00	20.50	20.50	20.50	24.50



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

WCDMA	B5	RMC12.2	Ant1	100.00%	21.70	21.00	24.10	24.80	24.10	23.90
LTE	B2	PC3	Ant2	100.00%	25.50	23.90	17.70	19.10	17.70	24.00
LTE	B2	PC3	Ant0	100.00%	46.90	46.90	14.20	15.00	14.20	23.90
LTE	B2	PC3	Ant1	100.00%	16.40	16.20	17.70	18.40	17.70	24.00
LTE	B2	PC3	Ant5	100.00%	16.90	15.70	16.20	17.60	16.20	23.90
LTE	B4	PC3	Ant2	100.00%	28.70	28.70	19.40	19.70	19.40	24.00
LTE	B4	PC3	Ant0	100.00%	37.90	37.90	13.90	15.90	13.90	23.90
LTE	B4	PC3	Ant1	100.00%	20.00	19.20	20.50	21.20	20.50	24.00
LTE	B4	PC3	Ant5	100.00%	17.60	16.30	16.40	17.80	16.40	23.90
LTE	B5 / 5B	PC3	Ant0	100.00%	29.20	29.20	20.50	20.50	20.50	24.00
LTE	B5 / 5B	PC3	Ant1	100.00%	22.80	22.00	24.50	25.30	24.50	23.90
LTE	B7 / 7C	PC3	Ant2	100.00%	23.40	22.00	15.80	17.20	15.80	24.00
LTE	B7 / 7C	PC3	Ant0	100.00%	31.50	31.50	15.40	17.10	15.40	24.00
LTE	B12	PC3	Ant0	100.00%	30.00	30.00	22.20	22.20	22.20	24.00
LTE	B12	PC3	Ant1	100.00%	24.10	23.40	25.10	25.80	25.10	23.80
LTE	B13	PC3	Ant0	100.00%	29.60	29.60	20.60	20.60	20.60	24.00
LTE	B13	PC3	Ant1	100.00%	24.20	23.40	25.50	25.80	25.50	23.80
LTE	B14	PC3	Ant0	100.00%	29.40	29.40	20.90	20.90	20.90	24.00
LTE	B14	PC3	Ant1	100.00%	24.20	23.40	24.40	24.40	24.40	23.80
LTE	B17	PC3	Ant0	100.00%	30.00	30.00	22.20	22.20	22.20	24.00
LTE	B17	PC3	Ant1	100.00%	24.10	23.40	25.10	25.80	25.10	23.80
LTE	B25	PC3	Ant2	100.00%	25.50	23.90	17.70	19.60	17.70	24.00
LTE	B25	PC3	Ant0	100.00%	46.90	46.90	14.20	15.00	14.20	23.90
LTE	B25	PC3	Ant1	100.00%	16.40	16.20	17.70	18.40	17.70	24.00
LTE	B25	PC3	Ant5	100.00%	16.90	15.70	16.20	17.60	16.20	23.90
LTE	B26	PC3	Ant0	100.00%	29.20	29.20	20.50	20.50	20.50	24.00
LTE	B26	PC3	Ant1	100.00%	22.80	22.00	24.50	25.30	24.50	23.90
LTE	B30	PC3	Ant2	100.00%	24.80	23.50	16.30	17.70	16.30	23.50
LTE	B30	PC3	Ant0	100.00%	35.10	35.10	14.30	17.20	14.30	22.60
LTE	B38 / 38C	PC3	Ant2	63.30%	24.50	21.90	16.00	16.30	16.00	22.00
LTE	B38	PC2	Ant2	43.30%	24.50	21.90	16.00	16.30	16.00	22.30
LTE	B38 / 38C	PC3	Ant0	63.30%	32.30	32.30	15.10	15.90	15.10	21.90
LTE	B38	PC2	Ant0	43.30%	32.30	32.30	15.10	15.90	15.10	22.20
LTE	B38 / 38C	PC3	Ant1	63.30%	16.00	15.30	15.70	17.60	15.70	22.00
LTE	B38	PC2	Ant1	43.30%	16.00	15.30	15.70	17.60	15.70	22.30
LTE	B38 / 38C	PC3	Ant5	63.30%	15.80	15.10	15.10	18.50	15.10	21.90
LTE	B38	PC2	Ant5	43.30%	15.80	15.10	15.10	18.50	15.10	22.10
LTE	B41 / 41C	PC3	Ant2	63.30%	24.50	21.90	16.00	16.30	16.00	22.00
LTE	B41	PC2	Ant2	43.30%	24.50	21.90	16.00	16.30	16.00	22.30
LTE	B41 / 41C	PC3	Ant0	63.30%	32.30	32.30	15.10	15.90	15.10	21.90
LTE	B41	PC2	Ant0	43.30%	32.30	32.30	15.10	15.90	15.10	22.20
LTE	B41 / 41C	PC3	Ant1	63.30%	16.00	15.30	15.70	17.60	15.70	22.00
LTE	B41	PC2	Ant1	43.30%	16.00	15.30	15.70	17.60	15.70	22.30
LTE	B41 / 41C	PC3	Ant5	63.30%	15.80	15.10	15.10	18.50	15.10	22.00
LTE	B41	PC2	Ant5	43.30%	15.80	15.10	15.10	18.50	15.10	22.30
LTE	B48	PC3	Ant6	63.30%	26.60	26.60	14.60	16.00	14.60	19.00
LTE	B48	PC3	Ant7	63.30%	29.10	29.10	15.40	16.80	15.40	19.70
LTE	B48	PC3	Ant1	63.30%	15.70	15.00	13.30	15.90	13.30	19.60
LTE	B48	PC3	Ant5	63.30%	17.90	17.20	17.10	17.80	17.10	22.00
LTE	B66 / 66C / 66B	PC3	Ant2	100.00%	28.70	28.70	19.40	19.70	19.40	24.00
LTE	B66 / 66C / 66B	PC3	Ant0	100.00%	37.90	37.90	13.90	15.90	13.90	23.90
LTE	B66 / 66C / 66B	PC3	Ant1	100.00%	20.00	19.20	20.50	21.20	20.50	24.00
LTE	B66 / 66C / 66B	PC3	Ant5	100.00%	17.60	16.30	16.40	17.80	16.40	24.00
LTE	B71	PC3	Ant0	100.00%	30.10	30.10	23.70	23.80	23.70	24.00
LTE	B71	PC3	Ant1	100.00%	23.10	22.40	26.00	26.70	26.00	23.80
NR	n2	PC3	Ant2	100.00%	26.20	26.20	18.10	18.80	18.10	24.00



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

NR	n2	PC3	Ant0	100.00%	38.20	38.20	14.00	15.00	14.00	23.90
NR	n2	PC3	Ant1	100.00%	16.90	16.70	17.70	18.40	17.70	24.00
NR	n2	PC3	Ant5	100.00%	17.60	16.90	16.90	18.30	16.90	23.90
NR	n5	PC3	Ant0	100.00%	29.80	29.10	20.70	20.70	20.70	24.00
NR	n5	PC3	Ant1	100.00%	22.80	22.80	25.00	25.80	25.00	23.90
NR	n7	PC3	Ant2	100.00%	23.60	22.20	15.80	16.80	15.80	24.00
NR	n7	PC3	Ant0	100.00%	29.00	29.00	15.50	16.90	15.50	24.00
NR	n12	PC3	Ant0	100.00%	30.80	30.10	22.80	22.80	22.80	24.00
NR	n12	PC3	Ant1	100.00%	23.30	22.60	26.10	26.40	26.10	23.80
NR	n13	PC3	Ant0	100.00%	30.10	29.30	21.30	21.30	21.30	24.00
NR	n13	PC3	Ant1	100.00%	24.40	23.70	23.70	25.10	23.70	23.80
NR	n14	PC3	Ant0	100.00%	30.20	29.50	21.40	21.60	21.40	24.00
NR	n14	PC3	Ant1	100.00%	23.30	22.90	26.10	26.20	26.10	23.80
NR	n25	PC3	Ant2	100.00%	26.20	26.20	18.10	18.80	18.10	24.00
NR	n25	PC3	Ant0	100.00%	38.20	38.20	14.00	15.00	14.00	23.90
NR	n25	PC3	Ant1	100.00%	16.90	16.70	17.70	18.40	17.70	24.00
NR	n25	PC3	Ant5	100.00%	17.60	16.90	16.90	18.30	16.90	23.90
NR	n26	PC3	Ant0	100.00%	29.80	29.10	20.70	20.70	20.70	24.00
NR	n26	PC3	Ant1	100.00%	22.80	22.80	25.00	25.80	25.00	23.90
NR	n30	PC3	Ant2	100.00%	25.90	25.90	16.20	18.20	16.20	23.50
NR	n30	PC3	Ant0	100.00%	36.00	36.00	14.50	17.10	14.50	22.60
NR	n38	PC3	Ant2	100.00%	23.80	22.60	16.20	17.60	16.20	24.00
NR	n38	PC3	Ant0	100.00%	31.60	31.60	14.80	16.10	14.80	23.90
NR	n38	PC3	Ant1	100.00%	17.30	16.60	17.20	20.00	17.20	24.00
NR	n38	PC3	Ant5	100.00%	16.50	16.50	15.70	18.30	15.70	23.90
NR	n41 / n41C / n41B	PC3	Ant2	100.00%	23.80	22.60	16.20	17.60	16.20	24.00
NR	n41	PC2	Ant2	50.00%	23.80	22.60	16.20	17.60	16.20	22.90
NR	n41	PC1.5	Ant2	25.00%	23.80	22.60	16.20	17.60	16.20	19.90
NR	n41 / n41C / n41B	PC3	Ant0	100.00%	31.60	31.60	14.80	16.10	14.80	23.90
NR	n41	PC2	Ant0	50.00%	31.60	31.60	14.80	16.10	14.80	22.80
NR	n41	PC1.5	Ant0	25.00%	31.60	31.60	14.80	16.10	14.80	19.80
NR	n41 / n41C / n41B	PC3	Ant1	100.00%	17.30	16.60	17.20	20.00	17.20	24.00
NR	n41	PC2	Ant1	50.00%	17.30	16.60	17.20	20.00	17.20	22.90
NR	n41	PC1.5	Ant1	25.00%	17.30	16.60	17.20	20.00	17.20	19.90
NR	n41 / n41C / n41B	PC3	Ant5	100.00%	16.50	16.50	15.70	18.30	15.70	24.00
NR	n41	PC2	Ant5	50.00%	16.50	16.50	15.70	18.30	15.70	22.90
NR	n41	PC1.5	Ant5	25.00%	16.50	16.50	15.70	18.30	15.70	19.90
NR	n66	PC3	Ant2	100.00%	28.50	28.50	19.30	20.00	19.30	24.00
NR	n66	PC3	Ant0	100.00%	33.50	33.50	14.40	15.80	14.40	23.90
NR	n66	PC3	Ant1	100.00%	19.30	18.60	20.70	21.40	20.70	24.00
NR	n66	PC3	Ant5	100.00%	18.80	18.10	17.10	18.00	17.10	23.90
NR	n71	PC3	Ant0	100.00%	30.40	29.70	22.80	23.20	22.80	24.00
NR	n71	PC3	Ant1	100.00%	24.30	23.50	27.20	27.50	27.20	23.80
NR	n77 / n77C	PC3	Ant6	100.00%	24.60	21.50	13.00	14.40	13.00	24.00
NR	n77	PC2	Ant6	50.00%	24.60	21.50	13.00	14.40	13.00	23.00
NR	n77	PC1.5	Ant6	25.00%	24.60	21.50	13.00	14.40	13.00	20.00
NR	n77 / n77C	PC3	Ant7	100.00%	25.40	25.40	14.70	17.20	14.70	23.50
NR	n77	PC2	Ant7	50.00%	25.40	25.40	14.70	17.20	14.70	22.50
NR	n77	PC1.5	Ant7	25.00%	25.40	25.40	14.70	17.20	14.70	19.50
NR	n77 / n77C	PC3	Ant1	100.00%	14.60	13.90	13.30	16.30	13.30	24.00
NR	n77	PC2	Ant1	50.00%	14.60	13.90	13.30	16.30	13.30	23.00
NR	n77	PC1.5	Ant1	25.00%	14.60	13.90	13.30	16.30	13.30	20.00
NR	n77 / n77C	PC3	Ant5	100.00%	17.30	16.60	17.20	17.90	17.20	24.00
NR	n77	PC2	Ant5	50.00%	17.30	16.60	17.20	17.90	17.20	23.00
NR	n77	PC1.5	Ant5	25.00%	17.30	16.60	17.20	17.90	17.20	20.00
NR	n78	PC3	Ant6	100.00%	24.60	21.50	13.00	14.40	13.00	24.00



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

NR	n78	PC2	Ant6	50.00%	24.60	21.50	13.00	14.40	13.00	23.00
NR	n78	PC1.5	Ant6	25.00%	24.60	21.50	13.00	14.40	13.00	20.00
NR	n78	PC3	Ant7	100.00%	25.40	25.40	14.70	17.20	14.70	23.50
NR	n78	PC2	Ant7	50.00%	25.40	25.40	14.70	17.20	14.70	22.50
NR	n78	PC1.5	Ant7	25.00%	25.40	25.40	14.70	17.20	14.70	19.50
NR	n78	PC3	Ant1	100.00%	14.60	13.90	13.30	16.30	13.30	24.00
NR	n78	PC2	Ant1	50.00%	14.60	13.90	13.30	16.30	13.30	23.00
NR	n78	PC1.5	Ant1	25.00%	14.60	13.90	13.30	16.30	13.30	20.00
NR	n78	PC3	Ant5	100.00%	17.30	16.60	17.20	17.90	17.20	24.00
NR	n78	PC2	Ant5	50.00%	17.30	16.60	17.20	17.90	17.20	23.00
NR	n78	PC1.5	Ant5	25.00%	17.30	16.60	17.20	17.90	17.20	20.00
NTN	B23	PC3	Ant5	100.00%				22.60		23.50
NTN	B255	PC3	Ant5	100.00%				21.00		23.50

4. RF Exposure Limits

4.1 Uncontrolled Environment

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

4.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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

4.3 RF Exposure limit for above 6GHz

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

Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm² per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

5. Guidance Applied

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

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

6. Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

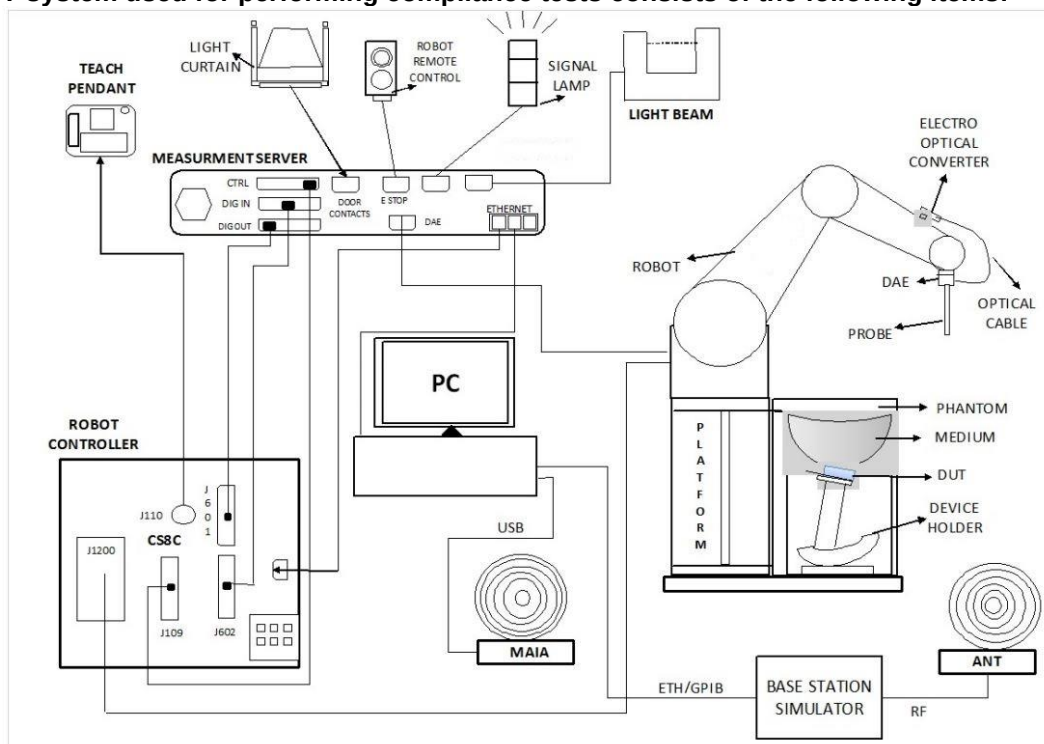
SAR is expressed in units of Watts per kilogram (W/kg)

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

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

7. System Description and Setup

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



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

7.1 Test Site Location

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

Laboratory	EMC & Wireless Communications Laboratory		Wensan Laboratory				
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan				
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY	SAR18-HY	SAR21-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	SAR16-HY	SAR19-HY	SAR22-HY
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	SAR17-HY	SAR20-HY	

7.2 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

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

7.3 Data Acquisition Electronics (DAE)

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

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



Fig 5.1 Photo of DAE

7.4 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

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

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

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

8.4 Zoom Scan

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

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

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

8.5 Volume Scan Procedures

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

8.6 Power Drift Monitoring

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



9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Last Cal.	Due Date
SPEAG	750MHz System Validation Kit	D750V3	1117	Mar. 12, 2025	Mar. 11, 2026
SPEAG	750MHz System Validation Kit	D750V3	1107	Jun. 11, 2025	Jun. 10, 2026
SPEAG	835MHz System Validation Kit	D835V2	4d060	Feb. 17, 2025	Feb. 16, 2026
SPEAG	835MHz System Validation Kit	D835V2	4d167	Dec. 02, 2025	Dec. 01, 2026
SPEAG	1640MHz System Validation Kit	D1640V2	346	Aug. 14, 2025	Aug. 13, 2026
SPEAG	1750MHz System Validation Kit	D1750V2	1112	Feb. 20, 2025	Feb. 19, 2026
SPEAG	1750MHz System Validation Kit ⁽²⁾	D1750V2	1112	Feb. 20, 2025	Feb. 18, 2027
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d041	Aug. 15, 2024	Aug. 13, 2026
SPEAG	1900MHz System Validation Kit	D1900V2	5d185	Jun. 11, 2025	Jun. 10, 2026
SPEAG	2000MHz System Validation Kit ⁽²⁾	D2000V2	1070	Mar. 13, 2025	Mar. 11, 2027
SPEAG	2000MHz System Validation Kit	D2000V2	1010	Dec. 04, 2025	Dec. 03, 2026
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1006	Jan. 14, 2025	Jan. 12, 2027
SPEAG	2300MHz System Validation Kit	D2300V2	1006	Jan. 14, 2025	Jan. 13, 2026
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	736	Aug. 15, 2024	Aug. 13, 2026
SPEAG	2450MHz System Validation Kit	D2450V2	929	Nov. 12, 2025	Nov. 11, 2026
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1008	Aug. 15, 2024	Aug. 13, 2026
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1014	Jan. 15, 2025	Jan. 13, 2027
SPEAG	3500MHz System Validation Kit	D3500V2	1014	Jan. 15, 2025	Jan. 14, 2026
SPEAG	3700MHz System Validation Kit	D3700V2	1006	Jun. 12, 2025	Jun. 11, 2026
SPEAG	3900MHz System Validation Kit ⁽²⁾	D3900V2	1092	May. 15, 2023	May. 12, 2026
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1006	Oct. 15, 2024	Oct. 13, 2026
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1083	Oct. 22, 2025	Oct. 21, 2026
SPEAG	5G Verification Source	10GHz	1020	Jan. 15, 2026	Jan. 14, 2027
SPEAG	13MHz System Validation Kit ⁽²⁾	CLA13	1011	Jul. 10, 2023	Jul. 07, 2026
SPEAG	Data Acquisition Electronics	DAE4ip	1800	Jun. 16, 2025	Jun. 15, 2026
SPEAG	Data Acquisition Electronics	DAE4ip	1823	Jul. 11, 2025	Jul. 10, 2026
SPEAG	Data Acquisition Electronics	DAE4	1697	Nov. 19, 2025	Nov. 18, 2026
SPEAG	Data Acquisition Electronics	DAE4	1707	Nov. 20, 2025	Nov. 19, 2026
SPEAG	Data Acquisition Electronics	DAE4	778	Jan. 15, 2026	Jan. 14, 2027
SPEAG	Data Acquisition Electronics	DAE4	1776	Feb. 12, 2025	Feb. 11, 2026
SPEAG	Data Acquisition Electronics	DAE4	656	Jan. 15, 2026	Jan. 14, 2027
SPEAG	Data Acquisition Electronics	DAE4ip	1823	Jul. 11, 2025	Jul. 10, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7814	Jun. 19, 2025	Jun. 18, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7695	Jul. 01, 2025	Jun. 30, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 23, 2025	Oct. 22, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7785	Nov. 26, 2025	Nov. 25, 2026
SPEAG	Dosimetric E-Field Probe	EX3DV4	7625	Dec. 09, 2025	Dec. 08, 2026
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9461	Oct. 15, 2025	Oct. 14, 2026
SPEAG	EUmmWV Probe Tip Protection	EUmmWV3	9424	Mar. 12, 2026	Mar. 11, 2027
SPEAG	Dielectric Probe Kit	DAK-3.5	1270	May. 19, 2025	May. 18, 2026
SPEAG	Dielectric Probe Kit	DAK-12	1156	Jul. 14, 2025	Jul. 13, 2026
Testo	Hygro meter	608-H1	45196600	Nov. 04, 2025	Nov. 03, 2026
Testo	Hygro meter	608-H1	45207528	Nov. 04, 2025	Nov. 03, 2026
Anritsu	Radio Communication Analyzer	MT8821C	6201074414	Aug. 19, 2025	Aug. 18, 2026
Keysight	5G Wireless Test Platform	E7515B	MY59321595	Jun. 20, 2025	Jun. 19, 2026
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Sep. 24, 2025	Sep. 23, 2026
Keysight	ENA Network Analyzer	E5071C	MY46104758	Oct. 14, 2025	Oct. 13, 2026
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3690	Aug. 14, 2025	Aug. 13, 2026
Anritsu	Power Meter	ML2496A	2119003	Jul. 14, 2025	Jul. 13, 2026
R&S	Power Sensor	NRP8S	103999	Jan. 06, 2025	Jan. 05, 2026
Anritsu	Power Sensor	MA2411B	1911334	Jul. 14, 2025	Jul. 13, 2026
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 09, 2025	Jul. 08, 2026
Mini-Circuits	Power Amplifier	ZVE-3W-183+	031302302	Feb. 24, 2025	Feb. 23, 2026
Mini-Circuits	Power Amplifier	ZVE-3W-183+	072602118	Apr. 08, 2025	Apr. 07, 2026
Mini-Circuits	Power Amplifier	ZHL-42W+	715701915	May. 19, 2025	May. 18, 2026
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:

- 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.
- The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.



10. System Verification

10.1 Tissue Verification

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

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

The SPEAG Dasy Measurement system implement a SAR error compensation algorithm as documented in IEEE Std 1528-2013 to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, according to KDB 865664 D01 and IEC/IEEE 62209-1528, the tolerance for "Delta (σ)" and "Delta (ϵ_r)" can be relaxed to $\pm 10\%$

< Tissue Dielectric Parameter Check Results >

Frequency (MHz)	Liquid Temp (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Limit (%)	Date
750	22.5	0.879	44.3	0.89	41.9	-1.24	5.73	± 10.0	2026-01-06
750	22.8	0.889	44.4	0.89	41.9	-0.11	5.97	± 10.0	2026-01-22
750	22.6	0.917	42.6	0.89	41.9	3.03	1.67	± 10.0	2026-01-26
750	22.4	0.89	44.9	0.89	41.9	0.00	7.16	± 10.0	2026-02-01
750	22.4	0.899	42.3	0.89	41.9	1.01	0.95	± 10.0	2026-02-04
750	22.4	0.891	42.8	0.89	41.9	0.11	2.15	± 10.0	2026-02-17
750	22.6	0.913	42.8	0.89	41.9	2.58	2.15	± 10.0	2026-02-18
750	22.5	0.886	42.3	0.89	41.9	-0.45	0.95	± 10.0	2026-02-20
750	22.8	0.883	42.8	0.89	41.9	-0.79	2.15	± 10.0	2026-02-24
750	22.2	0.891	42.5	0.89	41.9	0.11	1.43	± 10.0	2026-03-02
750	22.6	0.883	42.3	0.89	41.9	-0.79	0.95	± 10.0	2026-03-16
835	22.5	0.912	44.1	0.9	41.5	1.33	6.27	± 10.0	2026-01-05
835	22.5	0.907	44.1	0.9	41.5	0.78	6.27	± 10.0	2026-01-06
835	22.7	0.95	43.2	0.9	41.5	5.56	4.10	± 10.0	2026-01-27
835	22.4	0.917	44.6	0.9	41.5	1.89	7.47	± 10.0	2026-02-01
835	22.4	0.938	42.2	0.9	41.5	4.22	1.69	± 10.0	2026-02-04
835	22.4	0.923	42.5	0.9	41.5	2.56	2.41	± 10.0	2026-02-17
835	22.6	0.94	42.5	0.9	41.5	4.44	2.41	± 10.0	2026-02-18
835	22.5	0.915	42.1	0.9	41.5	1.67	1.45	± 10.0	2026-02-20
835	22.8	0.915	42.5	0.9	41.5	1.67	2.41	± 10.0	2026-02-24
835	22.2	0.921	42.3	0.9	41.5	2.33	1.93	± 10.0	2026-03-02
835	22.7	0.928	42.6	0.9	41.5	3.11	2.65	± 10.0	2026-03-07
835	22.2	0.912	42.0	0.9	41.5	1.33	1.20	± 10.0	2026-03-14
1640	22.1	1.3	43.0	1.31	40.23	-0.76	6.89	± 10.0	2026-03-21
1640	22.8	1.26	43.6	1.31	40.23	-3.82	8.38	± 10.0	2026-04-08
1750	22.2	1.35	40.5	1.37	40.1	-1.46	1.00	± 10.0	2026-01-02
1750	22.5	1.34	42.4	1.37	40.1	-2.19	5.74	± 10.0	2026-01-05
1750	22.8	1.37	42.1	1.37	40.1	0.00	4.99	± 10.0	2026-01-20
1750	22.5	1.36	42.1	1.37	40.1	-0.73	4.99	± 10.0	2026-01-25
1750	22.7	1.36	40.7	1.37	40.1	-0.73	1.50	± 10.0	2026-01-28
1750	22.5	1.32	42.8	1.37	40.1	-3.65	6.73	± 10.0	2026-01-30
1750	22.6	1.35	40.4	1.37	40.1	-1.46	0.75	± 10.0	2026-02-06
1750	22.8	1.38	40.8	1.37	40.1	0.73	1.75	± 10.0	2026-02-10
1750	22.4	1.36	40.9	1.37	40.1	-0.73	2.00	± 10.0	2026-02-17
1750	22.6	1.35	40.9	1.37	40.1	-1.46	2.00	± 10.0	2026-02-18
1750	22.2	1.35	41.0	1.37	40.1	-1.46	2.24	± 10.0	2026-02-22
1750	22.7	1.38	42.0	1.37	40.1	0.73	4.74	± 10.0	2026-02-27
1750	22.8	1.34	42.8	1.37	40.1	-2.19	6.73	± 10.0	2026-02-28
1750	22.6	1.37	40.9	1.37	40.1	0.00	2.00	± 10.0	2026-03-06
1750	22.5	1.37	40.6	1.37	40.1	0.00	1.25	± 10.0	2026-03-30
1900	22.2	1.43	40.2	1.4	40.0	2.14	0.50	± 10.0	2026-01-02
1900	22.8	1.48	42.0	1.4	40.0	5.71	5.00	± 10.0	2026-01-20
1900	22.5	1.47	42.0	1.4	40.0	5.00	5.00	± 10.0	2026-01-25
1900	22.7	1.44	40.4	1.4	40.0	2.86	1.00	± 10.0	2026-01-28
1900	22.5	1.41	42.6	1.4	40.0	0.71	6.50	± 10.0	2026-01-30
1900	22.4	1.44	40.7	1.4	40.0	2.86	1.75	± 10.0	2026-02-17
1900	22.2	1.43	40.8	1.4	40.0	2.14	2.00	± 10.0	2026-02-22
1900	22.3	1.43	42.4	1.4	40.0	2.14	6.00	± 10.0	2026-02-23
1900	22.7	1.47	41.7	1.4	40.0	5.00	4.25	± 10.0	2026-02-27
1900	22.6	1.45	40.6	1.4	40.0	3.57	1.50	± 10.0	2026-03-06



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

1900	22.5	1.46	40.4	1.4	40.0	4.29	1.00	±10.0	2026-03-06
1900	22.2	1.42	40.0	1.4	40.0	1.43	0.00	±10.0	2026-03-14
2000	22.1	1.52	42.5	1.4	40.0	8.57	6.25	±10.0	2026-03-21
2000	22.8	1.47	43.1	1.4	40.0	5.00	7.75	±10.0	2026-04-08
2300	22.5	1.7	41.6	1.67	39.5	1.80	5.32	±10.0	2026-01-03
2300	22.8	1.76	41.3	1.67	39.5	5.39	4.56	±10.0	2026-01-19
2300	22.7	1.73	39.9	1.67	39.5	3.59	1.01	±10.0	2026-01-29
2300	22.8	1.71	40.1	1.67	39.5	2.40	1.52	±10.0	2026-02-18
2300	22.6	1.7	40.0	1.67	39.5	1.80	1.27	±10.0	2026-02-18
2300	22.1	1.73	41.1	1.67	39.5	3.59	4.05	±10.0	2026-02-21
2300	22.1	1.73	40.2	1.67	39.5	3.59	1.77	±10.0	2026-03-01
2300	22.5	1.73	39.8	1.67	39.5	3.59	0.76	±10.0	2026-03-30
2600	22.5	1.93	41.1	1.96	39.0	-1.53	5.38	±10.0	2026-01-03
2600	22.8	2.0	40.9	1.96	39.0	2.04	4.87	±10.0	2026-01-19
2600	22.8	2.01	41.1	1.96	39.0	2.55	5.38	±10.0	2026-01-22
2600	22.5	1.93	39.9	1.96	39.0	-1.53	2.31	±10.0	2026-01-24
2600	22.7	1.96	39.4	1.96	39.0	0.00	1.03	±10.0	2026-01-29
2600	22.3	1.98	41.6	1.96	39.0	1.02	6.67	±10.0	2026-01-31
2600	22.5	1.95	39.5	1.96	39.0	-0.51	1.28	±10.0	2026-02-10
2600	22.8	1.94	39.7	1.96	39.0	-1.02	1.79	±10.0	2026-02-18
2600	22.5	1.96	42.3	1.96	39.0	0.00	8.46	±10.0	2026-02-20
2600	22.1	1.95	40.7	1.96	39.0	-0.51	4.36	±10.0	2026-02-21
2600	22.8	1.89	42.5	1.96	39.0	-3.57	8.97	±10.0	2026-02-26
2600	22.8	1.95	41.4	1.96	39.0	-0.51	6.15	±10.0	2026-02-28
2600	22.2	1.97	39.5	1.96	39.0	0.51	1.28	±10.0	2026-03-02
2600	22.2	1.97	39.6	1.96	39.0	0.51	1.54	±10.0	2026-03-02
2600	22.5	1.96	39.3	1.96	39.0	0.00	0.77	±10.0	2026-03-30
3500	22.7	2.7	39.5	2.91	37.9	-7.22	4.22	±10.0	2026-01-04
3500	22.5	2.74	39.7	2.91	37.9	-5.84	4.75	±10.0	2026-01-07
3500	22.4	2.65	40.6	2.91	37.9	-8.93	7.12	±10.0	2026-02-02
3500	22.6	2.69	39.5	2.91	37.9	-7.56	4.22	±10.0	2026-02-03
3500	22.7	2.69	38.9	2.91	37.9	-7.56	2.64	±10.0	2026-02-07
3500	22.8	2.65	38.6	2.91	37.9	-8.93	1.85	±10.0	2026-02-08
3500	22.8	2.83	39.1	2.91	37.9	-2.75	3.17	±10.0	2026-02-09
3500	22.9	2.71	37.8	2.91	37.9	-6.87	-0.26	±10.0	2026-02-09
3500	22.4	2.72	37.9	2.91	37.9	-6.53	0.00	±10.0	2026-02-17
3500	22.4	2.79	38.0	2.91	37.9	-4.12	0.26	±10.0	2026-02-24
3500	22.5	2.79	37.9	2.91	37.9	-4.12	0.00	±10.0	2026-02-25
3500	22.8	2.7	40.5	2.91	37.9	-7.22	6.86	±10.0	2026-02-26
3500	22.6	2.8	38.0	2.91	37.9	-3.78	0.26	±10.0	2026-02-26
3500	22.5	2.73	39.8	2.91	37.9	-6.19	5.01	±10.0	2026-03-01
3500	22.2	2.75	37.9	2.91	37.9	-5.50	0.00	±10.0	2026-03-02
3500	22.6	2.7	39.0	2.91	37.9	-7.22	2.90	±10.0	2026-03-15
3500	22.7	2.68	39.1	2.91	37.9	-7.90	3.17	±10.0	2026-03-31
3500	22.5	2.81	38.0	2.91	37.9	-3.44	0.26	±10.0	2026-04-01
3700	22.7	2.87	39.2	3.12	37.7	-8.01	3.98	±10.0	2026-01-04
3700	22.4	2.91	39.4	3.12	37.7	-6.73	4.51	±10.0	2026-01-07
3700	22.4	2.83	40.3	3.12	37.7	-9.29	6.90	±10.0	2026-02-02
3700	22.6	2.86	39.2	3.12	37.7	-8.33	3.98	±10.0	2026-02-03
3700	22.8	2.86	38.5	3.12	37.7	-8.33	2.12	±10.0	2026-02-07
3700	22.8	2.82	38.3	3.12	37.7	-9.62	1.59	±10.0	2026-02-08
3700	22.8	3.01	38.9	3.12	37.7	-3.53	3.18	±10.0	2026-02-09
3700	22.9	2.89	37.5	3.12	37.7	-7.37	-0.53	±10.0	2026-02-09
3700	22.4	2.92	37.5	3.12	37.7	-6.41	-0.53	±10.0	2026-02-17
3700	22.4	2.97	37.7	3.12	37.7	-4.81	0.00	±10.0	2026-02-24
3700	22.5	2.97	37.6	3.12	37.7	-4.81	-0.27	±10.0	2026-02-25
3700	22.8	2.95	40.6	3.12	37.7	-5.45	7.69	±10.0	2026-02-26
3700	22.6	2.98	37.6	3.12	37.7	-4.49	-0.27	±10.0	2026-02-26
3700	22.5	2.9	39.6	3.12	37.7	-7.05	5.04	±10.0	2026-03-01
3700	22.2	2.93	37.5	3.12	37.7	-6.09	-0.53	±10.0	2026-03-02
3700	22.6	2.87	38.7	3.12	37.7	-8.01	2.65	±10.0	2026-03-15
3700	22.7	2.87	38.9	3.12	37.7	-8.01	3.18	±10.0	2026-03-31
3700	22.5	2.98	37.8	3.12	37.7	-4.49	0.27	±10.0	2026-04-01
3900	22.8	3.05	38.3	3.33	37.51	-8.41	2.11	±10.0	2026-02-07
3900	22.8	3.0	38.0	3.33	37.51	-9.91	1.31	±10.0	2026-02-08
3900	22.8	3.23	38.6	3.33	37.51	-3.00	2.91	±10.0	2026-02-09
3900	22.9	3.09	37.2	3.33	37.51	-7.21	-0.83	±10.0	2026-02-09
3900	22.4	3.14	37.4	3.33	37.51	-5.71	-0.29	±10.0	2026-02-24
3900	22.5	3.14	37.3	3.33	37.51	-5.71	-0.56	±10.0	2026-02-25
3900	22.6	3.15	37.5	3.33	37.51	-5.41	-0.03	±10.0	2026-02-26
3900	22.2	3.1	37.2	3.33	37.51	-6.91	-0.83	±10.0	2026-03-02
3900	22.6	3.06	38.5	3.33	37.51	-8.11	2.64	±10.0	2026-03-15
3900	22.7	3.04	38.7	3.33	37.51	-8.71	3.17	±10.0	2026-03-31
2450	22.5	1.790	41.300	1.80	39.20	-0.56	5.36	±10.0	2026/1/8



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

2450	22.5	1.780	39.200	1.80	39.20	-1.11	0.00	±10.0	2026/1/12
2450	22.5	1.840	39.400	1.80	39.20	2.22	0.51	±10.0	2026/3/5
2450	22.5	1.840	39.500	1.80	39.20	2.22	0.77	±10.0	2026/3/6
2450	22.7	1.860	41.400	1.80	39.20	3.33	5.61	±10.0	2026/3/21
2450	22.3	1.850	39.700	1.80	39.20	2.78	1.28	±10.0	2026/3/23
2450	22.3	1.810	39.400	1.80	39.20	0.56	0.51	±10.0	2026/3/25
5250	22.5	4.46	36.4	4.71	35.95	-5.31	1.25	±10.0	2026/1/9
5250	22.5	4.530	34.600	4.71	35.95	-3.82	-3.76	±10.0	2026/3/5
5250	22.7	4.610	37.000	4.71	35.95	-2.12	2.92	±10.0	2026/3/17
5250	22.7	4.670	37.100	4.71	35.95	-0.85	3.20	±10.0	2026/3/18
5600	22.5	4.83	35.7	5.07	35.50	-4.73	0.56	±10.0	2026/1/9
5600	22.5	4.870	34.200	5.07	35.50	-3.94	-3.66	±10.0	2026/3/5
5600	22.7	5.010	36.400	5.07	35.50	-1.18	2.54	±10.0	2026/3/17
5600	22.7	5.080	36.500	5.07	35.50	0.20	2.82	±10.0	2026/3/18
5800	22.5	5.070	35.400	5.27	35.30	-3.80	0.28	±10.0	2026/1/9
5800	22.5	5.110	33.700	5.27	35.30	-3.04	-4.53	±10.0	2026/3/5
5800	22.7	5.240	36.000	5.27	35.30	-0.57	1.98	±10.0	2026/3/17
5800	22.7	5.310	36.200	5.27	35.30	0.76	2.55	±10.0	2026/3/18
6500	22.5	6.090	34.100	6.07	34.50	0.33	-1.16	±10.0	2026/3/19
6500	22.5	6.060	32.400	6.07	34.50	-0.16	-6.09	±10.0	2026/3/28
6500	22.5	6.110	32.700	6.07	34.50	0.66	-5.22	±10.0	2026/3/28
6500	22.5	6.040	32.800	6.07	34.50	-0.49	-4.93	±10.0	2026/3/29
13	23.5	0.719	53.500	0.75	55.00	-4.13	-2.73	±10.0	2026/4/10



10.2 System Performance Check Results

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

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR18	2026-01-06	750	251.19	D750V3 - 1117	EX3DV4 - SN7785	DAE4 Sn1707	2.220	8.600	8.838	2.77	1.470	5.570	5.852	5.07
SAR19	2026-01-22	750	251.19	D750V3 - 1117	EX3DV4 - SN7625	DAE4ip Sn1800	2.260	8.600	8.997	4.62	1.490	5.570	5.932	6.49
SAR19	2026-01-26	750	251.19	D750V3 - 1117	EX3DV4 - SN7625	DAE4ip Sn1800	2.280	8.600	9.077	5.54	1.510	5.570	6.011	7.92
SAR19	2026-02-01	750	251.19	D750V3 - 1117	EX3DV4 - SN7625	DAE4ip Sn1800	2.290	8.600	9.117	6.01	1.520	5.570	6.051	8.64
SAR19	2026-02-04	750	251.19	D750V3 - 1117	EX3DV4 - SN7625	DAE4ip Sn1800	2.000	8.600	7.962	-7.42	1.320	5.570	5.255	-5.66
SAR20	2026-02-17	750	251.19	D750V3 - 1117	EX3DV4 - SN7814	DAE4 Sn778	2.230	8.600	8.878	3.23	1.480	5.570	5.892	5.78
SAR20	2026-02-18	750	251.19	D750V3 - 1117	EX3DV4 - SN7814	DAE4 Sn778	2.280	8.600	9.077	5.54	1.520	5.570	6.051	8.64
SAR18	2026-02-20	750	251.19	D750V3 - 1117	EX3DV4 - SN7785	DAE4 Sn1707	2.180	8.600	8.679	0.91	1.450	5.570	5.773	3.64
SAR19	2026-02-24	750	251.19	D750V3 - 1117	EX3DV4 - SN7625	DAE4ip Sn1800	2.090	8.600	8.320	-3.25	1.380	5.570	5.494	-1.37
SAR19	2026-03-02	750	251.19	D750V3 - 1117	EX3DV4 - SN7625	DAE4ip Sn1800	2.020	8.600	8.042	-6.49	1.340	5.570	5.335	-4.23
SAR18	2026-03-16	750	251.19	D750V3 - 1107	EX3DV4 - SN7785	DAE4 Sn1707	2.270	8.840	9.037	2.23	1.510	5.810	6.011	3.47
SAR18	2026-01-05	835	251.19	D835V2 - 4d060	EX3DV4 - SN7785	DAE4 Sn1707	2.480	9.280	9.873	6.39	1.630	6.010	6.489	7.97
SAR18	2026-01-06	835	251.19	D835V2 - 4d060	EX3DV4 - SN7785	DAE4 Sn1707	2.490	9.280	9.913	6.82	1.640	6.010	6.529	8.63
SAR19	2026-01-27	835	251.19	D835V2 - 4d167	EX3DV4 - SN7625	DAE4ip Sn1800	2.510	9.360	9.992	6.76	1.650	6.050	6.569	8.57
SAR19	2026-02-01	835	251.19	D835V2 - 4d167	EX3DV4 - SN7625	DAE4ip Sn1800	2.540	9.360	10.112	8.03	1.670	6.050	6.648	9.89
SAR19	2026-02-04	835	251.19	D835V2 - 4d167	EX3DV4 - SN7625	DAE4ip Sn1800	2.440	9.360	9.714	3.78	1.610	6.050	6.409	5.94
SAR20	2026-02-17	835	251.19	D835V2 - 4d167	EX3DV4 - SN7814	DAE4 Sn778	2.440	9.360	9.714	3.78	1.610	6.050	6.409	5.94
SAR20	2026-02-18	835	251.19	D835V2 - 4d167	EX3DV4 - SN7814	DAE4 Sn778	2.510	9.360	9.992	6.76	1.650	6.050	6.569	8.57
SAR18	2026-02-20	835	251.19	D835V2 - 4d167	EX3DV4 - SN7785	DAE4 Sn1707	2.570	9.360	10.231	9.31	1.600	6.050	6.370	5.28
SAR19	2026-02-24	835	251.19	D835V2 - 4d167	EX3DV4 - SN7625	DAE4ip Sn1800	2.410	9.360	9.594	2.50	1.590	6.050	6.330	4.63
SAR19	2026-03-02	835	251.19	D835V2 - 4d167	EX3DV4 - SN7625	DAE4ip Sn1800	2.380	9.360	9.475	1.23	1.570	6.050	6.250	3.31
SAR20	2026-03-07	835	251.19	D835V2 - 4d167	EX3DV4 - SN7814	DAE4 Sn778	2.430	9.360	9.674	3.35	1.600	6.050	6.370	5.28
SAR18	2026-03-14	835	251.19	D835V2 - 4d167	EX3DV4 - SN7785	DAE4 Sn1707	2.370	9.360	9.435	0.80	1.570	6.050	6.250	3.31
SAR18	2026-03-21	1640	50.12	D1640V2 - 346	EX3DV4 - SN7785	DAE4 Sn1707	1.680	34.200	33.520	-1.99	0.905	18.600	18.057	-2.92
SAR18	2026-04-08	1640	50.12	D1640V2 - 346	EX3DV4 - SN7785	DAE4 Sn1707	1.700	34.200	33.919	-0.82	0.911	18.600	18.176	-2.28
SAR18	2026-01-02	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7785	DAE4 Sn1707	1.710	36.300	34.118	-6.01	0.910	19.300	18.156	-5.93
SAR18	2026-01-05	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7785	DAE4 Sn1707	1.750	36.300	34.916	-3.81	0.927	19.300	18.496	-4.17
SAR19	2026-01-20	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.840	36.300	36.712	1.13	0.973	19.300	19.413	0.59
SAR19	2026-01-25	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.780	36.300	35.515	-2.16	0.940	19.300	18.755	-2.82
SAR19	2026-01-28	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.800	36.300	35.914	-1.06	0.951	19.300	18.974	-1.69
SAR19	2026-01-30	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.800	36.300	35.914	-1.06	0.947	19.300	18.895	-2.10
SAR19	2026-02-06	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.750	36.300	34.916	-3.81	0.926	19.300	18.476	-4.27
SAR18	2026-02-10	1750	251.19	D1750V2 - 1112	EX3DV4 - SN7785	DAE4 Sn1707	9.000	36.300	35.829	-1.30	4.830	19.300	19.228	-0.37
SAR18	2026-02-17	1750	251.19	D1750V2 - 1112	EX3DV4 - SN7785	DAE4 Sn1707	8.960	36.300	35.670	-1.73	4.790	19.300	19.069	-1.20
SAR20	2026-02-18	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7814	DAE4 Sn778	1.780	36.300	35.515	-2.16	0.948	19.300	18.915	-2.00
SAR19	2026-02-22	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.800	36.300	35.914	-1.06	0.957	19.300	19.094	-1.07
SAR19	2026-02-27	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.830	36.300	36.512	0.59	0.972	19.300	19.393	0.48
SAR19	2026-02-28	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.800	36.300	35.914	-1.06	0.950	19.300	18.955	-1.79
SAR19	2026-03-06	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7625	DAE4ip Sn1800	1.780	36.300	35.515	-2.16	0.949	19.300	18.935	-1.89
SAR18	2026-03-30	1750	50.12	D1750V2 - 1112	EX3DV4 - SN7785	DAE4 Sn1707	1.770	36.300	35.315	-2.71	0.946	19.300	18.875	-2.20
SAR18	2026-01-02	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7785	DAE4 Sn1707	1.950	39.600	38.907	-1.75	1.010	20.800	20.152	-3.12
SAR19	2026-01-20	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7625	DAE4ip Sn1800	2.080	39.600	41.500	4.80	1.070	20.800	21.349	2.64
SAR19	2026-01-25	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7625	DAE4ip Sn1800	2.010	39.600	40.104	1.27	1.040	20.800	20.750	-0.24
SAR19	2026-01-28	1900	50.12	D1900V2 - 5d041	EX3DV4 - SN7625	DAE4ip Sn1800	1.990	39.200	39.705	1.29	1.030	20.700	20.551	-0.72
SAR19	2026-01-30	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7625	DAE4ip Sn1800	1.930	39.600	38.508	-2.76	0.997	20.800	19.892	-4.36
SAR18	2026-02-17	1900	251.19	D1900V2 - 5d185	EX3DV4 - SN7785	DAE4 Sn1707	10.300	39.600	41.005	3.55	5.350	20.800	21.299	2.40
SAR19	2026-02-22	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7625	DAE4ip Sn1800	1.990	39.600	39.705	0.26	1.030	20.800	20.551	-1.20
SAR19	2026-02-23	1900	50.12	D1900V2 - 5d041	EX3DV4 - SN7625	DAE4ip Sn1800	1.970	39.200	39.306	0.27	1.020	20.700	20.351	-1.69
SAR19	2026-02-27	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7625	DAE4ip Sn1800	2.070	39.600	41.301	4.30	1.070	20.800	21.349	2.64
SAR19	2026-03-06	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7625	DAE4ip Sn1800	1.990	39.600	39.705	0.26	1.040	20.800	20.750	-0.24
SAR20	2026-03-06	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7814	DAE4 Sn778	2.010	39.600	40.104	1.27	1.040	20.800	20.750	-0.24
SAR18	2026-03-14	1900	50.12	D1900V2 - 5d185	EX3DV4 - SN7785	DAE4 Sn1707	2.010	39.600	40.104	1.27	1.050	20.800	20.950	0.72
SAR18	2026-03-21	2000	50.12	D2000V2 - 1070	EX3DV4 - SN7785	DAE4 Sn1707	2.100	41.000	41.899	2.19	1.070	21.300	21.349	0.23
SAR18	2026-04-08	2000	50.12	D2000V2 - 1010	EX3DV4 - SN7785	DAE4 Sn1707	2.090	41.000	41.700	1.71	1.070	21.500	21.349	-0.70
SAR18	2026-01-03	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	2.350	48.200	46.887	-2.72	1.130	23.200	22.546	-2.82
SAR19	2026-01-19	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	2.490	48.200	49.681	3.07	1.190	23.200	23.743	2.34
SAR19	2026-01-29	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	2.470	48.200	49.282	2.24	1.180	23.200	23.543	1.48
SAR21	2026-02-18	2300	50.12	D2300V2 - 1006	EX3DV4 - SN3931	DAE4 Sn1697	2.550	48.200	50.878	5.56	1.220	23.200	24.342	4.92
SAR20	2026-02-18	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7814	DAE4 Sn778	2.380	48.200	47.486	-1.48	1.140	23.200	22.745	-1.96
SAR19	2026-02-21	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	2.430	48.200	48.484	0.59	1.170	23.200	23.344	0.62
SAR18	2026-03-01	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	2.470	48.200	49.282	2.24	1.180	23.200	23.543	1.48
SAR18	2026-03-30	2300	50.12	D2300V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	2.400	48.200	47.885	-0.65	1.150	23.200	22.945	-1.10
SAR18	2026-01-03	2600	251.19	D2600V2 - 1008	EX3DV4 - SN7785	DAE4 Sn1707	12.800	55.700	50.957	-8.51	5.740	25.300	22.851	-9.68
SAR19	2026-01-19	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.650	55.700	52.873	-5.08	1.200	25.300	23.943	-5.37
SAR19	2026-01-22	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.660	55.700	53.073	-4.72	1.190	25.300	23.743	-6.15



FCC SAR TEST REPORT

Report No. : FA5N0805-01B

SAR20	2026-01-24	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7814	DAE4 Sn1776	2.580	55.700	51.476	-7.58	1.150	25.300	22.945	-9.31
SAR19	2026-01-29	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.660	55.700	53.073	-4.72	1.190	25.300	23.743	-6.15
SAR19	2026-01-31	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.670	55.700	53.272	-4.36	1.190	25.300	23.743	-6.15
SAR19	2026-02-10	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.580	55.700	51.476	-7.58	1.150	25.300	22.945	-9.31
SAR21	2026-02-18	2600	50.12	D2600V2 - 1008	EX3DV4 - SN3931	DAE4 Sn1697	2.620	55.700	52.275	-6.15	1.180	25.300	23.543	-6.94
SAR22	2026-02-20	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7695	DAE4ip Sn1823	3.060	55.700	61.053	9.61	1.390	25.300	27.733	9.62
SAR19	2026-02-21	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.630	55.700	52.474	-5.79	1.180	25.300	23.543	-6.94
SAR19	2026-02-26	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.630	55.700	52.474	-5.79	1.170	25.300	23.344	-7.73
SAR19	2026-02-28	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7625	DAE4ip Sn1800	2.680	55.700	53.472	-4.00	1.200	25.300	23.943	-5.37
SAR18	2026-03-02	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7785	DAE4 Sn1707	2.530	55.700	50.479	-9.37	1.150	25.300	22.945	-9.31
SAR20	2026-03-02	2600	50.12	D2600V2 - 1008	EX3DV4 - SN7814	DAE4 Sn778	2.740	55.700	54.669	-1.85	1.230	25.300	24.541	-3.00
SAR18	2026-03-30	2600	47.64	D2600V2 - 1008	EX3DV4 - SN7785	DAE4 Sn1707	2.500	55.700	52.477	-5.79	1.120	25.300	23.510	-7.08
SAR18	2026-01-04	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.210	65.700	64.046	-2.52	1.220	24.900	24.342	-2.24
SAR18	2026-01-07	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.400	65.700	67.837	3.25	1.290	24.900	25.738	3.37
SAR19	2026-02-02	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.140	65.700	62.650	-4.64	1.170	24.900	23.344	-6.25
SAR18	2026-02-03	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.120	65.700	62.251	-5.25	1.180	24.900	23.543	-5.45
SAR19	2026-02-07	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.180	65.700	63.448	-3.43	1.200	24.900	23.943	-3.85
SAR19	2026-02-08	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.130	65.700	62.450	-4.95	1.170	24.900	23.344	-6.25
SAR19	2026-02-09	3500	100.00	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	6.290	65.700	62.900	-4.26	2.380	24.900	23.800	-4.42
SAR21	2026-02-09	3500	50.12	D3500V2 - 1014	EX3DV4 - SN3931	DAE4 Sn1697	3.090	65.700	61.652	-6.16	1.190	24.900	23.743	-4.65
SAR20	2026-02-17	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7814	DAE4 Sn778	3.230	65.700	64.445	-1.91	1.230	24.900	24.541	-1.44
SAR18	2026-02-24	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.430	65.700	68.436	4.16	1.320	24.900	26.337	5.77
SAR18	2026-02-25	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.350	65.700	66.840	1.73	1.280	24.900	25.539	2.57
SAR19	2026-02-26	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.230	65.700	64.445	-1.91	1.220	24.900	24.342	-2.24
SAR18	2026-02-26	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.420	65.700	68.236	3.86	1.310	24.900	26.137	4.97
SAR19	2026-03-01	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.270	65.700	65.243	-0.69	1.250	24.900	24.940	0.16
SAR18	2026-03-02	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.340	65.700	66.640	1.43	1.290	24.900	25.738	3.37
SAR19	2026-03-15	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.120	65.700	62.251	-5.25	1.170	24.900	23.344	-6.25
SAR19	2026-03-31	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7625	DAE4ip Sn1800	3.150	65.700	62.849	-4.34	1.190	24.900	23.743	-4.65
SAR18	2026-04-01	3500	50.12	D3500V2 - 1014	EX3DV4 - SN7785	DAE4 Sn1707	3.380	65.700	67.438	2.65	1.300	24.900	25.938	4.17
SAR18	2026-01-04	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.310	69.900	66.042	-5.52	1.230	25.600	24.541	-4.14
SAR18	2026-01-07	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.460	69.900	69.034	-1.24	1.280	25.600	25.539	-0.24
SAR19	2026-02-02	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.250	69.900	64.844	-7.23	1.180	25.600	23.543	-8.03
SAR18	2026-02-03	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.290	69.900	65.642	-6.09	1.220	25.600	24.342	-4.92
SAR19	2026-02-07	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.310	69.900	66.042	-5.52	1.210	25.600	24.142	-5.70
SAR19	2026-02-08	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.450	69.900	68.835	-1.52	1.250	25.600	24.940	-2.58
SAR19	2026-02-09	3700	100.00	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	6.480	69.900	64.800	-7.30	2.380	25.600	23.800	-7.03
SAR21	2026-02-09	3700	50.12	D3700V2 - 1006	EX3DV4 - SN3931	DAE4 Sn1697	3.180	69.900	63.448	-9.23	1.180	25.600	23.543	-8.03
SAR20	2026-02-17	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7814	DAE4 Sn778	3.480	69.900	69.433	-0.67	1.290	25.600	25.738	0.54
SAR18	2026-02-24	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.570	69.900	71.229	1.90	1.340	25.600	26.736	4.44
SAR18	2026-02-25	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.400	69.900	67.837	-2.95	1.260	25.600	25.140	-1.80
SAR19	2026-02-26	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.410	69.900	68.037	-2.67	1.260	25.600	25.140	-1.80
SAR18	2026-02-26	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.540	69.900	70.630	1.05	1.320	25.600	26.337	2.88
SAR19	2026-03-01	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.460	69.900	69.034	-1.24	1.280	25.600	25.539	-0.24
SAR18	2026-03-02	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.510	69.900	70.032	0.19	1.320	25.600	26.337	2.88
SAR19	2026-03-15	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.310	69.900	66.042	-5.52	1.210	25.600	24.142	-5.70
SAR19	2026-03-31	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.320	69.900	66.241	-5.23	1.230	25.600	24.541	-4.14
SAR18	2026-04-01	3700	50.12	D3700V2 - 1006	EX3DV4 - SN7785	DAE4 Sn1707	3.450	69.900	68.835	-1.52	1.280	25.600	25.539	-0.24
SAR19	2026-02-07	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.060	67.000	61.053	-8.88	1.070	23.200	21.349	-7.98
SAR19	2026-02-08	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.360	67.000	67.039	0.06	1.170	23.200	23.344	0.62
SAR19	2026-02-09	3900	100.00	D3900V2 - 1092	EX3DV4 - SN7625	DAE4ip Sn1800	6.720	67.000	67.200	0.30	2.360	23.200	23.600	1.72
SAR21	2026-02-09	3900	50.12	D3900V2 - 1092	EX3DV4 - SN3931	DAE4 Sn1697	3.100	67.000	61.852	-7.68	1.120	23.200	22.346	-3.68
SAR18	2026-02-24	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7785	DAE4 Sn1707	3.350	67.000	66.840	-0.24	1.200	23.200	23.943	3.20
SAR18	2026-02-25	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7785	DAE4 Sn1707	3.260	67.000	65.044	-2.92	1.160	23.200	23.144	-0.24
SAR18	2026-02-26	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7785	DAE4 Sn1707	3.310	67.000	66.042	-1.43	1.180	23.200	23.543	1.48
SAR18	2026-03-02	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7785	DAE4 Sn1707	3.370	67.000	67.239	0.36	1.200	23.200	23.943	3.20
SAR19	2026-03-15	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.070	67.000	61.253	-8.58	1.070	23.200	21.349	-7.98
SAR19	2026-03-31	3900	50.12	D3900V2 - 1092	EX3DV4 - SN7625	DAE4ip Sn1800	3.030	67.000	60.455	-9.77	1.070	23.200	21.349	-7.98
SAR-20	2026/1/8	2450	50	D2450V2-736	EX3DV4 - SN7785	DAE4 Sn1707	2.570	51.400	51.4	0.00	1.190	24.200	23.8	-1.65
SAR-20	2026/1/12	2450	50	D2450V2-929	EX3DV4 - SN7785	DAE4 Sn1707	2.550	53.300	51	-4.32	1.190	25.200	23.8	-5.56
SAR-18	2026/3/5	2450	50	D2450V2-929	EX3DV4 - SN3931	DAE4 Sn1697	2.540	53.300	50.8	-4.69	1.200	25.200	24	-4.76
SAR-18	2026/3/6	2450	50	D2450V2-736	EX3DV4 - SN3931	DAE4 Sn1697	2.590	51.400	51.8	0.78	1.220	24.200	24.4	0.83
SAR-19	2026/3/21	2450	50	D2450V2-929	EX3DV4 - SN7625	DAE4ip Sn1800	2.640	53.300	52.8	-0.94	1.230	25.200	24.6	-2.38
SAR-19	2026/3/23	2450	50	D2450V2-929	EX3DV4 - SN7625	DAE4ip Sn1800	2.580	53.300	51.6	-3.19	1.200	25.200	24	-4.76
SAR-19	2026/3/25	2450	50	D2450V2-736	EX3DV4 - SN7625	DAE4ip Sn1800	2.530	51.400	50.6	-1.56	1.180	24.200	23.6	-2.48
SAR-20	2026/1/9	5250	50	D5GHzV2-1006	EX3DV4 - SN7785	DAE4 Sn1707	4.210	80.600	84.2	4.47	1.210	22.800	24.2	6.14
SAR-18	2026/3/5	5250	49	D5GHzV2-1006	EX3DV4 - SN3931	DAE4 Sn1697	3.590	80.600	73.3	-9.10	1.050	22.800	21.4	-6.02
SAR-19	2026/3/17	5250	50	D5GHzV2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	3.910	80.600	78.2	-2.98	1.130	22.800	22.6	-0.88
SAR-19	2026/3/18	5250	50	D5GHzV2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	4.020	80.600	80.4	-0.25	1.160	22.800	23.2	1.75
SAR-20	2026/1/9	5600	50	D5GHzV2-1006	EX3DV4 - SN7785	DAE4 Sn1707	3.770	83.400	75.4	-9.59	1.110	23.700	22.2	-6.33
SAR-18	2026/3/5	5600	50	D5GHzV2-1006	EX3DV4 - SN3931	DAE4 Sn1697	3.840	80.600	76.8	-4.71	1.110	22.700	22.2	-2.20
SAR-19	2026/3/17	5600	50	D5GHzV2-1006	EX3DV									

SAR-18	2026/3/5	5800	50	D5GHzV2-1006	EX3DV4 - SN3931	DAE4 Sn1697	3.760	83.400	75.2	-9.83	1.080	23.700	21.6	-8.86
SAR-19	2026/3/17	5800	50	D5GHzV2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	4.140	80.600	82.8	2.73	1.190	22.700	23.8	4.85
SAR-19	2026/3/18	5800	50	D5GHzV2-1006	EX3DV4 - SN7625	DAE4ip Sn1800	4.250	80.600	85	5.46	1.210	22.700	24.2	6.61
SAR-19	2026/3/19	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7625	DAE4ip Sn1800	32.100	302.000	321	6.29	5.930	56.500	59.3	4.96
SAR-19	2026/3/28	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7625	DAE4ip Sn1800	31.800	302.000	318	5.30	5.880	56.500	58.8	4.07
SAR-18	2026/3/28	6500	100	D6.5GHzV2-1083	EX3DV4 - SN3931	DAE4 Sn1697	30.500	302.000	305	0.99	5.620	56.500	56.2	-0.53
SAR-18	2026/3/29	6500	100	D6.5GHzV2-1083	EX3DV4 - SN3931	DAE4 Sn1697	30.000	302.000	300	-0.66	5.510	56.500	55.1	-2.48
SAR-18	2026/4/10	13	1000	CLA13-1011	EX3DV4 - SN3931	DAE4 Sn1697					0.309	0.340	0.309	-9.12

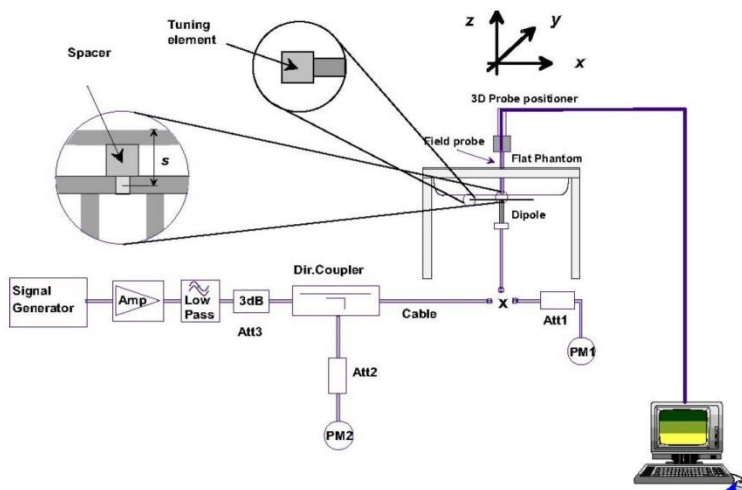


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

10.3 PD System Performance Check Results

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

Test Site	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
SAR14	10G	10GHz_1020	EUmmWV4 - SN9461	DAE4 Sn656	10mm	53.8	54.6	-0.06	2026/3/25
SAR17	10G	10GHz_1020	EUmmWV4 - SN9461	DAE4ip Sn1823	10mm	62	54.6	0.55	2026/3/27
SAR14	10G	10GHz_1020	EUmmWV3 - SN9424	DAE4 Sn656	10mm	55.4	54.6	0.06	2026/4/1

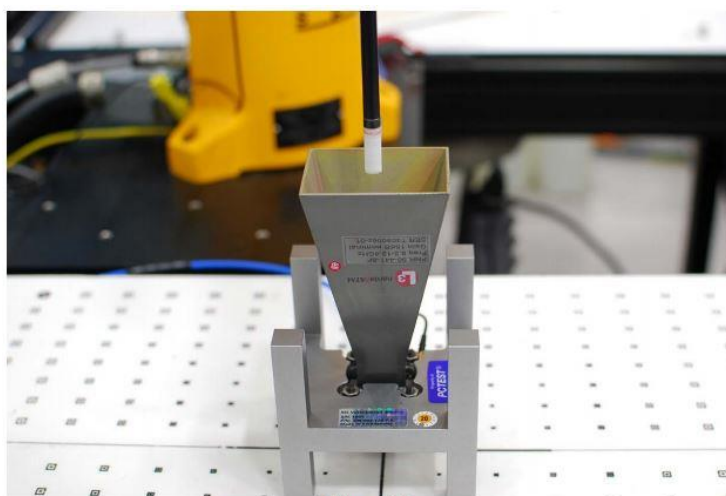


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

11. RF Exposure Positions

11.1 Ear and handset reference point

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

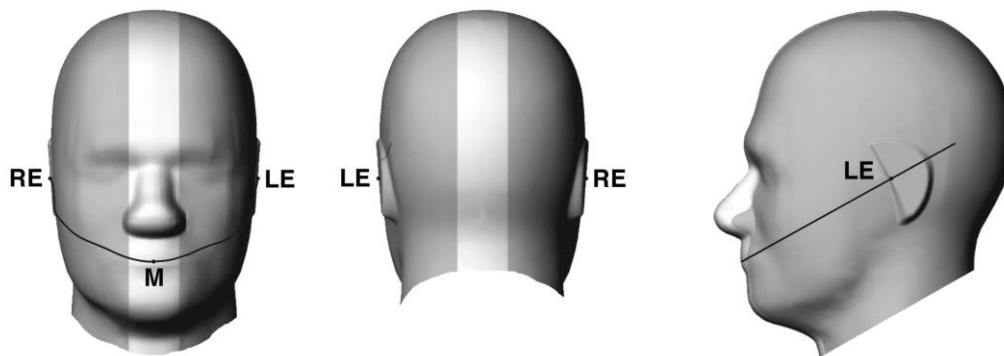


Fig 9.1.1 Front, back, and side views of SAM twin phantom

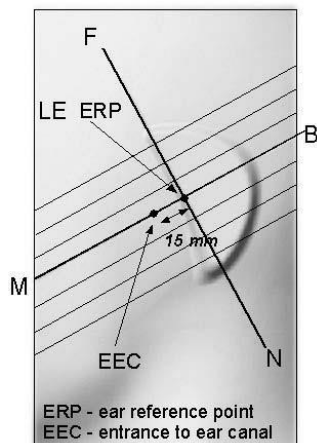


Fig 9.1.2 Close-up side view of phantom showing the ear region.

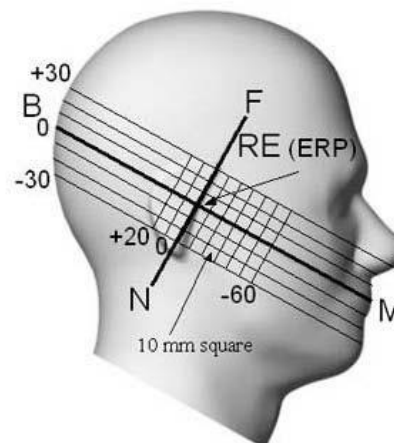


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

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

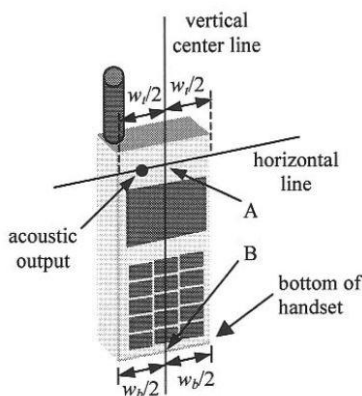


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case"

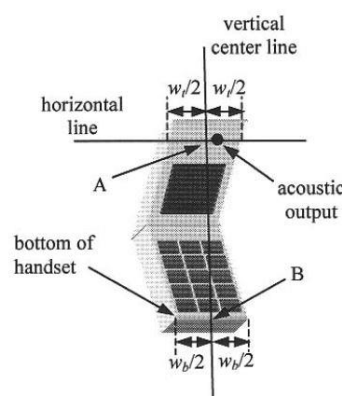


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

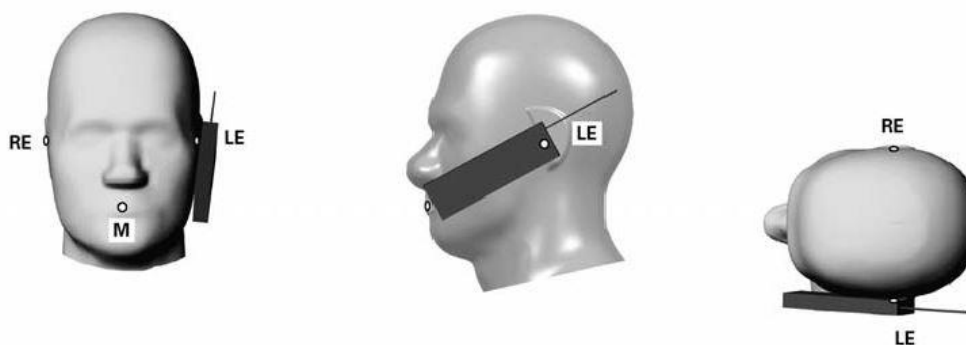


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

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

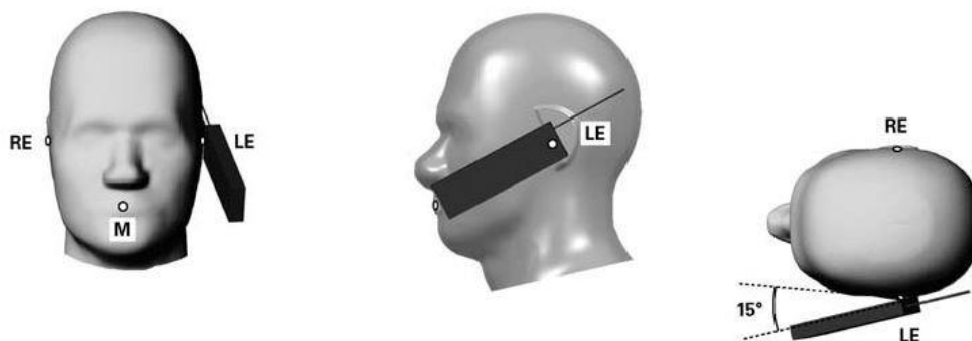


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

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

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

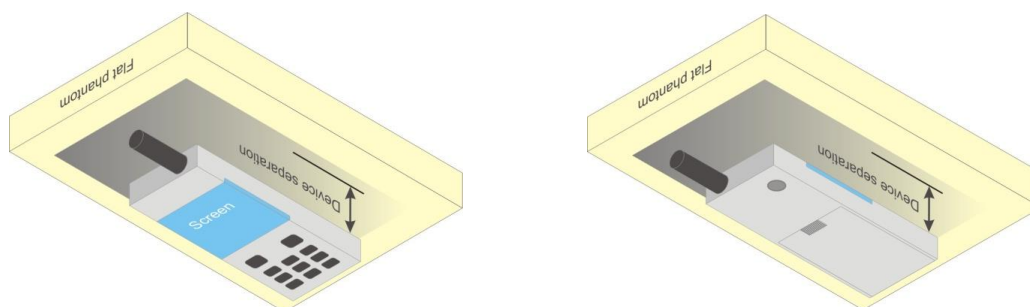


Fig 9.4 Body Worn Position



11.5 Product Specific Exposure

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

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

11.6 Wireless Router

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

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

12. Data Reuse Approach

FCC ID: A4RGBC0H (Parent model) and FCC ID: A4RG4HCD (variant model)

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

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

Per KDB 484596 D01v03, compare parent model and variant model SAR result, the all wireless band $d_{TER} \leq d_{TERmax}$, the max SAR summary are identical with parent model.

The applicant should take full responsibility that the test data as referenced in this report represent compliance for this FCC ID: A4RG4HCD

<Model Difference Information>

A4RGBC0H and A4RG4HCD use the identical internal printed circuit board layout, and the major differences which may relate to RF are listed below:

- Depopulated mmW module.

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

<Data Referencing Table>

Rule Part	Equipment Class	Wireless Technology	Frequency Band (MHz)	FCC ID (Parent Model)	Type Grant/ Permissive Change	Reference Title	FCC ID Filling (Variant)	Test on the variant
Part 2.1093 SAR	UWB	UWB	6489.6, 7987.2	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	1mW Low power exclusion
	DXX	NFC	13.56	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
	DSS	Bluetooth/ Thread	2400~2483.5	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
	DTS	BLE WiFi	2400~2483.5	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
	NII	Wi-Fi	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850 5850 ~ 5895	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
	6CD / 6VL	Wi-Fi	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Full Test
	PCE CBE	GSM	850/1900	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
		WCDMA	B2/4/5	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
		LTE	B2/4/5/7/12/13/14/17/25/26/30/38/41/48/66/71	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
		5G FR1	n2/5/7/12/13/14/25/26/30/38/41/66/71/77/78	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check
		NTN	B23/255	A4RGBC0H	Original Grant	FA5N0803-01C	A4RG4HCD	Spot check



13. 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 parent model remains representative for the variant model.

1st as parent model

2nd as variant model

13.1 Head SAR

Plot No	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 0	ECI 2	189	836.4	29.7	30.3	1.148			-0.05	0.398	0.457
01	2nd	GSM850	GPRS 4 Tx slots	Left Cheek	0mm	Ant 0	ECI 2	189	836.4	29.7	30.3	1.148			-0.06	0.359	0.412
	1st	LTE Band 71	20M_QPSK_1_0	Right Cheek	0mm	Ant 1	ECI 2	133297	680.5	22.33	24.1	1.503			0	0.639	0.960
02	2nd	LTE Band 71	20M_QPSK_1_0	Right Cheek	0mm	Ant 1	ECI 2	133297	680.5	22.33	24.1	1.503			0.01	0.634	0.953
	1st	LTE Band 48	20M_QPSK_50_0	Right Cheek	0mm	Ant 1	ECI 2	55830	3609	17.52	18.7	1.312	62.9	1.006	-0.01	0.738	0.974
03	2nd	LTE Band 48	20M_QPSK_50_0	Right Cheek	0mm	Ant 1	ECI 2	55830	3609	17.52	18.7	1.312	62.9	1.006	-0.02	0.452	0.597
	1st	FR1 n77	100M_BPSK_1_271	Right Cheek	0mm	Ant 1	ECI 2	656000	3840	14.51	15.6	1.285			0.01	0.636	0.817
04	2nd	FR1 n77	100M_BPSK_1_271	Right Cheek	0mm	Ant 1	ECI 2	656000	3840	14.51	15.6	1.285			-0.16	0.581	0.747
	1st	LTE Band 7	20M_QPSK_1_0	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	22.93	24.4	1.403			0.15	0.706	0.991
05	2nd	LTE Band 7	20M_QPSK_1_0	Right Cheek	0mm	Ant 2	ECI 2	21100	2535	22.93	24.4	1.403			-0.13	0.669	0.939
	1st	LTE Band 66	20M_QPSK_50_50	Left Cheek	0mm	Ant 5	ECI 2	132572	1770	16.82	18.6	1.507			-0.03	0.650	0.980
06	2nd	LTE Band 66	20M_QPSK_50_50	Left Cheek	0mm	Ant 5	ECI 2	132572	1770	16.82	18.6	1.507			0.18	0.628	0.946
	1st	LTE Band 48	20M_QPSK_50_0	Left Cheek	0mm	Ant 5	ECI 2	55340	3560	19.5	20.9	1.380	62.9	1.006	-0.13	0.714	0.991
07	2nd	LTE Band 48	20M_QPSK_50_0	Left Cheek	0mm	Ant 5	ECI 2	55340	3560	19.5	20.9	1.380	62.9	1.006	-0.09	0.634	0.880
	1st	FR1 n77	100M_BPSK_135_0	Left Cheek	0mm	Ant 5	ECI 2	633332	3499.98	16.97	18.3	1.358			-0.06	0.686	0.932
08	2nd	FR1 n77	100M_BPSK_135_0	Left Cheek	0mm	Ant 5	ECI 2	633332	3499.98	16.97	18.3	1.358			0.01	0.604	0.820
	1st	LTE Band 48	20M_QPSK_1_0	Left Cheek	0mm	Ant 6	ECI 2	56150	3641	21.28	22	1.180	62.9	1.006	0.07	0.296	0.351
09	2nd	LTE Band 48	20M_QPSK_1_0	Left Cheek	0mm	Ant 6	ECI 2	56150	3641	21.28	22	1.180	62.9	1.006	0.17	0.289	0.343
	1st	FR1 n77	100M_QPSK_135_69	Left Cheek	0mm	Ant 6	ECI 2	633332	3499.98	24.41	25	1.146			-0.17	0.731	0.838
10	2nd	FR1 n77	100M_QPSK_135_69	Left Cheek	0mm	Ant 6	ECI 2	633332	3499.98	24.41	25	1.146			-0.1	0.716	0.821
	1st	LTE Band 48	20M_QPSK_1_0	Right Cheek	0mm	Ant 7	ECI 2	56150	3641	21.51	22.7	1.315	62.9	1.006	0.17	0.312	0.413
11	2nd	LTE Band 48	20M_QPSK_1_0	Right Cheek	0mm	Ant 7	ECI 2	56150	3641	21.51	22.7	1.315	62.9	1.006	-0.18	0.176	0.233
	1st	FR1 n77	100M_QPSK_1_137	Right Cheek	0mm	Ant 7	ECI 2	633332	3499.98	23.34	24.5	1.306			-0.11	0.348	0.454
12	2nd	FR1 n77	100M_QPSK_1_137	Right Cheek	0mm	Ant 7	ECI 2	633332	3499.98	23.34	24.5	1.306			0.03	0.263	0.343

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+4(3)	Index 1	11	2462	15.85	17.50	1.462	100	1.000	0.09	0.525	0.768
		WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+4(4)	Index 1	11	2462	16.05	17.50	1.396	100	1.000	0.09	0.324	0.452
13	2nd	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+4(3)	Index 1	11	2462	15.85	17.50	1.462	100	1.000	0.06	0.417	0.610
		WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 3+4(4)	Index 1	11	2462	16.05	17.50	1.396	100	1.000	0.06	0.387	0.540
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(3)	Index 1	122	5610	15.21	16.50	1.346	97.75	1.023	-0.1	0.001	0.001
		WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Index 1	122	5610	14.50	16.50	1.585	97.75	1.023	-0.1	0.452	0.733
14	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(3)	Index 1	122	5610	15.21	16.50	1.346	97.75	1.023	-0.15	0.059	0.081
		WLAN5GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 3+4(4)	Index 1	122	5610	14.50	16.50	1.585	97.75	1.023	-0.15	0.418	0.678
	1st	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Index 1	39	2441	13.05	14.50	1.396	76.93	1.083	-0.12	0.145	0.219
15	2nd	Bluetooth	1Mbps	Right Cheek	0mm	Ant 3	Index 1	39	2441	13.05	14.50	1.396	76.93	1.083	-0.17	0.139	0.210
	1st	Thread	250K	Right Cheek	0mm	Ant 3	Index 1	11	2405	13.85	14.00	1.035	89.81	1.113	0.06	0.195	0.225
16	2nd	Thread	250K	Right Cheek	0mm	Ant 3	Index 1	11	2405	13.85	14.00	1.035	89.81	1.113	-0.06	0.156	0.180

13.2 Hotspot SAR

Plot No	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	WCDMA II	RMC 12.2Kbps	Bottom Edge	5mm	Ant 0	ECI 6	9262	1852.4	14.99	15	1.002			-0.02	0.845	0.847
17	2nd	WCDMA II	RMC 12.2Kbps	Bottom Edge	5mm	Ant 0	ECI 6	9262	1852.4	14.99	15	1.002			-0.02	0.822	0.824
	1st	LTE Band 66	20M_QPSK_50_50	Back	5mm	Ant 1	ECI 6	132572	1770	20.9	21.5	1.148			-0.11	0.729	0.837
18	2nd	LTE Band 66	20M_QPSK_50_50	Back	5mm	Ant 1	ECI 6	132572	1770	20.9	21.5	1.148			-0.13	0.728	0.836
	1st	LTE Band 48	20M_QPSK_50_50	Left Edge	5mm	Ant 1	ECI 6	56640	3690	15.57	16.3	1.183	62.9	1.006	-0.08	0.516	0.614
19	2nd	LTE Band 48	20M_QPSK_50_50	Left Edge	5mm	Ant 1	ECI 6	56640	3690	15.57	16.3	1.183	62.9	1.006	0.05	0.503	0.599
	1st	FR1 n77	100M_BPSK_135_138	Left Edge	5mm	Ant 1	ECI 6	656000	3840	13.18	14.3	1.294			0.07	0.453	0.586
20	2nd	FR1 n77	100M_BPSK_135_138	Left Edge	5mm	Ant 1	ECI 6	656000	3840	13.18	14.3	1.294			-0.1	0.432	0.559
	1st	FR1 n25	40M_BPSK_1_214	Right Edge	5mm	Ant 2	ECI 6	376500	1882.5	18.91	19.1	1.045			0.02	0.794	0.830
21	2nd	FR1 n25	40M_BPSK_1_214	Right Edge	5mm	Ant 2	ECI 6	376500	1882.5	18.91	19.1	1.045			-0.02	0.793	0.829
	1st	FR1 n25	40M_BPSK_216_0	Right Edge	5mm	Ant 5	ECI 6	376500	1882.5	17.73	17.9	1.040			-0.06	0.808	0.840
22	2nd	FR1 n25	40M_BPSK_216_0	Right Edge	5mm	Ant 5	ECI 6	376500	1882.5	17.73	17.9	1.040			-0.01	0.775	0.806
	1st	LTE Band 48	20M_QPSK_50_0	Back	5mm	Ant 5	ECI 6	56640	3690	19.61	20.1	1.119	62.9	1.006	0.05	0.749	0.843
23	2nd	LTE Band 48	20M_QPSK_50_0	Back	5mm	Ant 5	ECI 6	56640	3690	19.61	20.1	1.119	62.9	1.006	0.05	0.663	0.746
	1st	FR1 n77	100M_BPSK_1_137	Top Edge	5mm	Ant 5	ECI 6	633332	3499.98	17.59	18.2	1.151			-0.12	0.446	0.513
24	2nd	FR1 n77	100M_BPSK_1_137	Top Edge	5mm	Ant 5	ECI 6	633332	3499.98	17.59	18.2	1.151			-0.01	0.413	0.475
	1st	LTE Band 48	20M_QPSK_50_0	Left Edge	5mm	Ant 6	ECI 6	55340	3560	17.36	17.6	1.057	62.9	1.006	-0.11	0.751	0.799
25	2nd	LTE Band 48	20M_QPSK_50_0	Left Edge	5mm	Ant 6	ECI 6	55340	3560	17.36	17.6	1.057	62.9	1.006	-0.07	0.701	0.745
	1st	FR1 n77	100M_BPSK_135_0	Left Edge	5mm	Ant 6	ECI 6	656000	3840	13.78	14	1.052			-0.07	0.786	0.827
26	2nd	FR1 n77	100M_BPSK_135_0	Left Edge	5mm	Ant 6	ECI 6	656000	3840	13.78	14	1.052			-0.07	0.741	0.780
	1st	LTE Band 48	20M_QPSK_50_0	Right Edge	5mm	Ant 7	ECI 6	56150	3641	18	18.4	1.096	62.9	1.006	-0.06	0.736	0.811
27	2nd	LTE Band 48	20M_QPSK_50_0	Right Edge	5mm	Ant 7	ECI 6	56150	3641	18	18.4	1.096	62.9	1.006	0.06	0.694	0.765
	1st	FR1 n77	100M_BPSK_135_0	Right Edge	5mm	Ant 7	ECI 6	656000	3840	15.23	15.7	1.114			-0.03	0.604	0.673
28	2nd	FR1 n77	100M_BPSK_135_0	Right Edge	5mm	Ant 7	ECI 6	656000	3840	15.23	15.7	1.114			-0.01	0.593	0.661

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	WLAN2.4GHz	802.11b 1Mbps	Left Edge	5mm	Ant 3	Index 4	6	2437	10.14	10.50	1.086	100	1.000	-0.05	0.186	0.202
29	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Edge	5mm	Ant 3	Index 4	6	2437	10.14	10.50	1.086	100	1.000	-0.07	0.148	0.161
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(3)	Index 4	155	5775	10.07	11.50	1.390	97.75	1.023	0.11	0.124	0.176
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(4)	Index 4	155	5775	10.85	11.50	1.161	97.75	1.023	0.11	0.210	0.249
	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(3)	Index 4	155	5775	10.07	11.50	1.390	97.75	1.023	0.02	0.102	0.145
30		WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(4)	Index 4	155	5775	10.85	11.50	1.161	97.75	1.023	0.02	0.155	0.184
	1st	Bluetooth	1Mbps	Top Edge	5mm	Ant 4	Index 3	78	2480	17.90	18.00	1.023	76.93	1.083	0.03	0.432	0.479
31	2nd	Bluetooth	1Mbps	Top Edge	5mm	Ant 4	Index 3	78	2480	17.90	18.00	1.023	76.93	1.083	-0.06	0.365	0.404
	1st	Thread	250K	Left Edge	5mm	Ant 3	Index 3	11	2405	12.16	14.00	1.528	89.81	1.113	0.06	0.182	0.310
32	2nd	Thread	250K	Left Edge	5mm	Ant 3	Index 3	11	2405	12.16	14.00	1.528	89.81	1.113	-0.05	0.167	0.284

**13.3 Body-Worn SAR**

Plot No	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	FR1 n12	15M_BPSK_1_77	Back	5mm	Ant 0	ECI 4	141500	707.5	22.9	23.8	1.230			-0.01	0.637	0.784
33	2nd	FR1 n12	15M_BPSK_1_77	Back	5mm	Ant 0	ECI 4	141500	707.5	22.9	23.8	1.230			-0.04	0.625	0.769
	1st	LTE Band 66	20M_QPSK_50_50	Back	5mm	Ant 1	ECI 4	132572	1770	20.9	22.2	1.349			-0.11	0.729	0.983
34	2nd	LTE Band 66	20M_QPSK_50_50	Back	5mm	Ant 1	ECI 4	132572	1770	20.9	22.2	1.349			-0.13	0.728	0.982
	1st	LTE Band 48	20M_QPSK_1_99	Back	5mm	Ant 1	ECI 4	56640	3690	17.32	18.9	1.439	62.9	1.006	0.14	0.601	0.870
35	2nd	LTE Band 48	20M_QPSK_1_99	Back	5mm	Ant 1	ECI 4	56640	3690	17.32	18.9	1.439	62.9	1.006	0.05	0.581	0.841
	1st	FR1 n77	100M_BPSK_135_138	Back	5mm	Ant 1	ECI 4	656000	3840	15.7	17.3	1.445			0.03	0.618	0.893
36	2nd	FR1 n77	100M_BPSK_135_138	Back	5mm	Ant 1	ECI 4	656000	3840	15.7	17.3	1.445			0.04	0.520	0.751
	1st	WCDMA IV	RMC 12.2Kbps	Front	5mm	Ant 2	ECI 4	1312	1712.4	20.69	21.9	1.321			0.02	0.637	0.841
37	2nd	WCDMA IV	RMC 12.2Kbps	Front	5mm	Ant 2	ECI 4	1312	1712.4	20.69	21.9	1.321			0	0.635	0.839
	1st	LTE Band 25	20M_QPSK_50_50	Back	5mm	Ant 5	ECI 4	26340	1880	17.16	18.6	1.393			-0.03	0.686	0.956
38	2nd	LTE Band 25	20M_QPSK_50_50	Back	5mm	Ant 5	ECI 4	26340	1880	17.16	18.6	1.393			0.06	0.645	0.898
	1st	LTE Band 48	20M_QPSK_50_0	Back	5mm	Ant 5	ECI 4	56640	3690	19.61	20.8	1.315	62.9	1.006	0.05	0.749	0.991
39	2nd	LTE Band 48	20M_QPSK_50_0	Back	5mm	Ant 5	ECI 4	56640	3690	19.61	20.8	1.315	62.9	1.006	0.05	0.663	0.877
	1st	FR1 n77	100M_BPSK_1_137	Back	5mm	Ant 5	ECI 4	633332	3499.98	17.59	18.9	1.352			0.13	0.414	0.560
40	2nd	FR1 n77	100M_BPSK_1_137	Back	5mm	Ant 5	ECI 4	633332	3499.98	17.59	18.9	1.352			0.09	0.398	0.538
	1st	LTE Band 48	20M_QPSK_50_0	Back	5mm	Ant 6	ECI 4	55340	3560	17.36	19	1.459	62.9	1.006	-0.03	0.417	0.612
41	2nd	LTE Band 48	20M_QPSK_50_0	Back	5mm	Ant 6	ECI 4	55340	3560	17.36	19	1.459	62.9	1.006	0.16	0.292	0.429
	1st	FR1 n77	100M_BPSK_135_0	Back	5mm	Ant 6	ECI 4	656000	3840	13.78	15.4	1.452			-0.13	0.475	0.690
42	2nd	FR1 n77	100M_BPSK_135_0	Back	5mm	Ant 6	ECI 4	656000	3840	13.78	15.4	1.452			-0.04	0.412	0.598
	1st	LTE Band 48	20M_QPSK_1_0	Back	5mm	Ant 7	ECI 4	56150	3641	18.07	19.8	1.489	62.9	1.006	-0.13	0.361	0.541
43	2nd	LTE Band 48	20M_QPSK_1_0	Back	5mm	Ant 7	ECI 4	56150	3641	18.07	19.8	1.489	62.9	1.006	-0.17	0.359	0.538
	1st	FR1 n77	100M_BPSK_1_137	Back	5mm	Ant 7	ECI 4	633332	3499.98	16.99	18.2	1.321			-0.17	0.440	0.581
44	2nd	FR1 n77	100M_BPSK_1_137	Back	5mm	Ant 7	ECI 4	633332	3499.98	16.99	18.2	1.321			-0.12	0.415	0.548

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+4(3)	Index 3	6	2437	17.62	18.00	1.091	100	1.000	0.11	0.675	0.736
		WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+4(4)	Index 3	6	2437	17.63	18.00	1.089	100	1.000	0.11	0.442	0.481
45	2nd	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+4(3)	Index 3	6	2437	17.62	18.00	1.091	100	1.000	-0.16	0.636	0.694
		WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 3+4(4)	Index 3	6	2437	17.63	18.00	1.089	100	1.000	-0.16	0.416	0.453
	1st	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(3)	Index 3	122	5610	15.55	16.00	1.109	97.75	1.023	-0.14	0.587	0.666
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(4)	Index 3	122	5610	15.43	16.00	1.140	97.75	1.023	-0.14	0.663	0.773
46	2nd	WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(3)	Index 3	122	5610	15.55	16.00	1.109	97.75	1.023	0.16	0.541	0.614
		WLAN5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 3+4(4)	Index 3	122	5610	15.43	16.00	1.140	97.75	1.023	0.16	0.640	0.746
	1st	Bluetooth	1Mbps	Back	5mm	Ant 4	Index 2	78	2480	19.54	21.00	1.400	76.93	1.083	-0.11	0.732	1.110
47	2nd	Bluetooth	1Mbps	Back	5mm	Ant 4	Index 2	78	2480	19.54	21.00	1.400	76.93	1.083	-0.13	0.731	1.108
	1st	Thread	250K	Back	5mm	Ant 3	Index 2	25	2475	20.60	21.00	1.096	89.81	1.113	-0.02	0.917	1.119
48	2nd	Thread	250K	Back	5mm	Ant 3	Index 2	25	2475	20.60	21.00	1.096	89.81	1.113	0.08	0.768	0.937



13.4 Product Specific SAR

Plot No	No.	Band	BW	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	FR1 n30	10M	BPSK	1	1	Bottom Edge	0mm	Ant 0	ECI 4	462000	2310	17.11	18.1	1.256	0.01	1.050	1.319
49	2nd	FR1 n30	10M	BPSK	1	1	Bottom Edge	0mm	Ant 0	ECI 4	462000	2310	17.11	18.1	1.256	-0.02	0.993	1.247
	1st	FR1 n41_HPUE	100M	BPSK	135	0	Top Edge	0mm	Ant 1	ECI 4	518598	2592.99	23.38	24	1.153	0.01	1.020	1.176
50	2nd	FR1 n41_HPUE	100M	BPSK	135	0	Top Edge	0mm	Ant 1	ECI 4	518598	2592.99	23.38	24	1.153	-0.04	0.632	0.729
	1st	NTN Band 23	3.75K	BPSK	1	46	Front	0mm	Ant 5	ECI 4	25501	2000.1	22.57	24.1	1.422	0.1	1.720	2.446
52	2nd	NTN Band 23	3.75K	BPSK	1	46	Front	0mm	Ant 5	ECI 4	25501	2000.1	22.57	24.1	1.422	0.05	1.690	2.403

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
	1st	WLAN5GHz	802.11ac-VHT160 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	163	5815	13.73	15.50	1.503	95.8	1.044	-0.11	0.574	0.901
		WLAN5GHz	802.11ac-VHT160 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	163	5815	14.28	15.50	1.324	95.8	1.044	-0.11	0.001	0.001
53	2nd	WLAN5GHz	802.11ac-VHT160 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	163	5815	13.73	15.50	1.503	95.8	1.044	0.19	0.461	0.723
		WLAN5GHz	802.11ac-VHT160 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	163	5815	14.28	15.50	1.324	95.8	1.044	0.19	0.001	0.001

Plot No.	No.	No.	Band	Mode	Test Position	Gap (mm)	Freq. (MHz)	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	1st	1st	NFC	ASK	Top Edge	0mm	13.56	0	0.008	0.008
54	2nd	2nd	NFC	ASK	Top Edge	0mm	13.56	-0.09	0.007	0.007

<Spot check compare result>
<ANT 0>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	GSM850	0.457	0.412	0.286	0.258	0.098	0.464	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	WCDMA II	0.847	0.824	0.529	0.515	0.027	0.250	Pass
Body-Worn Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n12	0.784	0.769	0.490	0.481	0.019	0.260	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n30	1.319	1.247	0.330	0.312	0.055	0.420	Pass

<ANT 1>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 71	0.960	0.953	0.600	0.596	0.007	0.250	Pass
PCE	FR1 n77	0.817	0.747	0.511	0.467	0.086	0.250	Pass
CBE*	LTE Band 48	0.974	0.597	0.609	0.466	0.234	0.250	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 66	0.837	0.836	0.523	0.523	0.001	0.250	Pass
PCE	FR1 n77	0.586	0.559	0.366	0.349	0.046	0.384	Pass
CBE	LTE Band 48	0.614	0.599	0.384	0.374	0.024	0.366	Pass
Body-Worn Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 66	0.983	0.982	0.614	0.614	0.001	0.250	Pass
PCE	FR1 n77	0.893	0.751	0.558	0.469	0.159	0.250	Pass
CBE	LTE Band 48	0.870	0.841	0.544	0.526	0.033	0.250	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n41	1.176	0.729	0.294	0.182	0.380	0.456	Pass

*Per KDB 484596 D01v03, the SAR relative difference between the variant and the parent model to 25% when the parent model SAR worst-case scenario is 0.8 W/kg or higher (that is, a TER margin $M \leq 0.5$)

<ANT 2>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 7	0.991	0.939	0.619	0.587	0.052	0.250	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n25	0.830	0.829	0.519	0.518	0.001	0.250	Pass
Body-Worn Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	WCDMA IV	0.841	0.839	0.526	0.524	0.002	0.250	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 7	3.248	3.248	0.812	0.812	0.000	0.250	Pass

<ANT 5>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 66	0.980	0.946	0.613	0.591	0.035	0.250	Pass
PCE	FR1 n77	0.932	0.820	0.583	0.513	0.120	0.250	Pass
CBE	LTE Band 48	0.991	0.880	0.619	0.550	0.112	0.250	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n25	0.840	0.806	0.525	0.504	0.040	0.250	Pass
PCE	FR1 n77	0.513	0.475	0.321	0.297	0.074	0.429	Pass
CBE	LTE Band 48	0.843	0.746	0.527	0.466	0.115	0.250	Pass
Body-Worn Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	LTE Band 25	0.956	0.898	0.598	0.561	0.061	0.250	Pass
PCE	FR1 n77	0.560	0.538	0.350	0.336	0.039	0.400	Pass
CBE	LTE Band 48	0.991	0.877	0.619	0.548	0.115	0.250	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
TNB	NTN Band 23	2.446	2.403	0.612	0.601	0.018	0.250	Pass

<ANT 6>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n77	0.838	0.821	0.524	0.513	0.020	0.250	Pass
CBE	LTE Band 48	0.351	0.343	0.219	0.214	0.023	0.500	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n77	0.827	0.780	0.517	0.488	0.057	0.250	Pass
CBE	LTE Band 48	0.799	0.745	0.499	0.466	0.068	0.251	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n77	0.690	0.598	0.431	0.374	0.133	0.319	Pass
CBE	LTE Band 48	0.612	0.429	0.383	0.268	0.299	0.368	Pass

<ANT 7>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n77	0.454	0.343	0.284	0.214	0.244	0.466	Pass
CBE	LTE Band 48	0.413	0.233	0.258	0.146	0.436	0.492	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n77	0.673	0.661	0.421	0.413	0.018	0.329	Pass
CBE	LTE Band 48	0.811	0.765	0.507	0.478	0.057	0.250	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
PCE	FR1 n77	0.581	0.548	0.363	0.343	0.057	0.387	Pass
CBE	LTE Band 48	0.541	0.538	0.338	0.336	0.006	0.412	Pass

<ANT 3+4>

Head Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
DTS	WLAN2.4GHz	0.768	0.610	0.480	0.381	0.206	0.270	Pass
	WLAN2.4GHz	0.452	0.540	0.283	0.338	0.195	0.468	Pass
NII	WLAN5GHz	0.733	0.678	0.458	0.424	0.075	0.292	Pass
	WLAN5GHz	0.733	0.678	0.458	0.424	0.075	0.292	Pass
DSS	Bluetooth	0.219	0.210	0.137	0.131	0.041	0.500	Pass
DTS	Thread	0.225	0.180	0.141	0.113	0.200	0.500	Pass
Hotspot Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
DTS	WLAN2.4GHz	0.202	0.161	0.126	0.101	0.203	0.500	Pass
NII	WLAN5GHz	0.176	0.145	0.110	0.091	0.176	0.500	Pass
	WLAN5GHz	0.249	0.184	0.156	0.115	0.261	0.500	Pass
DSS	Bluetooth	0.479	0.404	0.299	0.253	0.157	0.451	Pass
DTS	Thread	0.310	0.284	0.194	0.178	0.084	0.500	Pass
Body-Worn Exposure Condition								
Equipment Class	Band	Parent Model Reported 1g SAR (W/kg)	Variant Model Reported 1g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
DTS	WLAN2.4GHz	0.736	0.694	0.460	0.434	0.057	0.290	Pass
	WLAN2.4GHz	0.481	0.453	0.301	0.283	0.058	0.449	Pass
NII	WLAN5GHz	0.666	0.614	0.416	0.384	0.078	0.334	Pass
	WLAN5GHz	0.773	0.746	0.483	0.466	0.035	0.267	Pass
DSS	Bluetooth	1.110	1.108	0.694	0.693	0.002	0.250	Pass
DTS	Thread	1.119	0.937	0.699	0.586	0.163	0.250	Pass
Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
NII	WLAN5GHz	0.901	0.723	0.225	0.181	0.198	0.500	Pass

<NFC>

Product Specific Exposure Condition								
Equipment Class	Band	Parent Model Reported 10g SAR (W/kg)	Variant Model Reported 10g SAR (W/kg)	TER _R	TER _V	d _{TER}	d _{TERmax}	Pass Criterion
DXX	NFC	0.008	0.007	0.002	0.002	0.125	0.500	Pass

Conclusion:

Per KDB 484596 D01v03, The spot check SAR results compare with parent model worst case result, all the wireless tech. $d_{TER} \leq d_{TERmax}$. Referring to the guidance SAR data reuse is justified.

14. WiFi Output Power (Unit: dBm)

<WLAN Note>

1. 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.
2. 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.
3. 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).
4. 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.
5. 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.
6. 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)
7. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing
8. 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
9. 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

<WiFi 6E_Index 1_SP>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	16.50	Not Required	16.50	Not Required	19.50	Not Required
		57	6235		16.50		16.50		19.50	
		173	6815		15.50		15.50		18.50	
	802.11ax-HE20 MCS0	1	5955		16.50		16.50		19.50	
		57	6235		16.50		16.50		19.50	
		173	6815		15.50		15.50		18.50	
	802.11ax-HE40 MCS0	3	5965		16.50		16.50		19.50	
		59	6245		16.50		16.50		19.50	
		171	6805		15.50		15.50		18.50	
	802.11ax-HE80 MCS0	7	5985		16.50		16.50		19.50	
		71	6305		16.50		16.50		19.50	
		167	6785		15.50		15.50		18.50	
	802.11ax-HE160 MCS0	15	6025	16.17	16.50	16.50	16.50	19.35	19.50	95.24
		47	6185	15.12	16.50	16.27	16.50	18.74	19.50	
		143	6665	13.77	15.50	15.49	15.50	17.72	18.50	
	802.11be-EHT20 MCS0	1	5955	Not Required	16.50	Not Required	16.50	Not Required	19.50	Not Required
		57	6235		16.50		16.50		19.50	
		173	6815		15.50		15.50		18.50	
	802.11be-EHT40 MCS0	3	5965		16.50		16.50		19.50	
		59	6245		16.50		16.50		19.50	
		171	6805		15.50		15.50		18.50	
	802.11be-EHT80 MCS0	7	5985		16.50		16.50		19.50	
		71	6305		16.50		16.50		19.50	
		167	6785		15.50		15.50		18.50	
	802.11be-EHT160 MCS0	15	6025		16.50		16.50		19.50	
		47	6185		16.50		16.50		19.50	
		143	6665		15.50		15.50		18.50	

<WiFi 6E_Index 1_LPI>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	10.50	Not Required	10.50	Not Required	13.50	Not Required
		57	6235		10.50		10.50		13.50	
		113	6515		7.50		7.50		10.50	
		173	6815		8.00		8.00		11.00	
	802.11ax-HE20 MCS0	1	5955		11.00		11.00		14.00	
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11ax-HE40 MCS0	3	5965		13.50		13.50		16.50	
		59	6245		13.50		13.50		16.50	
		107	6485		13.00		13.00		16.00	
		171	6805		14.00		14.00		17.00	
		227	7085		15.50		15.50		18.50	
	802.11ax-HE80 MCS0	7	5985		16.50		16.50		19.50	
		71	6305		16.50		16.50		19.50	
		119	6545		15.50		15.50		18.50	
		167	6785		15.50		15.50		18.50	
		215	7025		17.00		17.00		20.00	
	802.11ax-HE160 MCS0	15	6025	16.17	16.50	16.50	16.50	19.35	19.50	95.24
		47	6185	15.12	16.50	16.27	16.50	18.74	19.50	
		111	6505	17.00	17.50	17.11	17.50	20.07	20.50	
		143	6665	13.77	15.50	15.49	15.50	17.72	18.50	
		207	6985	16.15	17.00	16.09	17.00	19.13	20.00	
	802.11be-EHT20 MCS0	1	5955	Not Required	11.00	Not Required	11.00	Not Required	14.00	Not Required
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11be-EHT40 MCS0	3	5965		13.50		13.50		16.50	
		59	6245		13.50		13.50		16.50	
		107	6485		13.00		13.00		16.00	
		171	6805		14.00		14.00		17.00	
		227	7085		15.50		15.50		18.50	
	802.11be-EHT80 MCS0	7	5985		16.50		16.50		19.50	
		71	6305		16.50		16.50		19.50	
		119	6545		15.50		15.50		18.50	
		167	6785		15.50		15.50		18.50	
		215	7025		17.00		17.00		20.00	
	802.11be-EHT160 MCS0	15	6025		16.50		16.50		19.50	
		47	6185		16.50		16.50		19.50	
		111	6505		17.50		17.50		20.50	
		143	6665		15.50		15.50		18.50	
		207	6985		17.00		17.00		20.00	

<WiFi 6E_Index 2_SP>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	11.50	Not Required	11.50	Not Required	14.50	Not Required
		57	6235		11.50		11.50		14.50	
		173	6815		12.50		12.50		15.50	
	802.11ax-HE20 MCS0	1	5955		11.50		11.50		14.50	
		57	6235		11.50		11.50		14.50	
		173	6815		12.50		12.50		15.50	
	802.11ax-HE40 MCS0	3	5965		11.50		11.50		14.50	
		59	6245		11.50		11.50		14.50	
		171	6805		12.50		12.50		15.50	
	802.11ax-HE80 MCS0	7	5985		11.50		11.50		14.50	
		71	6305		11.50		11.50		14.50	
		167	6785		12.50		12.50		15.50	
	802.11ax-HE160 MCS0	15	6025	10.39	11.50	11.44	11.50	13.96	14.50	95.24
		47	6185	10.20	11.50	11.50	11.50	13.91	14.50	
		143	6665	11.27	12.50	12.50	12.50	14.94	15.50	
	802.11be-EHT20 MCS0	1	5955	Not Required	11.50	Not Required	11.50	Not Required	14.50	Not Required
		57	6235		11.50		11.50		14.50	
		173	6815		12.50		12.50		15.50	
	802.11be-EHT40 MCS0	3	5965		11.50		11.50		14.50	
		59	6245		11.50		11.50		14.50	
		171	6805		12.50		12.50		15.50	
	802.11be-EHT80 MCS0	7	5985		11.50		11.50		14.50	
		71	6305		11.50		11.50		14.50	
		167	6785		12.50		12.50		15.50	
	802.11be-EHT160 MCS0	15	6025		11.50		11.50		14.50	
		47	6185		11.50		11.50		14.50	
		143	6665		12.50		12.50		15.50	

<WiFi 6E_Index 2_LPI>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	10.50	Not Required	10.50	Not Required	13.50	Not Required
		57	6235		10.50		10.50		13.50	
		113	6515		7.50		7.50		10.50	
		173	6815		8.00		8.00		11.00	
	802.11ax-HE20 MCS0	1	5955		11.00		11.00		14.00	
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11ax-HE40 MCS0	3	5965		11.50		11.50		14.50	
		59	6245		11.50		11.50		14.50	
		107	6485		12.50		12.50		15.50	
		171	6805		12.50		12.50		15.50	
		227	7085		12.50		12.50		15.50	
	802.11ax-HE80 MCS0	7	5985		11.50		11.50		14.50	
		71	6305		11.50		11.50		14.50	
		119	6545		12.50		12.50		15.50	
		167	6785		12.50		12.50		15.50	
		215	7025		12.50		12.50		15.50	
	802.11ax-HE160 MCS0	15	6025	10.39	11.50	11.44	11.50	13.96	14.50	95.24
		47	6185	10.20	11.50	11.50	11.50	13.91	14.50	
		111	6505	11.22	12.50	12.38	12.50	14.85	15.50	
		143	6665	11.27	12.50	12.50	12.50	14.94	15.50	
		207	6985	12.13	12.50	12.50	12.50	15.33	15.50	
	802.11be-EHT20 MCS0	1	5955	Not Required	11.00	Not Required	11.00	Not Required	14.00	Not Required
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11be-EHT40 MCS0	3	5965		11.50		11.50		14.50	
		59	6245		11.50		11.50		14.50	
		107	6485		12.50		12.50		15.50	
		171	6805		12.50		12.50		15.50	
		227	7085		12.50		12.50		15.50	
	802.11be-EHT80 MCS0	7	5985		11.50		11.50		14.50	
		71	6305		11.50		11.50		14.50	
		119	6545		12.50		12.50		15.50	
		167	6785		12.50		12.50		15.50	
		215	7025		12.50		12.50		15.50	
	802.11be-EHT160 MCS0	15	6025		11.50		11.50		14.50	
		47	6185		11.50		11.50		14.50	
		111	6505		12.50		12.50		15.50	
		143	6665		12.50		12.50		15.50	
		207	6985		12.50		12.50		15.50	

<WiFi 6E_Index 3_SP>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	15.50	Not Required	15.50	Not Required	18.50	Not Required
		57	6235		15.50		15.50		18.50	
		173	6815		13.50		13.50		16.50	
	802.11ax-HE20 MCS0	1	5955		15.50		15.50		18.50	
		57	6235		15.50		15.50		18.50	
		173	6815		13.50		13.50		16.50	
	802.11ax-HE40 MCS0	3	5965		15.50		15.50		18.50	
		59	6245		15.50		15.50		18.50	
		171	6805		13.50		13.50		16.50	
	802.11ax-HE80 MCS0	7	5985		15.50		15.50		18.50	
		71	6305		15.50		15.50		18.50	
		167	6785		13.50		13.50		16.50	
	802.11ax-HE160 MCS0	15	6025		13.98		15.18		17.63	95.24
		47	6185		13.56		15.12		17.42	
		143	6665		12.33		13.45		15.94	
	802.11be-EHT20 MCS0	1	5955		15.50		15.50		18.50	Not Required
		57	6235		15.50		15.50		18.50	
		173	6815		13.50		13.50		16.50	
	802.11be-EHT40 MCS0	3	5965		15.50		15.50		18.50	
		59	6245		15.50		15.50		18.50	
		171	6805		13.50		13.50		16.50	
	802.11be-EHT80 MCS0	7	5985		15.50		15.50		18.50	
		71	6305		15.50		15.50		18.50	
		167	6785		13.50		13.50		16.50	
	802.11be-EHT160 MCS0	15	6025		15.50		15.50		18.50	
		47	6185		15.50		15.50		18.50	
		143	6665		13.50		13.50		16.50	

<WiFi 6E_Index 3_LPI>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	10.50	Not Required	10.50	Not Required	13.50	Not Required
		57	6235		10.50		10.50		13.50	
		113	6515		7.50		7.50		10.50	
		173	6815		8.00		8.00		11.00	
	802.11ax-HE20 MCS0	1	5955		11.00		11.00		14.00	
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11ax-HE40 MCS0	3	5965		13.50		13.50		16.50	
		59	6245		13.50		13.50		16.50	
		107	6485		13.00		13.00		16.00	
		171	6805		13.50		13.50		16.50	
		227	7085		15.50		15.50		18.50	
	802.11ax-HE80 MCS0	7	5985		15.50		15.50		18.50	97.22
		71	6305		15.50		15.50		18.50	
		119	6545		14.50		14.50		17.50	
		167	6785		13.50		13.50		16.50	
		215	7025	17.50	17.50	17.46	17.50	20.49	20.50	
	802.11ax-HE160 MCS0	15	6025	13.98	15.50	15.18	15.50	17.63	18.50	95.24
		47	6185	13.56	15.50	15.12	15.50	17.42	18.50	
		111	6505	13.76	14.50	14.50	14.50	17.16	17.50	
		143	6665	12.33	13.50	13.45	13.50	15.94	16.50	
		207	6985	Not Required	17.00	Not Required	17.00	Not Required	20.00	
	802.11be-EHT20 MCS0	1	5955		11.00		11.00		14.00	Not Required
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11be-EHT40 MCS0	3	5965		13.50		13.50		16.50	
		59	6245		13.50		13.50		16.50	
		107	6485		13.00		13.00		16.00	
		171	6805		13.50		13.50		16.50	
		227	7085		15.50		15.50		18.50	
	802.11be-EHT80 MCS0	7	5985		15.50		15.50		18.50	
		71	6305		15.50		15.50		18.50	
		119	6545		14.50		14.50		17.50	
		167	6785		13.50		13.50		16.50	
		215	7025		17.50		17.50		20.50	
	802.11be-EHT160 MCS0	15	6025		15.50		15.50		18.50	
		47	6185		15.50		15.50		18.50	
		111	6505		14.50		14.50		17.50	
		143	6665		13.50		13.50		16.50	
		207	6985		17.00		17.00		20.00	

<WiFi 6E_Index 4_SP>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	11.00	Not Required	11.00	Not Required	14.00	Not Required
		57	6235		11.00		11.00		14.00	
		173	6815		10.00		10.00		13.00	
	802.11ax-HE20 MCS0	1	5955		11.00		11.00		14.00	
		57	6235		11.00		11.00		14.00	
		173	6815		10.00		10.00		13.00	
	802.11ax-HE40 MCS0	3	5965		11.00		11.00		14.00	
		59	6245		11.00		11.00		14.00	
		171	6805		10.00		10.00		13.00	
	802.11ax-HE80 MCS0	7	5985		11.00		11.00		14.00	
		71	6305		11.00		11.00		14.00	
		167	6785		10.00		10.00		13.00	
	802.11ax-HE160 MCS0	15	6025	9.02	11.00	10.60	11.00	12.89	14.00	95.24
		47	6185	9.01	11.00	10.73	11.00	12.96	14.00	
		143	6665	8.00	10.00	8.35	10.00	11.19	13.00	
	802.11be-EHT20 MCS0	1	5955	Not Required	11.00	Not Required	11.00	Not Required	14.00	Not Required
		57	6235		11.00		11.00		14.00	
		173	6815		10.00		10.00		13.00	
	802.11be-EHT40 MCS0	3	5965		11.00		11.00		14.00	
		59	6245		11.00		11.00		14.00	
		171	6805		10.00		10.00		13.00	
	802.11be-EHT80 MCS0	7	5985		11.00		11.00		14.00	
		71	6305		11.00		11.00		14.00	
		167	6785		10.00		10.00		13.00	
	802.11be-EHT160 MCS0	15	6025		11.00		11.00		14.00	
		47	6185		11.00		11.00		14.00	
		143	6665		10.00		10.00		13.00	

<WiFi 6E_Index 4_LPI>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	10.50	Not Required	10.50	Not Required	13.50	Not Required
		57	6235		10.50		10.50		13.50	
		113	6515		7.50		7.50		10.50	
		173	6815		8.00		8.00		11.00	
	802.11ax-HE20 MCS0	1	5955		11.00		11.00		14.00	
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11ax-HE40 MCS0	3	5965		11.00		11.00		14.00	
		59	6245		11.00		11.00		14.00	
		107	6485		11.50		11.50		14.50	
		171	6805		10.00		10.00		13.00	
		227	7085		12.50		12.50		15.50	
	802.11ax-HE80 MCS0	7	5985		11.00		11.00		14.00	
		71	6305		11.00		11.00		14.00	
		119	6545		11.50		11.50		14.50	
		167	6785		10.00		10.00		13.00	
		215	7025		12.50		12.50		15.50	
	802.11ax-HE160 MCS0	15	6025	9.02	11.00	10.60	11.00	12.89	14.00	95.24
		47	6185	9.01	11.00	10.73	11.00	12.96	14.00	
		111	6505	9.78	11.50	10.80	11.50	13.33	14.50	
		143	6665	8.00	10.00	8.35	10.00	11.19	13.00	
		207	6985	11.32	12.50	11.90	12.50	14.63	15.50	
	802.11be-EHT20 MCS0	1	5955	Not Required	11.00	Not Required	11.00	Not Required	14.00	Not Required
		57	6235		11.00		11.00		14.00	
		113	6515		10.50		10.50		13.50	
		173	6815		8.50		8.50		11.50	
	802.11be-EHT40 MCS0	3	5965		11.00		11.00		14.00	
		59	6245		11.00		11.00		14.00	
		107	6485		11.50		11.50		14.50	
		171	6805		10.00		10.00		13.00	
		227	7085		12.50		12.50		15.50	
	802.11be-EHT80 MCS0	7	5985		11.00		11.00		14.00	
		71	6305		11.00		11.00		14.00	
		119	6545		11.50		11.50		14.50	
		167	6785		10.00		10.00		13.00	
		215	7025		12.50		12.50		15.50	
	802.11be-EHT160 MCS0	15	6025		11.00		11.00		14.00	
		47	6185		11.00		11.00		14.00	
		111	6505		11.50		11.50		14.50	
		143	6665		10.00		10.00		13.00	
		207	6985		12.50		12.50		15.50	

<WiFi 6E_Index 4_VLP>										
	Mode	Channel	Frequency (MHz)	Ant 3+4 (3)		Ant 3+4 (4)		Ant 3+4		
				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	5.00	Not Required	5.00	Not Required	8.00	Not Required
		57	6235		5.00		5.00		8.00	
		113	6515		5.00		5.00		8.00	
		173	6815		5.50		5.50		8.50	
	802.11ax-HE20 MCS0	1	5955		6.00		6.00		9.00	
		57	6235		6.00		6.00		9.00	
		113	6515		5.00		5.00		8.00	
		173	6815		6.00		6.00		9.00	
	802.11ax-HE40 MCS0	3	5965		7.50		7.50		10.50	
		59	6245		7.50		7.50		10.50	
		107	6485		7.00		7.00		10.00	
		171	6805		8.50		8.50		11.50	
		227	7085		11.00		11.00		14.00	
	802.11ax-HE80 MCS0	7	5985		11.00		11.00		14.00	
		71	6305		11.00		11.00		14.00	
		119	6545		11.50		11.50		14.50	
		167	6785		10.00		10.00		13.00	
		215	7025		12.50		12.50		15.50	
	802.11ax-HE160 MCS0	15	6025	9.02	11.00	10.60	11.00	12.89	14.00	95.24
		47	6185	9.01	11.00	10.73	11.00	12.96	14.00	
		111	6505	9.78	11.50	10.80	11.50	13.33	14.50	
		143	6665	8.00	10.00	8.35	10.00	11.19	13.00	
		207	6985	11.32	12.50	11.90	12.50	14.63	15.50	
	802.11be-EHT20 MCS0	1	5955	Not Required	6.00	Not Required	6.00	Not Required	9.00	Not Required
		57	6235		6.00		6.00		9.00	
		113	6515		5.00		5.00		8.00	
		173	6815		6.00		6.00		9.00	
	802.11be-EHT40 MCS0	3	5965		7.50		7.50		10.50	
		59	6245		7.50		7.50		10.50	
		107	6485		7.00		7.00		10.00	
		171	6805		8.50		8.50		11.50	
		227	7085		11.00		11.00		14.00	
	802.11be-EHT80 MCS0	7	5985		11.00		11.00		14.00	
		71	6305		11.00		11.00		14.00	
		119	6545		11.50		11.50		14.50	
		167	6785		10.00		10.00		13.00	
		215	7025		12.50		12.50		15.50	
	802.11be-EHT160 MCS0	15	6025		11.00		11.00		14.00	
		47	6185		11.00		11.00		14.00	
		111	6505		11.50		11.50		14.50	
		143	6665		10.00		10.00		13.00	
		207	6985		12.50		12.50		15.50	

15. RF Exposure position consideration

Distance of the Antenna to the EUT surface/edge						
Antennas	Front	Back	Top Edge	Bottom Edge	Right Edge	Left Edge
WWAN Ant 0	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WWAN Ant 2	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 5	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WWAN Ant 6	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 7	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WLAN/BT Ant 3	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WLAN/BT Ant 4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WLAN Ant 3+4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
NFC	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm

Positions for SAR test						
Antennas	Front	Back	Top Edge	Bottom Edge	Right Edge	Left Edge
WWAN Ant 0	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 1	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 2	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 5	Yes	Yes	Yes	No	Yes	Yes
WWAN Ant 6	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 6	Yes	Yes	No	Yes	Yes	Yes
WLAN/BT Ant 3	Yes	Yes	Yes	No	Yes	Yes
WLAN/BT Ant 4	Yes	Yes	Yes	No	Yes	Yes
WLAN Ant 3+4	Yes	Yes	Yes	No	Yes	Yes
NFC	Yes	Yes	Yes	No	Yes	Yes

General Note:

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

16. SAR Test Results

General Note:

2. 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: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.

WLAN Note:

1. 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.
2. 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.
3. For determining the SAR scaling factor in MIMO mode, if the RF hot spots are spatially separated, the scaling factors are individually derived from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined based on the worst number observed among all transmit chains.
4. The designation "3+4(3)" represents to a 2TX operation in which antennas 3 and 4 are active, and the reported SAR or conducted power data corresponds specifically to antenna 3.
5. The designation "3+4(4)" represents to a 2TX operation in which antennas 3 and 4 are active, and the reported SAR or conducted power data corresponds specifically to antenna 4.
6. During SAR testing, the WLAN transmit signal was continuously monitored using a spectrum analyzer to ensure continuous and stable signal output throughout the measurement.

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 appendix D and part1 PD report.
6. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
7. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
8. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
9. The measurement procedure consists of measuring the PDinc at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPDn fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

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

**16.1 Head SAR**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 1	111	6505	17.00	17.50	1.122	95.24	1.050	-0.03	0.352	0.415	2.030	2.392
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 1	111	6505	17.11	17.50	1.094	95.24	1.050	0.08	0.127	0.146	0.969	1.113
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 3+4(3)	Index 1	111	6505	17.00	17.50	1.122	95.24	1.050	0.07	0.347	0.409	2.930	3.452
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 3+4(4)	Index 1	111	6505	17.11	17.50	1.094	95.24	1.050	-0.14	0.053	0.061	0.309	0.355
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 3+4(3)	Index 1	111	6505	17.00	17.50	1.122	95.24	1.050	0.06	0.227	0.267	1.510	1.779
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 3+4(4)	Index 1	111	6505	17.11	17.50	1.094	95.24	1.050	-0.14	0.240	0.276	1.710	1.964
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+4(3)	Index 1	111	6505	17.00	17.50	1.122	95.24	1.050	0.02	0.008	0.009	0.051	0.060
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+4(4)	Index 1	111	6505	17.11	17.50	1.094	95.24	1.050	-0.14	0.338	0.388	2.510	2.883
55	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 1	15	6025	16.17	16.50	1.079	95.24	1.050	0.03	0.660	0.748	4.020	4.554
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 1	15	6025	16.50	16.50	1.000	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 1	47	6185	15.12	16.50	1.374	95.24	1.050	0.04	0.520	0.750	3.140	4.530
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 1	47	6185	16.27	16.50	1.054	95.24	1.050	-0.07	0.175	0.194	1.320	1.461
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 1	143	6665	13.77	15.50	1.489	95.24	1.050	0.04	0.371	0.580	2.200	3.440
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 1	143	6665	15.49	15.50	1.002	95.24	1.050	-0.11	0.293	0.308	2.120	2.230
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 1	207	6985	16.15	17.00	1.216	95.24	1.050	0.08	0.190	0.243	1.220	1.558
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 1	207	6985	16.09	17.00	1.233	95.24	1.050	0.01	0.395	0.511	2.900	3.754
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 2	207	6985	12.13	12.50	1.089	95.24	1.050	0.01	0.072	0.082	0.446	0.510
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 2	207	6985	12.50	12.50	1.000	95.24	1.050	0.04	0.181	0.190	0.963	1.011
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 3+4(3)	Index 2	207	6985	12.13	12.50	1.089	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 3+4(4)	Index 2	207	6985	12.50	12.50	1.000	95.24	1.050	-0.03	0.173	0.182	1.090	1.145
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 3+4(3)	Index 2	207	6985	12.13	12.50	1.089	95.24	1.050	-0.05	0.022	0.025	0.129	0.148
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 3+4(4)	Index 2	207	6985	12.50	12.50	1.000	95.24	1.050	0.05	0.168	0.176	1.280	1.344
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+4(3)	Index 2	207	6985	12.13	12.50	1.089	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 3+4(4)	Index 2	207	6985	12.50	12.50	1.000	95.24	1.050	-0.09	0.179	0.188	1.330	1.397
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 2	15	6025	10.39	11.50	1.291	95.24	1.050	0.07	0.134	0.182	0.862	1.168
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 2	15	6025	11.44	11.50	1.014	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 2	47	6185	10.20	11.50	1.349	95.24	1.050	-0.14	0.066	0.093	0.257	0.364
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 2	47	6185	11.50	11.50	1.000	95.24	1.050	0	0.001	0.001	0.040	0.042
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 2	111	6505	11.22	12.50	1.343	95.24	1.050	0.03	0.130	0.183	0.704	0.993
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 2	111	6505	12.38	12.50	1.028	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(3)	Index 2	143	6665	11.27	12.50	1.327	95.24	1.050	0.01	0.139	0.194	0.792	1.104
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 3+4(4)	Index 2	143	6665	12.50	12.50	1.000	95.24	1.050	0	0.001	0.001	0.001	0.001

16.2 Hotspot SAR

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
56	WLAN6GHz	802.11ax-HE160 MCS0	Front	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	-0.08	0.017	0.023	0.112	0.154
	WLAN6GHz	802.11ax-HE160 MCS0	Front	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	-0.08	0.070	0.084	0.506	0.610
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	0.08	0.132	0.182	0.980	1.350
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	0.01	0.202	0.243	1.440	1.736
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	0.1	0.080	0.110	0.556	0.766
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Edge	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Edge	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	-0.18	0.031	0.037	0.249	0.300
	WLAN6GHz	802.11ax-HE160 MCS0	Top Edge	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	0.12	0.034	0.047	0.248	0.342
	WLAN6GHz	802.11ax-HE160 MCS0	Top Edge	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	0.1	0.116	0.140	0.751	0.905
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	15	6025	9.02	11.00	1.578	95.24	1.050	-0.08	0.091	0.151	0.593	0.983
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	15	6025	10.60	11.00	1.096	95.24	1.050	0.03	0.177	0.204	1.140	1.312
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	47	6185	9.01	11.00	1.581	95.24	1.050	-0.08	0.063	0.105	0.398	0.661
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	47	6185	10.73	11.00	1.064	95.24	1.050	0.01	0.158	0.177	0.977	1.092
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	111	6505	9.78	11.50	1.486	95.24	1.050	0.01	0.094	0.147	0.001	0.002
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	111	6505	10.80	11.50	1.175	95.24	1.050	0.02	0.176	0.217	0.685	0.845
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	143	6665	8.00	10.00	1.585	95.24	1.050	0.1	0.030	0.050	0.239	0.398
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	143	6665	8.35	10.00	1.462	95.24	1.050	-0.18	0.133	0.204	0.762	1.170

16.3 Body-Worn SAR

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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)
57	WLAN6GHz	802.11ax-HE80 MCS0	Front	5mm	Ant 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	0.06	0.154	0.158	1.140	1.173
	WLAN6GHz	802.11ax-HE80 MCS0	Front	5mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	-0.12	0.275	0.286	1.890	1.962
	WLAN6GHz	802.11ax-HE80 MCS0	Back	5mm	Ant 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	-0.14	0.459	0.472	3.940	4.054
	WLAN6GHz	802.11ax-HE80 MCS0	Back	5mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	0.07	0.691	0.717	4.960	5.150
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 3	15	6025	13.98	15.50	1.419	95.24	1.050	0.06	0.311	0.463	2.240	3.337
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 3	15	6025	15.18	15.50	1.076	95.24	1.050	0.1	0.640	0.723	4.000	4.519
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 3	47	6185	13.56	15.50	1.563	95.24	1.050	0.12	0.278	0.456	1.890	3.102
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 3	47	6185	15.12	15.50	1.091	95.24	1.050	0.08	0.662	0.758	4.150	4.754
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 3	111	6505	13.76	14.50	1.186	95.24	1.050	0.05	0.255	0.318	1.850	2.304
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 3	111	6505	14.50	14.50	1.000	95.24	1.050	-0.11	0.614	0.645	3.710	3.896
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 3	143	6665	12.33	13.50	1.309	95.24	1.050	0.08	0.125	0.172	0.990	1.361
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 3	143	6665	13.45	13.50	1.012	95.24	1.050	-0.03	0.697	0.741	4.040	4.293
	WLAN6GHz	802.11ax-HE160 MCS0	Front	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	-0.08	0.017	0.023	0.112	0.154
	WLAN6GHz	802.11ax-HE160 MCS0	Front	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	-0.08	0.070	0.084	0.506	0.610
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	207	6985	11.32	12.50	1.312	95.24	1.050	0.08	0.132	0.182	0.980	1.350
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	207	6985	11.90	12.50	1.148	95.24	1.050	0.01	0.202	0.243	1.440	1.736
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(3)	Index 4	15	6025	9.02	11.00	1.578	95.24	1.050	-0.08	0.091	0.151	0.593	0.983
	WLAN6GHz	802.11ax-HE160 MCS0	Back	5mm	Ant 3+4(4)	Index 4	15	6025	10.60	11.00	1.096	95.24	1.050	0.03	0.177	0.204	1.140	1.312

**16.4 Product Specific SAR**

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	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 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	0.07	0.126	0.130	2.870	2.953
	WLAN6GHz	802.11ax-HE80 MCS0	Front	0mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	0.05	0.353	0.367	8.060	8.368
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	0.05	0.158	0.163	3.500	3.602
	WLAN6GHz	802.11ax-HE80 MCS0	Back	0mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	0.07	0.256	0.266	5.820	6.043
	WLAN6GHz	802.11ax-HE80 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	-0.12	0.542	0.558	12.670	13.037
	WLAN6GHz	802.11ax-HE80 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE80 MCS0	Right Edge	0mm	Ant 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE80 MCS0	Right Edge	0mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	0.03	0.126	0.131	2.810	2.918
	WLAN6GHz	802.11ax-HE80 MCS0	Top Edge	0mm	Ant 3+4(3)	Index 3	215	7025	17.50	17.50	1.000	97.22	1.029	0.11	0.095	0.098	2.100	2.161
	WLAN6GHz	802.11ax-HE80 MCS0	Top Edge	0mm	Ant 3+4(4)	Index 3	215	7025	17.46	17.50	1.009	97.22	1.029	-0.05	0.523	0.543	13.500	14.017
58	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	15	6025	13.98	15.50	1.419	95.24	1.050	0.07	0.456	0.679	10.500	15.644
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	15	6025	15.18	15.50	1.076	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	47	6185	13.56	15.50	1.563	95.24	1.050	0.18	0.350	0.574	8.110	13.310
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	47	6185	15.12	15.50	1.091	95.24	1.050	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	111	6505	13.76	14.50	1.186	95.24	1.050	-0.17	0.310	0.386	7.220	8.991
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	111	6505	14.50	14.50	1.000	95.24	1.050	0.14	0.055	0.058	1.330	1.397
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(3)	Index 3	143	6665	12.33	13.50	1.309	95.24	1.050	0.17	0.160	0.220	3.770	5.182
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	0mm	Ant 3+4(4)	Index 3	143	6665	13.45	13.50	1.012	95.24	1.050	-0.05	0.020	0.021	0.503	0.534

16.5 6GHz PD Test Result

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Grid Step (λ)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+4(3)	15	6025	16.04	0.0625	2.51	-0.91687972	2.07	3.10
WLAN6GHz	802.11ax-HE160 MCS0	Front	10mm	Ant 3+4(4)	15	6025	16.76	0.25	3.1		1.09	1.12
WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+4(4)	207	6985	15.93	0.0625	1.51	-0.97484857	2.15	3.03
WLAN6GHz	802.11ax-HE160 MCS0	Front	8.59mm	Ant 3+4(4)	207	6985	15.93	0.25	1.89		1.1	1.11

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-HE160 MCS0	Front	2mm	Ant 3+4(3)	15	6025	16.17	16.50	1.079	95.24	1.050	0.0625	1.5535	0.18	2.49	4.38	3.58	6.30
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+4(3)	47	6185	15.12	16.50	1.374	95.24	1.050	0.0625	1.5535	-0.19	2.64	5.92	3.08	6.90
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+4(4)	111	6505	17.11	17.50	1.094	95.24	1.050	0.0625	1.5535	0.16	1.46	2.61	2.70	4.82
59	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+4(4)	143	6665	15.49	15.50	1.002	95.24	1.050	0.0625	1.5535	-0.13	2.57	4.20	4.39	7.18
	WLAN6GHz	802.11ax-HE160 MCS0	Front	2mm	Ant 3+4(4)	207	6985	16.09	17.00	1.233	95.24	1.050	0.0625	1.5535	0.11	1.78	3.58	3.39	6.82
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	2mm	Ant 3+4(3)	15	6025	13.98	15.50	1.419	95.24	1.050	0.0625	1.5535	-0.14	2.47	5.72	3.12	7.22
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	2mm	Ant 3+4(3)	47	6185	13.56	15.50	1.563	95.24	1.050	0.0625	1.5535	0.11	1.95	4.97	2.72	6.94
60	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	2mm	Ant 3+4(3)	111	6505	13.76	14.50	1.186	95.24	1.050	0.0625	1.5535	0	3.1	6.00	3.76	7.27
	WLAN6GHz	802.11ax-HE160 MCS0	Left Edge	2mm	Ant 3+4(3)	143	6665	12.33	13.50	1.309	95.24	1.050	0.0625	1.5535	0.03	1.21	2.58	1.49	3.18
	WLAN6GHz	802.11ax-HE80 MCS0	Left Edge	2mm	Ant 3+4(3)	215	7025	17.50	17.50	1.000	97.22	1.029	0.0625	1.5535	0.09	2.09	3.34	2.68	4.28

Test Engineer : White Huang, Willy Yu, Lev Lo and Charles Shen

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

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

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

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

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

(b) k is the coverage factor

Standard Uncertainty for Assumed Distribution

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

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

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

Applicable for SAR Measurements:

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

Applicable for Power Density Measurements:

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

18. References

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