

FCC SAR TEST REPORT

FCC ID : A4RG9FPL
Equipment : Phone
Model Name : G9FPL, G0B96
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Nov. 23, 2022 and testing was started from Dec. 05, 2022 and completed on Mar. 29, 2023. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

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



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA262403-04D	01	Initial issue of report	Mar. 31, 2023



1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for Google LLC, Phone, G9FPL, G0B96, are as follows.

Equipment Class		Highest SAR Summary				Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 10mm)	Hotspot (Separation 10mm)	Product Specific (Separation 0mm)		
		1g SAR (W/kg)		10g SAR (W/kg)			
Licensed	GSM850	1.19	0.60	0.84	2.96	1.57	3.65
	GSM1900	0.53	1.19	1.00	2.86		
	WCDMA II	0.81	1.13	0.98	2.77		
	WCDMA IV	0.71	1.18	0.98	2.98		
	WCDMA V	1.19	0.64	0.63	2.03		
	LTE Band 2	1.19	1.08	0.98	2.96		
	LTE Band 7	0.36	1.18	0.94	2.96		
	LTE Band 12 / 17	1.18	0.67	0.67	1.90		
	LTE Band 13	1.14	0.65	0.65	2.10		
	LTE Band 14	1.06	0.70	0.70	1.94		
	LTE Band 25	0.97	1.19	0.99	2.97		
	LTE Band 5 / 26	1.19	0.76	0.76	2.11		
	LTE Band 30	0.35	1.12	0.99	2.94		
	LTE Band 38	0.29	0.61	0.61			
	LTE Band 41	0.46	1.18	0.98	2.85		
	LTE Band 48	0.42	0.68	0.63	2.97		
	LTE Band 4 / 66	1.18	1.18	0.98	2.98		
	LTE Band 71	1.06	0.53	0.53	2.16		
	FR1 n2	1.16	1.01	0.92	2.95		
	FR1 n5	1.14	0.71	0.71	2.10		
	FR1 n7	0.19	1.17	0.92	2.95		
	FR1 n12	1.11	0.63	0.63	1.93		
	FR1 n14	1.11	0.68	0.68	2.11		
	FR1 n25	0.48	1.18	0.98	2.73		
	FR1 n30	0.33	1.18	0.98	2.76		
	FR1 n38	0.39	0.92	0.92			
	FR1 n41	1.13	1.15	1.00	2.93		
	FR1 n48	1.00	1.72	0.98	2.72		
FR1 n66	1.18	1.06	0.96	2.81			
FR1 n71	1.06	0.59	0.59	2.16			
FR1 n77	1.13	1.06	0.99	2.90			
DXX	13.56MHz				0.02		3.86
DTS	2.4GHz WLAN	1.18	0.72	0.72	2.27	1.59	3.81
NII	5GHz WLAN	1.19	0.71	0.75	2.93	1.59	3.86
6CD	6GHz WLAN	1.06	0.30		0.70	1.59	3.86
DSS	Bluetooth	0.30	0.65	0.65	1.34	1.56	3.86
Equipment Class	Frequency Band	Head Reported APD (mW/cm ²)	Body-Worn Reported APD (mW/cm ²)	Product Specific Reported APD (mW/cm ²)	Reported PD (mW/cm ²)		
6CD	6GHz WLAN	0.59	0.25	1.66	0.75		
Date of Testing:		2022/12/5 - 2023/3/29					

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093), Human Exposure to RF Radiation Limits (1.0 mW/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	
Equipment Name	Phone
Model Name	G9FPL, G0B96
FCC ID	A4RG9FPL
S / N	2B021FDHS0003N / 2B021FDHS0001R / 2B021FDHS00024 / 2B021FDHS0004V
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n258 : 24.25 GHz~24.45 GHz, 24.75GHz ~25.25GHz 5G NR n260 : 37 GHz~40 GHz 5G NR n261 : 27.5 GHz~28.35 GHz WLAN 2.4GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2G Band: 5150 MHz ~ 5250 MHz WLAN 5.3G Band: 5250 MHz ~ 5350 MHz WLAN 5.5G Band: 5470 MHz ~ 5725 MHz WLAN 5.8G Band: 5725 MHz ~ 5850 MHz WLAN 5.9G Band: 5850 MHz ~ 5895 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC: 13.56 MHz WPT Client: 110 kHz ~ 148.5 kHz UWB: 6489.6 MHz, 7987.2 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK WPT Client: ASK UWB: BPM-BPSK
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
Remark: 1. Dynamic antenna tuning mechanism is available at Ant. 0 and 2 and for its < 3GHz band, details are illustrated in the operational description 2. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications. 3. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) and the TAS feature will manage to ensure the power level not exceeding the associated power table. Details about the power management decision and sensor detection are provided in the operational description. 4. The UWB output power is -8.9dBm and it is less than 1mW and exempt from power density testing.	



2.2 Maximum Tune-up Limit

General Note:

- 1. In the report PC3 as power class3, PC2 as power class2.
2. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition.
3. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) by output power index and the TAS feature will manage to ensure the power level not exceeding the associated power table.
4. The following table shows maximum output power configurations for various exposure conditions (output power index) with tune-up tolerance accounted.
5. The index 1 is maximum power for the mobile exposure condition, the compliance is demonstrated in Sporton's test report FA262403-04A.
6. SAR compliance for the scenario, when device in next-to-ear voice call with hotspot enabled, is justified via head SAR test at Power Index 3/8.
7. The device additional support uplink MIMO on n41, n48 and n77, the TAS feature will control the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit, the uplink MIMO compliance is validated include in the TAS Part2 report No.: FA262403-04E.
8. When the Uplink MIMO is active that per chain power is equal than standalone power back off 3dB.
9. The 5G FR1 uplink MIMO only support CP-OFDM modulation. Since the CP-OFDM mode maximum power is lower than DFT-s-OFDM maximum power by 3GPP MPR requirement, uplink MIMO SAR testing was not necessary due to cover by DFT-s-OFDM SAR results.

Table with 2 columns: Transmit switching diversity configuration and Support transmit antenna and band. Rows include TX0 and TX 1 configurations with antenna and band details.



<Closed mode>

Band	Antenna	Duty cycle	Maximum Transmit Burst Average Power (dBm)					
			Maximum Power	Head	Head	Hotspot	Body-worn	Body-worn
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5
GSM850 GSM/GPRS 1TX	0	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
GSM850 GPRS 2TX	0	25.00%	32.5	32.5	32.5	32.5	32.5	32.5
GSM850 GPRS 3TX	0	37.50%	31.0	31.0	31.0	31.0	31.0	31.0
GSM850 GPRS 4TX	0	50.00%	30.0	30.0	30.0	30.0	30.0	30.0
GSM850 EDGE 1TX	0	12.50%	28.0	28.0	28.0	28.0	28.0	28.0
GSM850 EDGE 2TX	0	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	0	37.50%	27.0	27.0	27.0	27.0	27.0	27.0
GSM850 EDGE 4TX	0	50.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 GSM/GPRS 1TX	2	12.50%	31.0	31.0	31.0	28.5	31.0	30.7
GSM1900 GPRS 2TX	2	25.00%	29.5	29.5	29.5	25.5	29.5	29.2
GSM1900 GPRS 3TX	2	37.50%	28.5	28.5	28.5	23.5	28.5	28.2
GSM1900 GPRS 4TX	2	50.00%	27.5	27.5	27.5	22.5	27.5	27.2
GSM1900 EDGE 1TX	2	12.50%	26.0	26.0	26.0	26.0	26.0	26.0
GSM1900 EDGE 2TX	2	25.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 EDGE 3TX	2	37.50%	24.5	24.5	24.5	23.5	24.5	24.5
GSM1900 EDGE 4TX	2	50.00%	23.5	23.5	23.5	22.5	23.5	23.5
WCDMA B2	2	100.00%	25.2	25.2	25.2	18.6	22.6	21.8
WCDMA B4	2	100.00%	25.7	25.7	25.7	19.8	22.3	21.5
WCDMA B5	0	100.00%	25.0	25.0	25.0	25.0	25.0	25.0
LTE B7	2	100.00%	25.7	25.7	25.7	18.5	20.7	19.9
LTE B12/B17	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B13	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B14	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B25/B2	2	100.00%	25.7	25.7	25.7	18.9	23.0	22.2
LTE B26/B5	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B30	2	100.00%	23.7	23.7	23.7	18.1	21.3	20.5
LTE B38 PC3	2	63.30%	25.7	25.7	25.7	20.9	23.1	22.3
LTE B38 PC2	2	43.30%	27.4	27.4	27.4	22.5	24.7	23.9
LTE B41 PC3	2	63.30%	25.4	25.4	25.4	20.9	23.1	22.3
LTE B41 PC2	2	43.30%	27.4	27.4	27.4	22.5	24.7	23.9
LTE B48 PC3	6	63.30%	25.7	25.7	25.7	25.5	25.7	25.5
LTE B66/B4	2	100.00%	25.7	25.7	25.7	19.5	22.4	21.6
LTE B71	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n5	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n7	2	100.00%	25.7	25.7	25.7	18.4	20.6	19.8
FR1 n12	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n14	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n25/n2	2	100.00%	25.7	25.7	25.7	18.9	23.0	22.2
FR1 n30	2	100.00%	23.7	23.7	23.7	18.2	21.6	20.8
FR1 n38 PC3	2	100.00%	25.7	25.7	25.7	18.6	20.7	19.9
FR1 n41 PC3	2	100.00%	25.4	25.4	25.4	18.6	20.7	19.9
FR1 n41 PC2	2	50.00%	27.4	27.4	27.4	21.6	23.7	22.9
FR1 n66	2	100.00%	25.7	25.7	25.7	19.9	21.9	21.1
FR1 n71	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n77 PC3	6	100.00%	25.1	25.1	25.1	24.3	25.1	24.8
FR1 n77 PC2	6	50.00%	27.1	27.1	27.1	27.1	27.1	27.1
LTE B2	1	100.00%	25.7	16.5	15.7	20.2	21.5	20.7
LTE B66/B4	1	100.00%	25.7	20.7	19.9	24.9	25.7	25.7
FR1 n2	1	100.00%	25.7	18.3	17.5	22.2	23.3	22.5
FR1 n38 PC3	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
FR1 n41 PC3	1	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
FR1 n41 PC2	1	50.00%	27.2	27.2	27.2	27.2	27.2	27.2
FR1 n48 PC3	1	100.00%	25.3	25.3	25.3	25.3	25.3	25.3
FR1 n66	1	100.00%	25.7	23.2	22.4	25.1	25.7	25.7
FR1 n77	1	100.00%	25.3	25.3	25.3	25.3	25.3	25.3



Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Maximum Power	Head	Head	Hotspot	Body-worn-Extremity	Body-worn-Extremity
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 1	Index 2	Index 3	Index 4	Index 5
GSM850 GSM/GPRS 1TX	1	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
GSM850 GPRS 2TX	1	25.00%	32.5	32.5	32.5	32.5	32.5	32.5
GSM850 GPRS 3TX	1	37.50%	31.0	31.0	31.0	31.0	31.0	31.0
GSM850 GPRS 4TX	1	50.00%	30.0	30.0	30.0	30.0	30.0	30.0
GSM850 EDGE 1TX	1	12.50%	28.0	28.0	28.0	28.0	28.0	28.0
GSM850 EDGE 2TX	1	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	1	37.50%	27.0	27.0	27.0	27.0	27.0	27.0
GSM850 EDGE 4TX	1	50.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 GSM/GPRS 1TX	0	12.50%	31.0	31.0	31.0	31.0	31.0	31.0
GSM1900 GPRS 2TX	0	25.00%	29.5	29.5	29.5	29.5	29.5	29.5
GSM1900 GPRS 3TX	0	37.50%	28.5	28.5	28.5	28.5	28.5	28.5
GSM1900 GPRS 4TX	0	50.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM1900 EDGE 1TX	0	12.50%	26.0	26.0	26.0	26.0	26.0	26.0
GSM1900 EDGE 2TX	0	25.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 EDGE 3TX	0	37.50%	24.5	24.5	24.5	24.5	24.5	24.5
GSM1900 EDGE 4TX	0	50.00%	23.5	23.5	23.5	23.5	23.5	23.5
WCDMA B2	0	100.00%	25.2	25.2	25.2	25.2	25.2	25.2
WCDMA B4	0	100.00%	25.7	25.7	25.7	21.2	22.4	21.6
WCDMA B5	1	100.00%	25.0	25.0	25.0	25.0	25.0	25.0
LTE B7	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B12/B17	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B13	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B14	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B25/B2	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B26/B5	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B30	0	100.00%	23.7	23.7	23.7	23.7	23.7	23.7
LTE B38 PC3	0	63.30%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B38 PC2	0	43.30%	27.4	27.4	27.4	27.4	27.4	27.4
LTE B41 PC3	0	63.30%	25.4	25.4	25.4	25.4	25.4	25.4
LTE B41 PC2	0	43.30%	27.4	27.4	27.4	27.4	27.4	27.4
LTE B48 PC3	2	63.30%	25.2	25.2	25.2	25.2	25.2	25.2
LTE B66/B4	0	100.00%	25.7	25.7	25.7	21.9	22.7	21.9
LTE B71	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n5	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n7	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n12	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n14	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n25/n2	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n30	0	100.00%	23.7	23.7	23.7	23.5	23.7	23.5
FR1 n38 PC3	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n41 PC3	0	100.00%	25.4	25.4	25.4	25.4	25.4	25.4
FR1 n41 PC2	0	50.00%	27.4	27.4	27.4	27.4	27.4	27.4
FR1 n66	0	100.00%	25.7	25.7	25.7	23.1	24.2	23.4
FR1 n71	1	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n77 PC3	2	100.00%	25.1	25.1	25.1	24.3	25.1	25.0
FR1 n77 PC2	2	50.00%	27.7	27.7	27.7	27.3	27.7	27.7
LTE B2	5	100.00%	25.7	25.7	25.7	25.2	25.7	25.2
LTE B66/B4	5	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n2	5	100.00%	25.7	25.7	25.7	25.1	25.7	25.1
FR1 n38 PC3	5	100.00%	25.2	25.2	25.2	22.0	22.8	22.0
FR1 n41 PC3	5	100.00%	25.2	25.2	25.2	22.0	22.8	22.0
FR1 n41 PC2	5	50.00%	27.2	27.2	27.2	25.0	25.8	25.0
FR1 n48 PC3	5	100.00%	25.3	25.3	25.3	24.3	25.1	24.3
FR1 n66	5	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n77	5	100.00%	25.3	25.3	25.3	25.3	25.3	25.3



<Open mode>

Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Maximum Power	Head	Head	Hotspot	Body-worn-Extremity	Body-worn-Extremity
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous
				Index 1	Index 7	Index 8	Index 9	Index 10
GSM850 GSM/GPRS 1TX	0	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
GSM850 GPRS 2TX	0	25.00%	32.5	32.5	32.5	32.2	32.5	32.2
GSM850 GPRS 3TX	0	37.50%	31.0	31.0	31.0	30.2	31.0	30.2
GSM850 GPRS 4TX	0	50.00%	30.0	30.0	30.0	29.2	30.0	29.2
GSM850 EDGE 1TX	0	12.50%	28.0	28.0	28.0	28.0	28.0	28.0
GSM850 EDGE 2TX	0	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	0	37.50%	27.0	27.0	27.0	27.0	27.0	27.0
GSM850 EDGE 4TX	0	50.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 GSM/GPRS 1TX	2	12.50%	31.0	31.0	31.0	28.9	31.0	30.3
GSM1900 GPRS 2TX	2	25.00%	29.5	29.5	29.5	25.9	28.1	27.3
GSM1900 GPRS 3TX	2	37.50%	28.5	28.5	28.5	23.9	26.1	25.3
GSM1900 GPRS 4TX	2	50.00%	27.5	27.5	27.5	22.9	25.1	24.3
GSM1900 EDGE 1TX	2	12.50%	26.0	26.0	26.0	26.0	26.0	26.0
GSM1900 EDGE 2TX	2	25.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 EDGE 3TX	2	37.50%	24.5	24.5	24.5	23.9	24.5	24.5
GSM1900 EDGE 4TX	2	50.00%	23.5	23.5	23.5	22.9	23.5	23.5
WCDMA B2	2	100.00%	25.2	25.2	25.2	19.6	21.8	21.0
WCDMA B4	2	100.00%	25.7	25.7	25.7	19.6	20.6	19.8
WCDMA B5	0	100.00%	25.0	25.0	25.0	25.0	25.0	25.0
LTE B7	2	100.00%	25.7	25.7	25.7	18.6	20.3	19.5
LTE B12/B17	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B13	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B14	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B25/B2	2	100.00%	25.7	25.7	25.7	19.5	21.7	20.9
LTE B26/B5	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
LTE B30	2	100.00%	23.7	23.7	23.7	19.0	21.5	20.7
LTE B38 PC3	2	63.30%	25.7	25.7	25.7	20.3	22.0	21.2
LTE B38 PC2	2	43.30%	27.4	27.4	27.4	21.9	23.6	22.8
LTE B41 PC3	2	63.30%	25.4	25.4	25.4	20.3	22.0	21.2
LTE B41 PC2	2	43.30%	27.4	27.4	27.4	21.9	23.6	22.8
LTE B48 PC3	6	63.30%	25.7	25.7	25.7	22.2	23.0	22.2
LTE B66/B4	2	100.00%	25.7	25.7	25.7	19.8	20.6	19.8
LTE B71	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n5	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n7	2	100.00%	25.7	25.7	25.7	19.0	21.5	20.7
FR1 n12	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n14	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n25/n2	2	100.00%	25.7	25.7	25.7	19.7	22.0	21.2
FR1 n30	2	100.00%	23.7	23.7	23.7	18.7	21.6	20.8
FR1 n38 PC3	2	100.00%	25.7	25.7	25.7	19.0	19.8	19.0
FR1 n41 PC3	2	100.00%	25.4	25.4	25.4	19.0	19.8	19.0
FR1 n41 PC2	2	50.00%	27.4	27.4	27.4	22.0	22.8	22.0
FR1 n66	2	100.00%	25.7	25.7	25.7	20.0	20.8	20.0
FR1 n71	0	100.00%	25.7	25.7	25.7	25.7	25.7	25.7
FR1 n77 PC3	6	100.00%	25.1	25.1	25.1	19.9	20.7	19.9
FR1 n77 PC2	6	50.00%	27.1	27.1	27.1	22.9	23.7	22.9
LTE B2	1	100.00%	25.7	14.9	14.1	19.3	20.1	19.3
LTE B66/B4	1	100.00%	25.7	18.5	17.7	22.4	23.2	22.4
FR1 n2	1	100.00%	25.7	18.9	18.1	23.0	23.8	23.0
FR1 n38 PC3	1	100.00%	25.2	17.7	16.9	22.1	22.9	22.1
FR1 n41 PC3	1	100.00%	25.2	17.7	16.9	22.1	22.9	22.1
FR1 n41 PC2	1	50.00%	27.2	20.7	19.9	25.1	25.9	25.1
FR1 n48 PC3	1	100.00%	25.3	21.6	20.8	25.2	25.3	25.2
FR1 n66	1	100.00%	25.7	20.4	19.6	24.1	24.9	24.1
FR1 n77	1	100.00%	25.3	20.7	19.9	24.6	25.3	24.6



Maximum Transmit Burst Average Power (dBm)								
Band	Antenna	Duty cycle	Maximum Power	Head		Hotspot	Body-worn-Extremity	
				Standalone	Simultaneous		Standalone	Simultaneous
				Index 1	Index 7	Index 8	Index 9	Index 10
GSM850 GSM/GPRS 1TX	1	12.50%	33.5	33.5	33.5	33.5	33.5	33.5
GSM850 GPRS 2TX	1	25.00%	32.5	31.3	30.5	32.5	32.5	32.5
GSM850 GPRS 3TX	1	37.50%	31.0	29.3	28.5	31.0	31.0	31.0
GSM850 GPRS 4TX	1	50.00%	30.0	28.3	27.5	30.0	30.0	30.0
GSM850 EDGE 1TX	1	12.50%	28.0	28.0	28.0	28.0	28.0	28.0
GSM850 EDGE 2TX	1	25.00%	27.5	27.5	27.5	27.5	27.5	27.5
GSM850 EDGE 3TX	1	37.50%	27.0	27.0	27.0	27.0	27.0	27.0
GSM850 EDGE 4TX	1	50.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 GSM/GPRS 1TX	0	12.50%	31.0	31.0	31.0	31.0	31.0	31.0
GSM1900 GPRS 2TX	0	25.00%	29.5	29.5	29.5	29.5	29.5	29.5
GSM1900 GPRS 3TX	0	37.50%	28.5	28.5	28.5	27.5	28.3	27.5
GSM1900 GPRS 4TX	0	50.00%	27.5	27.5	27.5	26.5	27.3	26.5
GSM1900 EDGE 1TX	0	12.50%	26.0	26.0	26.0	26.0	26.0	26.0
GSM1900 EDGE 2TX	0	25.00%	25.0	25.0	25.0	25.0	25.0	25.0
GSM1900 EDGE 3TX	0	37.50%	24.5	24.5	24.5	24.5	24.5	24.5
GSM1900 EDGE 4TX	0	50.00%	23.5	23.5	23.5	23.5	23.5	23.5
WCDMA B2	0	100.00%	25.2	25.2	25.2	21.9	22.7	21.9
WCDMA B4	0	100.00%	25.7	25.7	25.7	21.1	21.9	21.1
WCDMA B5	1	100.00%	25.0	23.0	22.2	25.0	25.0	25.0
LTE B7	0	100.00%	25.7	25.7	25.7	24.1	24.9	24.1
LTE B12/B17	1	100.00%	25.7	25.5	24.7	25.7	25.7	25.7
LTE B13	1	100.00%	25.7	23.8	23.0	25.7	25.7	25.7
LTE B14	1	100.00%	25.7	24.3	23.5	25.7	25.7	25.7
LTE B25/B2	0	100.00%	25.7	25.7	25.7	24.1	24.9	24.1
LTE B26/B5	1	100.00%	25.7	23.5	22.7	25.7	25.7	25.7
LTE B30	0	100.00%	23.7	23.7	23.7	22.6	23.4	22.6
LTE B38 PC3	0	63.30%	25.7	25.7	25.7	24.5	25.3	24.5
LTE B38 PC2	0	43.30%	27.4	27.4	27.4	26.1	26.9	26.1
LTE B41 PC3	0	63.30%	25.4	25.4	25.4	24.5	25.3	24.5
LTE B41 PC2	0	43.30%	27.4	27.4	27.4	26.1	26.9	26.1
LTE B48 PC3	2	63.30%	25.2	25.2	25.2	22.1	22.9	22.1
LTE B66/B4	0	100.00%	25.7	25.7	25.7	21.6	22.4	21.6
LTE B71	1	100.00%	25.7	25.7	25.4	25.7	25.7	25.7
FR1 n5	1	100.00%	25.7	23.1	22.3	25.7	25.7	25.7
FR1 n7	0	100.00%	25.7	25.7	25.7	24.2	25.0	24.2
FR1 n12	1	100.00%	25.7	24.9	24.1	25.7	25.7	25.7
FR1 n14	1	100.00%	25.7	23.9	23.1	25.7	25.7	25.7
FR1 n25/n2	0	100.00%	25.7	25.7	25.7	23.7	24.5	23.7
FR1 n30	0	100.00%	23.7	23.7	23.7	22.4	23.2	22.4
FR1 n38 PC3	0	100.00%	25.7	25.7	25.7	23.5	24.3	23.5
FR1 n41 PC3	0	100.00%	25.4	25.4	25.4	23.5	24.3	23.5
FR1 n41 PC2	0	50.00%	27.4	27.4	27.4	26.5	27.3	26.5
FR1 n66	0	100.00%	25.7	25.7	25.7	21.3	22.1	21.3
FR1 n71	1	100.00%	25.7	25.6	24.8	25.7	25.7	25.7
FR1 n77 PC3	2	100.00%	25.1	25.1	25.1	21.3	22.1	21.3
FR1 n77 PC2	2	50.00%	27.7	27.7	27.7	24.3	25.1	24.3
LTE B2	5	100.00%	25.7	25.7	25.7	23.1	23.9	23.1
LTE B66/B4	5	100.00%	25.7	25.7	25.7	21.2	22.0	21.2
FR1 n2	5	100.00%	25.7	25.7	25.7	23.8	24.6	23.8
FR1 n38 PC3	5	100.00%	25.2	25.2	25.2	20.8	21.6	20.8
FR1 n41 PC3	5	100.00%	25.2	25.2	25.2	20.8	21.6	20.8
FR1 n41 PC2	5	50.00%	27.2	27.2	27.2	23.8	24.6	23.8
FR1 n48 PC3	5	100.00%	25.3	25.3	25.3	25.3	25.3	25.3
FR1 n66	5	100.00%	25.7	25.7	25.7	22.4	23.2	22.4
FR1 n77	5	100.00%	25.3	25.3	25.3	23.6	24.4	23.6

<WLAN Maximum Power>

General Note:

1. The device implements the power management for WLAN SAR compliance for different exposure conditions and user cases. In each exposure condition, the power index selection is determined by the user cases as tested in Section 15 of this report. Full details about the proprietary power management decision are illustrated in the operational description.
2. 3+4(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3.
3. 3+4(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4.

<Maximum Power – Power index 0>

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		23.00	23.00
		6	2437		23.00	23.00
		11	2462		23.00	23.00
		12	2467		23.00	23.00
		13	2472		19.00	19.00

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		23.00	23.00
		6	2437		23.00	23.00
		11	2462		23.00	23.00
		12	2467		23.00	23.00
		13	2472		20.00	20.00

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412		21.50	21.50	24.50	21.50	21.50	24.50
		6	2437		23.00	23.00	26.00	23.00	23.00	26.00
		11	2462		20.50	20.50	23.50	20.50	20.50	23.50
		12	2467		16.00	16.00	19.00	16.00	16.00	19.00
		13	2472		13.00	13.00	16.00	13.00	13.00	16.00
	802.11n-HT20 MCS0	1	2412		20.50	20.50	23.50	20.50	20.50	23.50
		6	2437		23.00	23.00	26.00	23.00	23.00	26.00
		11	2462		19.00	19.00	22.00	19.00	19.00	22.00
		12	2467		16.50	16.50	19.50	16.50	16.50	19.50
	802.11ac-VHT20 MCS0	1	2412		20.50	20.50	23.50	20.50	20.50	23.50
		6	2437		23.00	23.00	26.00	23.00	23.00	26.00
		11	2462		19.00	19.00	22.00	19.00	19.00	22.00
		12	2467		16.50	16.50	19.50	16.50	16.50	19.50
	802.11ax-HE20 MCS0	1	2412		20.50	20.50	23.50	20.50	20.50	23.50
		6	2437		23.00	23.00	26.00	23.00	23.00	26.00
		11	2462		19.00	19.00	22.00	19.00	19.00	22.00
		12	2467		16.50	16.50	19.50	16.50	16.50	19.50

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	17.00	17.00	20.00	17.00	17.00	20.00	
	40	5200	18.00	18.00	21.00	18.00	18.00	21.00	
	44	5220	19.50	19.50	22.50	19.50	19.50	22.50	
	48	5240	18.00	18.00	21.00	18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50	18.50	18.50	21.50	
	40	5200	19.00	19.00	22.00	19.00	19.00	22.00	
	44	5220	20.00	20.00	23.00	20.00	20.00	23.00	
802.11n-HT40 MCS0	48	5240	19.00	19.00	22.00	19.00	19.00	22.00	
	38	5190	16.00	16.00	19.00	16.00	16.00	19.00	
	46	5230	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50	18.50	18.50	21.50	
	40	5200	19.00	19.00	22.00	19.00	19.00	22.00	
	44	5220	20.00	20.00	23.00	20.00	20.00	23.00	
	48	5240	19.00	19.00	22.00	19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.00	16.00	16.00	19.00	
	46	5230	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00	16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50	18.50	18.50	21.50	
	40	5200	19.00	19.00	22.00	19.00	19.00	22.00	
	44	5220	20.00	20.00	23.00	20.00	20.00	23.00	
	48	5240	19.00	19.00	22.00	19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190	16.50	16.50	19.50	16.50	16.50	19.50	
	46	5230	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00	16.00	16.00	19.00	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	18.00	18.00	21.00	18.00	18.00	21.00
		56	5280	19.00	19.00	22.00	19.00	19.00	22.00
		60	5300	19.50	19.50	22.50	19.50	19.50	22.50
		64	5320	19.00	19.00	22.00	19.00	19.00	22.00
	802.11n-HT20 MCS0	52	5260	19.00	19.00	22.00	19.00	19.00	22.00
		56	5280	19.00	19.00	22.00	19.00	19.00	22.00
		60	5300	20.00	20.00	23.00	20.00	20.00	23.00
	802.11n-HT40 MCS0	64	5320	19.00	19.00	22.00	19.00	19.00	22.00
		54	5270	20.00	20.00	23.00	20.00	20.00	23.00
	802.11ac-VHT20 MCS0	62	5310	17.00	17.00	20.00	17.00	17.00	20.00
		52	5260	19.00	19.00	22.00	19.00	19.00	22.00
	802.11ac-VHT40 MCS0	56	5280	19.00	19.00	22.00	19.00	19.00	22.00
		60	5300	20.00	20.00	23.00	20.00	20.00	23.00
		64	5320	19.00	19.00	22.00	19.00	19.00	22.00
	802.11ac-VHT80 MCS0	54	5270	20.00	20.00	23.00	20.00	20.00	23.00
		62	5310	17.00	17.00	20.00	17.00	17.00	20.00
	802.11ac-VHT160 MCS0	58	5290	16.50	16.50	19.50	16.50	16.50	19.50
	802.11ax-HE20 MCS0	50	5250	13.50	13.50	16.50	13.50	13.50	16.50
	802.11ax-HE40 MCS0	52	5260	19.00	19.00	22.00	19.00	19.00	22.00
		56	5280	19.00	19.00	22.00	19.00	19.00	22.00
60		5300	20.00	20.00	23.00	20.00	20.00	23.00	
64		5320	19.00	19.00	22.00	19.00	19.00	22.00	
802.11ax-HE80 MCS0	54	5270	20.00	20.00	23.00	20.00	20.00	23.00	
	62	5310	17.00	17.00	20.00	17.00	17.00	20.00	
802.11ax-HE160 MCS0	58	5290	16.50	16.50	19.50	16.50	16.50	19.50	
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50	13.50	13.50	16.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.00	16.00	16.00	19.00
		116	5580	16.00	16.00	19.00	16.00	16.00	19.00
		124	5620	15.00	15.00	18.00	15.00	15.00	18.00
		132	5660	16.00	16.00	19.00	16.00	16.00	19.00
		144	5720	15.50	15.50	18.50	15.50	15.50	18.50
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.00	16.00	16.00	19.00
		116	5580	16.50	16.50	19.50	16.50	16.50	19.50
		124	5620	16.00	16.00	19.00	16.00	16.00	19.00
		132	5660	16.50	16.50	19.50	16.50	16.50	19.50
		144	5720	16.00	16.00	19.00	16.00	16.00	19.00
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00	17.00	17.00	20.00
		110	5550	16.50	16.50	19.50	16.50	16.50	19.50
		126	5630	17.00	17.00	20.00	17.00	17.00	20.00
		134	5670	19.50	19.50	22.50	19.50	19.50	22.50
		142	5710	17.50	17.50	20.50	17.50	17.50	20.50
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.00	16.00	16.00	19.00
		116	5580	16.50	16.50	19.50	16.50	16.50	19.50
		124	5620	16.00	16.00	19.00	16.00	16.00	19.00
		132	5660	16.50	16.50	19.50	16.50	16.50	19.50
		144	5720	16.00	16.00	19.00	16.00	16.00	19.00
802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00	17.00	17.00	20.00	
	110	5550	16.50	16.50	19.50	16.50	16.50	19.50	
	126	5630	17.00	17.00	20.00	17.00	17.00	20.00	
	134	5670	19.50	19.50	22.50	19.50	19.50	22.50	
	142	5710	17.50	17.50	20.50	17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530	17.00	17.00	20.00	17.00	17.00	20.00	
	122	5610	19.00	19.00	22.00	19.00	19.00	22.00	
	138	5690	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570	14.50	14.50	17.50	14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.00	16.00	16.00	19.00	
	116	5580	16.50	16.50	19.50	16.50	16.50	19.50	
	124	5620	16.00	16.00	19.00	16.00	16.00	19.00	
	132	5660	16.50	16.50	19.50	16.50	16.50	19.50	
	144	5720	16.00	16.00	19.00	16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.00	17.00	17.00	20.00	
	110	5550	16.50	16.50	19.50	16.50	16.50	19.50	
	126	5630	17.00	17.00	20.00	17.00	17.00	20.00	
	134	5670	19.50	19.50	22.50	19.50	19.50	22.50	
	142	5710	17.50	17.50	20.50	17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530	17.00	17.00	20.00	17.00	17.00	20.00	
	122	5610	19.00	19.00	22.00	19.00	19.00	22.00	
	138	5690	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570	14.50	14.50	17.50	14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.00	16.00	19.00	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00	16.00	16.00	19.00
		165	5825	17.50	17.50	20.50	17.50	17.50	20.50
	802.11n-HT20 MCS0	149	5745	16.00	16.00	19.00	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00	16.00	16.00	19.00
		165	5825	17.50	17.50	20.50	17.50	17.50	20.50
	802.11n-HT40 MCS0	151	5755	18.50	18.50	21.50	18.50	18.50	21.50
		159	5795	18.50	18.50	21.50	18.50	18.50	21.50
	802.11ac-VHT20 MCS0	149	5745	16.00	16.00	19.00	16.00	16.00	19.00
		157	5785	16.00	16.00	19.00	16.00	16.00	19.00
		165	5825	17.50	17.50	20.50	17.50	17.50	20.50
	802.11ac-VHT40 MCS0	151	5755	18.50	18.50	21.50	18.50	18.50	21.50
159		5795	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ac-VHT80 MCS0	155	5775	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ax-HE20 MCS0	149	5745	16.00	16.00	19.00	16.00	16.00	19.00	
	157	5785	16.00	16.00	19.00	16.00	16.00	19.00	
	165	5825	17.50	17.50	20.50	17.50	17.50	20.50	
802.11ax-HE40 MCS0	151	5755	18.50	18.50	21.50	18.50	18.50	21.50	
	159	5795	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.00	20.00	20.00	23.00	

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	169	5845	17.00	17.00	20.00	17.00	17.00	20.00	
	173	5865	17.00	17.00	20.00	17.00	17.00	20.00	
	177	5885	16.00	16.00	19.00	16.00	16.00	19.00	
802.11n-HT20 MCS0	169	5845	17.00	17.00	20.00	17.00	17.00	20.00	
	173	5865	17.00	17.00	20.00	17.00	17.00	20.00	
	177	5885	17.50	17.50	20.50	17.50	17.50	20.50	
802.11n-HT40 MCS0	167	5835	18.50	18.50	21.50	18.50	18.50	21.50	
	175	5875	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ac-VHT20 MCS0	169	5845	17.00	17.00	20.00	17.00	17.00	20.00	
	173	5865	17.00	17.00	20.00	17.00	17.00	20.00	
	177	5885	17.50	17.50	20.50	17.50	17.50	20.50	
802.11ac-VHT40 MCS0	167	5835	18.50	18.50	21.50	18.50	18.50	21.50	
	175	5875	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ac-VHT80 MCS0	171	5855	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ac-VHT160 MCS0	163	5815	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ax-HE20 MCS0	169	5845	17.00	17.00	20.00	17.00	17.00	20.00	
	173	5865	17.00	17.00	20.00	17.00	17.00	20.00	
	177	5885	17.50	17.50	20.50	17.50	17.50	20.50	
802.11ax-HE40 MCS0	167	5835	18.50	18.50	21.50	18.50	18.50	21.50	
	175	5875	18.50	18.50	21.50	18.50	18.50	21.50	
802.11ax-HE80 MCS0	171	5855	20.00	20.00	23.00	20.00	20.00	23.00	
802.11ax-HE160 MCS0	163	5815	20.00	20.00	23.00	20.00	20.00	23.00	



<Power index 1> Non-RSDB

<2.4Hz WLAN>

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

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
	802.11g 6Mbps	1	2412					18.50	21.00	22.90
		6	2437					18.50	21.00	22.90
		11	2462					18.50	20.50	22.60
		12	2467					16.00	16.00	19.00
		13	2472					13.00	13.00	16.00
	802.11n-HT20 MCS0	1	2412					18.50	20.50	22.60
		6	2437					18.50	21.00	22.90
		11	2462					18.50	19.00	22.00
		12	2467					16.50	16.50	19.50
		13	2472					14.50	14.50	17.50
	802.11ac-VHT20 MCS0	1	2412					18.50	20.50	22.60
		6	2437					18.50	21.00	22.90
		11	2462					18.50	19.00	22.00
		12	2467					16.50	16.50	19.50
		13	2472					14.50	14.50	17.50
	802.11ax-HE20 MCS0	1	2412					18.50	20.50	22.60
		6	2437					18.50	21.00	22.90
		11	2462					18.50	19.00	22.00
		12	2467					16.50	16.50	19.50
		13	2472					14.50	14.50	17.50

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4			Ant 3+4			
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180				15.00	17.00	19.10
		40	5200				15.00	18.00	19.80
		44	5220				15.00	19.50	20.80
		48	5240				15.00	18.00	19.80
	802.11n-HT20 MCS0	36	5180				15.00	18.50	20.10
		40	5200				15.00	19.00	20.50
		44	5220				15.00	20.00	21.20
	802.11n-HT40 MCS0	38	5190				15.00	16.00	18.50
		46	5230				15.00	20.00	21.20
	802.11ac-VHT20 MCS0	36	5180				15.00	18.50	20.10
		40	5200				15.00	19.00	20.50
		44	5220				15.00	20.00	21.20
48		5240				15.00	19.00	20.50	
802.11ac-VHT40 MCS0	38	5190				15.00	16.00	18.50	
	46	5230				15.00	20.00	21.20	
802.11ac-VHT80 MCS0	42	5210				15.00	16.00	18.50	
802.11ax-HE20 MCS0	36	5180				15.00	18.50	20.10	
	40	5200				15.00	19.00	20.50	
	44	5220				15.00	20.00	21.20	
	48	5240				15.00	19.00	20.50	
802.11ax-HE40 MCS0	38	5190				15.00	16.50	18.80	
	46	5230				15.00	20.00	21.20	
802.11ax-HE80 MCS0	42	5210				15.00	16.00	18.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260				15.00	18.00	19.80
		56	5280				15.00	19.00	20.50
		60	5300				15.00	19.50	20.80
		64	5320				15.00	19.00	20.50
	802.11n-HT20 MCS0	52	5260				15.00	19.00	20.50
		56	5280				15.00	19.00	20.50
		60	5300				15.00	20.00	21.20
	802.11n-HT40 MCS0	54	5270				15.00	20.00	21.20
		62	5310				15.00	17.00	19.10
	802.11ac-VHT20 MCS0	52	5260				15.00	19.00	20.50
		56	5280				15.00	19.00	20.50
		60	5300				15.00	20.00	21.20
	802.11ac-VHT40 MCS0	54	5270				15.00	20.00	21.20
		62	5310				15.00	17.00	19.10
	802.11ac-VHT80 MCS0	58	5290				15.00	16.50	18.80
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50
802.11ax-HE20 MCS0	52	5260				15.00	19.00	20.50	
	56	5280				15.00	19.00	20.50	
	60	5300				15.00	20.00	21.20	
	64	5320				15.00	19.00	20.50	
802.11ax-HE40 MCS0	54	5270				15.00	20.00	21.20	
	62	5310				15.00	17.00	19.10	
802.11ax-HE80 MCS0	58	5290				15.00	16.50	18.80	
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.00	19.00	
	124	5620				15.00	15.00	18.00	
	132	5660				16.00	16.00	19.00	
	144	5720				15.50	15.50	18.50	
802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.50	19.30	
	124	5620				16.00	16.00	19.00	
	132	5660				16.00	16.50	19.30	
	144	5720				16.00	16.00	19.00	
802.11n-HT40 MCS0	102	5510				16.00	17.00	19.50	
	110	5550				16.00	16.50	19.30	
	126	5630				16.00	17.00	19.50	
	134	5670				16.00	19.50	21.10	
	142	5710				16.00	17.50	19.80	
802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.50	19.30	
	124	5620				16.00	16.00	19.00	
	132	5660				16.00	16.50	19.30	
	144	5720				16.00	16.00	19.00	
802.11ac-VHT40 MCS0	102	5510				16.00	17.00	19.50	
	110	5550				16.00	16.50	19.30	
	126	5630				16.00	17.00	19.50	
	134	5670				16.00	19.50	21.10	
	142	5710				16.00	17.50	19.80	
802.11ac-VHT80 MCS0	106	5530				16.00	17.00	19.50	
	122	5610				16.00	19.00	20.80	
	138	5690				16.00	18.50	20.40	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.50	19.30	
	124	5620				16.00	16.00	19.00	
	132	5660				16.00	16.50	19.30	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				16.00	17.00	19.50	
	110	5550				16.00	16.50	19.30	
	126	5630				16.00	17.00	19.50	
	134	5670				16.00	19.50	21.10	
	142	5710				16.00	17.50	19.80	
802.11ax-HE80 MCS0	106	5530				16.00	17.00	19.50	
	122	5610				16.00	19.00	20.80	
	138	5690				16.00	18.50	20.40	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11n-HT20 MCS0		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11n-HT40 MCS0		151	5755				15.50	18.50	20.30
		159	5795				15.50	18.50	20.30
802.11ac-VHT20 MCS0		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11ac-VHT40 MCS0		151	5755				15.50	18.50	20.30
		159	5795				15.50	18.50	20.30
802.11ac-VHT80 MCS0		155	5775				15.50	20.00	21.30
802.11ax-HE20 MCS0		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11ax-HE40 MCS0		151	5755				15.50	18.50	20.30
		159	5795				15.50	18.50	20.30
802.11ax-HE80 MCS0		155	5775				15.50	20.00	21.30

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	16.00	18.80
802.11n-HT20 MCS0		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	17.50	19.60
802.11n-HT40 MCS0		167	5835				15.50	18.50	20.30
		175	5875				15.50	18.50	20.30
802.11ac-VHT20 MCS0		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	17.50	19.60
802.11ac-VHT40 MCS0		167	5835				15.50	18.50	20.30
		175	5875				15.50	18.50	20.30
802.11ac-VHT80 MCS0		171	5855				15.50	20.00	21.30
802.11ac-VHT160 MCS0		163	5815				15.50	20.00	21.30
802.11ax-HE20 MCS0		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	17.50	19.60
802.11ax-HE40 MCS0		167	5835				15.50	18.50	20.30
		175	5875				15.50	18.50	20.30
802.11ax-HE80 MCS0		171	5855				15.50	20.00	21.30
802.11ax-HE160 MCS0		163	5815				15.50	20.00	21.30

<Power index 1> RSDB

<2.4Hz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		15.00	
		6	2437		15.00	
		11	2462		15.00	
		12	2467		15.00	
		13	2472		15.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412				15.00	21.00	22.00
		6	2437				15.00	21.00	22.00
		11	2462				15.00	21.00	22.00
		12	2467				15.00	16.00	18.50
		13	2472				13.00	13.00	16.00
	802.11n-HT20 MCS0	1	2412				15.00	21.00	22.00
		6	2437				15.00	21.00	22.00
		11	2462				15.00	21.00	22.00
		12	2467				15.00	16.50	18.80
		13	2472				14.50	14.50	17.50
	802.11ac-VHT20 MCS0	1	2412				15.00	21.00	22.00
		6	2437				15.00	21.00	22.00
		11	2462				15.00	21.00	22.00
		12	2467				15.00	16.50	18.80
		13	2472				14.50	14.50	17.50
	802.11ax-HE20 MCS0	1	2412				15.00	21.00	22.00
		6	2437				15.00	21.00	22.00
		11	2462				15.00	21.00	22.00
12		2467				15.00	16.50	18.80	
13		2472				14.50	14.50	17.50	

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				15.00	17.00	19.10	
	40	5200				15.00	18.00	19.80	
	44	5220				15.00	19.50	20.80	
	48	5240				15.00	18.00	19.80	
802.11n-HT20 MCS0	36	5180				15.00	18.50	20.10	
	40	5200				15.00	19.00	20.50	
	44	5220				15.00	20.00	21.20	
802.11n-HT40 MCS0	48	5240				15.00	19.00	20.50	
	38	5190				15.00	16.00	18.50	
	46	5230				15.00	20.00	21.20	
802.11ac-VHT20 MCS0	36	5180				15.00	18.50	20.10	
	40	5200				15.00	19.00	20.50	
	44	5220				15.00	20.00	21.20	
	48	5240				15.00	19.00	20.50	
802.11ac-VHT40 MCS0	38	5190				15.00	16.00	18.50	
	46	5230				15.00	20.00	21.20	
802.11ac-VHT80 MCS0	42	5210				15.00	16.00	18.50	
802.11ax-HE20 MCS0	36	5180				15.00	18.50	20.10	
	40	5200				15.00	19.00	20.50	
	44	5220				15.00	20.00	21.20	
	48	5240				15.00	19.00	20.50	
802.11ax-HE40 MCS0	38	5190				15.00	16.50	18.80	
	46	5230				15.00	20.00	21.20	
802.11ax-HE80 MCS0	42	5210				15.00	16.00	18.50	



Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4		
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				15.00	18.00	19.80		
		56	5280				15.00	19.00	20.50		
		60	5300				15.00	19.50	20.80		
		64	5320				15.00	19.00	20.50		
	802.11n-HT20 MCS0	52	5260				15.00	19.00	20.50		
		56	5280				15.00	19.00	20.50		
		60	5300				15.00	20.00	21.20		
	802.11n-HT40 MCS0	54	5270				15.00	20.00	21.20		
		62	5310				15.00	17.00	19.10		
	802.11ac-VHT20 MCS0	52	5260				15.00	19.00	20.50		
		56	5280				15.00	19.00	20.50		
		60	5300				15.00	20.00	21.20		
	802.11ac-VHT40 MCS0	54	5270				15.00	20.00	21.20		
		62	5310				15.00	17.00	19.10		
	802.11ac-VHT80 MCS0	58	5290				15.00	16.50	18.80		
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50		
	802.11ax-HE20 MCS0	52	5260				15.00	19.00	20.50		
		56	5280				15.00	19.00	20.50		
		60	5300				15.00	20.00	21.20		
		64	5320				15.00	19.00	20.50		
802.11ax-HE40 MCS0	54	5270				15.00	20.00	21.20			
	62	5310				15.00	17.00	19.10			
802.11ax-HE80 MCS0	58	5290				15.00	16.50	18.80			
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50			



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.00	19.00	
	124	5620				15.00	15.00	18.00	
	132	5660				16.00	16.00	19.00	
	144	5720				15.50	15.50	18.50	
802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.50	19.30	
	124	5620				16.00	16.00	19.00	
	132	5660				16.00	16.50	19.30	
	144	5720				16.00	16.00	19.00	
802.11n-HT40 MCS0	102	5510				16.00	17.00	19.50	
	110	5550				16.00	16.50	19.30	
	126	5630				16.00	17.00	19.50	
	134	5670				16.00	19.50	21.10	
	142	5710				16.00	17.50	19.80	
802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.50	19.30	
	124	5620				16.00	16.00	19.00	
	132	5660				16.00	16.50	19.30	
	144	5720				16.00	16.00	19.00	
802.11ac-VHT40 MCS0	102	5510				16.00	17.00	19.50	
	110	5550				16.00	16.50	19.30	
	126	5630				16.00	17.00	19.50	
	134	5670				16.00	19.50	21.10	
	142	5710				16.00	17.50	19.80	
802.11ac-VHT80 MCS0	106	5530				16.00	17.00	19.50	
	122	5610				16.00	19.00	20.80	
	138	5690				16.00	18.50	20.40	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.50	19.30	
	124	5620				16.00	16.00	19.00	
	132	5660				16.00	16.50	19.30	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				16.00	17.00	19.50	
	110	5550				16.00	16.50	19.30	
	126	5630				16.00	17.00	19.50	
	134	5670				16.00	19.50	21.10	
	142	5710				16.00	17.50	19.80	
802.11ax-HE80 MCS0	106	5530				16.00	17.00	19.50	
	122	5610				16.00	19.00	20.80	
	138	5690				16.00	18.50	20.40	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11n-HT20 MCS0		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11n-HT40 MCS0		151	5755				15.50	18.50	20.30
		159	5795				15.50	18.50	20.30
802.11ac-VHT20 MCS0		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11ac-VHT40 MCS0		151	5755				15.50	18.50	20.30
		159	5795				15.50	18.50	20.30
802.11ac-VHT80 MCS0		155	5775				15.50	20.00	21.30
802.11ax-HE20 MCS0		149	5745				15.50	16.00	18.80
		157	5785				15.50	16.00	18.80
		165	5825				15.50	17.50	19.60
802.11ax-HE40 MCS0		151	5755				15.50	18.50	20.30
		159	5795				15.50	18.50	20.30
802.11ax-HE80 MCS0		155	5775				15.50	20.00	21.30

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	16.00	18.80
802.11n-HT20 MCS0		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	17.50	19.60
802.11n-HT40 MCS0		167	5835				15.50	18.50	20.30
		175	5875				15.50	18.50	20.30
802.11ac-VHT20 MCS0		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	17.50	19.60
802.11ac-VHT40 MCS0		167	5835				15.50	18.50	20.30
		175	5875				15.50	18.50	20.30
802.11ac-VHT80 MCS0		171	5855				15.50	20.00	21.30
802.11ac-VHT160 MCS0		163	5815				15.50	20.00	21.30
802.11ax-HE20 MCS0		169	5845				15.50	17.00	19.30
		173	5865				15.50	17.00	19.30
		177	5885				15.50	17.50	19.60
802.11ax-HE40 MCS0		167	5835				15.50	18.50	20.30
		175	5875				15.50	18.50	20.30
802.11ax-HE80 MCS0		171	5855				15.50	20.00	21.30
802.11ax-HE160 MCS0		163	5815				15.50	20.00	21.30

<Power index 2> Non-RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		19.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps		1	2412				21.00	21.00	24.00
			6	2437				21.00	21.00	24.00
			11	2462				20.50	20.50	23.50
			12	2467				16.00	16.00	19.00
			13	2472				13.00	13.00	16.00
	802.11n-HT20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				21.00	21.00	24.00
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ac-VHT20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				21.00	21.00	24.00
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ax-HE20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				21.00	21.00	24.00
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				19.50	19.50	22.50	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
802.11n-HT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				20.00	20.00	23.00	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00
		56	5280				19.00	19.00	22.00
		60	5300				19.50	19.50	22.50
		64	5320				19.00	19.00	22.00
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
	802.11n-HT40 MCS0	54	5270				20.00	20.00	23.00
		62	5310				17.00	17.00	20.00
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
	802.11ac-VHT40 MCS0	54	5270				20.00	20.00	23.00
		62	5310				17.00	17.00	20.00
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50
802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00	
	56	5280				19.00	19.00	22.00	
	60	5300				20.00	20.00	23.00	
	64	5320				19.00	19.00	22.00	
802.11ax-HE40 MCS0	54	5270				20.00	20.00	23.00	
	62	5310				17.00	17.00	20.00	
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50	
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500				16.00	16.00	19.00
		116	5580				16.00	16.00	19.00
		124	5620				15.00	15.00	18.00
		132	5660				16.00	16.00	19.00
		144	5720				15.50	15.50	18.50
	802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00
		116	5580				16.50	16.50	19.50
		124	5620				16.00	16.00	19.00
		132	5660				16.50	16.50	19.50
		144	5720				16.00	16.00	19.00
	802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00
		110	5550				16.50	16.50	19.50
		126	5630				17.00	17.00	20.00
		134	5670				19.50	19.50	22.50
		142	5710				17.50	17.50	20.50
	802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00
		116	5580				16.50	16.50	19.50
		124	5620				16.00	16.00	19.00
		132	5660				16.50	16.50	19.50
		144	5720				16.00	16.00	19.00
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				20.00	20.00	23.00
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				20.00	20.00	23.00

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				20.00	20.00	23.00
802.11ac-VHT160 MCS0		163	5815				20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				20.00	20.00	23.00
802.11ax-HE160 MCS0		163	5815				20.00	20.00	23.00

<Power index 2> RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		20.00	
		6	2437		20.00	
		11	2462		20.00	
		12	2467		20.00	
		13	2472		19.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps		1	2412				20.00	21.00	23.50
			6	2437				20.00	21.00	23.50
			11	2462				20.00	20.50	23.30
			12	2467				16.00	16.00	19.00
			13	2472				13.00	13.00	16.00
	802.11n-HT20 MCS0		1	2412				20.00	20.50	23.30
			6	2437				20.00	21.00	23.50
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ac-VHT20 MCS0		1	2412				20.00	20.50	23.30
			6	2437				20.00	21.00	23.50
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ax-HE20 MCS0		1	2412				20.00	20.50	23.30
			6	2437				20.00	21.00	23.50
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				19.50	19.50	22.50	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				19.50	20.00	22.80	
802.11n-HT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				19.50	20.00	22.80	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				19.50	20.00	22.80	
	48	5240				19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190				16.00	16.00	19.00	
	46	5230				19.50	20.00	22.80	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				19.50	20.00	22.80	
	48	5240				19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				19.50	20.00	22.80	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4		
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	19.50	22.50		
		64	5320				19.00	19.00	22.00		
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	20.00	22.80		
	802.11n-HT40 MCS0	54	5270				19.50	20.00	22.80		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	20.00	22.80		
	802.11ac-VHT40 MCS0	54	5270				19.50	20.00	22.80		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50		
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50		
	802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	20.00	22.80		
		64	5320				19.00	19.00	22.00		
802.11ax-HE40 MCS0	54	5270				19.50	20.00	22.80			
	62	5310				17.00	17.00	20.00			
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50			
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50			



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.00	19.00	
	124	5620				15.00	15.00	18.00	
	132	5660				16.00	16.00	19.00	
	144	5720				15.50	15.50	18.50	
802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				20.00	20.00	23.00
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				20.00	20.00	23.00

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				20.00	20.00	23.00
802.11ac-VHT160 MCS0		163	5815				20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				20.00	20.00	23.00
802.11ax-HE160 MCS0		163	5815				20.00	20.00	23.00



<Power index 3> Non-RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps		1	2412		20.50
			6	2437		20.50
			11	2462		20.50
			12	2467		20.50
			13	2472		19.00

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps		1	2412		21.00
			6	2437		21.00
			11	2462		21.00
			12	2467		21.00
			13	2472		20.00

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps		1	2412				20.50	21.00	23.80
			6	2437				20.50	21.00	23.80
			11	2462				20.50	20.50	23.50
			12	2467				16.00	16.00	19.00
			13	2472				13.00	13.00	16.00
	802.11n-HT20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				20.50	21.00	23.80
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ac-VHT20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				20.50	21.00	23.80
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ax-HE20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				20.50	21.00	23.80
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				19.50	19.50	22.50	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
802.11n-HT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				20.00	20.00	23.00	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4		
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	19.50	22.50		
		64	5320				19.00	19.00	22.00		
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				20.00	20.00	23.00		
	802.11n-HT40 MCS0	54	5270				20.00	20.00	23.00		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				20.00	20.00	23.00		
	802.11ac-VHT40 MCS0	54	5270				20.00	20.00	23.00		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50		
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50		
	802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				20.00	20.00	23.00		
		64	5320				19.00	19.00	22.00		
802.11ax-HE40 MCS0	54	5270				20.00	20.00	23.00			
	62	5310				17.00	17.00	20.00			
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50			
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50			



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.00	19.00	
	124	5620				15.00	15.00	18.00	
	132	5660				16.00	16.00	19.00	
	144	5720				15.50	15.50	18.50	
802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				20.00	20.00	23.00
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				20.00	20.00	23.00

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				20.00	20.00	23.00
802.11ac-VHT160 MCS0		163	5815				20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				20.00	20.00	23.00
802.11ax-HE160 MCS0		163	5815				20.00	20.00	23.00

<Power index 3> RSDB

<2.4GHz WLAN>

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

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		18.00	
		6	2437		18.00	
		11	2462		18.00	
		12	2467		18.00	
		13	2472		18.00	

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
	802.11g 6Mbps	1	2412				17.50	18.00	20.80
		6	2437				17.50	18.00	20.80
		11	2462				17.50	18.00	20.80
		12	2467				16.00	16.00	19.00
		13	2472				13.00	13.00	16.00
	802.11n-HT20 MCS0	1	2412				17.50	18.00	20.80
		6	2437				17.50	18.00	20.80
		11	2462				17.50	18.00	20.80
		12	2467				16.50	16.50	19.50
		13	2472				14.50	14.50	17.50
	802.11ac-VHT20 MCS0	1	2412				17.50	18.00	20.80
		6	2437				17.50	18.00	20.80
		11	2462				17.50	18.00	20.80
		12	2467				16.50	16.50	19.50
		13	2472				14.50	14.50	17.50
	802.11ax-HE20 MCS0	1	2412				17.50	18.00	20.80
		6	2437				17.50	18.00	20.80
		11	2462				17.50	18.00	20.80
12		2467				16.50	16.50	19.50	
13		2472				14.50	14.50	17.50	

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				18.50	19.50	22.00	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				18.50	19.00	21.80	
	44	5220				18.50	20.00	22.30	
802.11n-HT40 MCS0	48	5240				18.50	19.00	21.80	
	38	5190				16.00	16.00	19.00	
	46	5230				18.50	20.00	22.30	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				18.50	19.00	21.80	
	44	5220				18.50	20.00	22.30	
	48	5240				18.50	19.00	21.80	
802.11ac-VHT40 MCS0	38	5190				16.00	16.00	19.00	
	46	5230				18.50	20.00	22.30	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				18.50	19.00	21.80	
	44	5220				18.50	20.00	22.30	
	48	5240				18.50	19.00	21.80	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				18.50	20.00	22.30	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4		
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	19.50	22.50		
		64	5320				19.00	19.00	22.00		
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	20.00	22.80		
	802.11n-HT40 MCS0	54	5270				19.50	20.00	22.80		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	20.00	22.80		
	802.11ac-VHT40 MCS0	54	5270				19.50	20.00	22.80		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50		
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50		
	802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	20.00	22.80		
		64	5320				19.00	19.00	22.00		
802.11ax-HE40 MCS0	54	5270				19.50	20.00	22.80			
	62	5310				17.00	17.00	20.00			
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50			
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50			



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.00	19.00	
	124	5620				15.00	15.00	18.00	
	132	5660				16.00	16.00	19.00	
	144	5720				15.50	15.50	18.50	
802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				18.50	19.50	22.00	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				18.50	19.50	22.00	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				18.50	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				18.50	19.50	22.00	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				18.50	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				18.50	18.50	22.50
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				18.50	18.50	22.50

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				18.50	18.50	21.50
802.11ac-VHT160 MCS0		163	5815				18.50	18.50	21.50
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				18.50	18.50	21.50
802.11ax-HE160 MCS0		163	5815				18.50	18.50	21.50



<Power index 4> Non-RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps		1	2412		21.00
			6	2437		21.00
			11	2462		21.00
			12	2467		21.00
			13	2472		19.00

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps		1	2412		21.00
			6	2437		21.00
			11	2462		21.00
			12	2467		21.00
			13	2472		20.00

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps		1	2412				21.00	21.00	24.00
			6	2437				21.00	21.00	24.00
			11	2462				20.50	20.50	23.50
			12	2467				16.00	16.00	19.00
			13	2472				13.00	13.00	16.00
	802.11n-HT20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				21.00	21.00	24.00
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ac-VHT20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				21.00	21.00	24.00
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50
	802.11ax-HE20 MCS0		1	2412				20.50	20.50	23.50
			6	2437				21.00	21.00	24.00
			11	2462				19.00	19.00	22.00
			12	2467				16.50	16.50	19.50
			13	2472				14.50	14.50	17.50

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				19.50	19.50	22.50	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
802.11n-HT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				20.00	20.00	23.00	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00
		56	5280				19.00	19.00	22.00
		60	5300				19.50	19.50	22.50
		64	5320				19.00	19.00	22.00
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
	802.11n-HT40 MCS0	54	5270				20.00	20.00	23.00
		62	5310				17.00	17.00	20.00
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
	802.11ac-VHT40 MCS0	54	5270				20.00	20.00	23.00
		62	5310				17.00	17.00	20.00
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50
	802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
60		5300				20.00	20.00	23.00	
64		5320				19.00	19.00	22.00	
802.11ax-HE40 MCS0	54	5270				20.00	20.00	23.00	
	62	5310				17.00	17.00	20.00	
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50	
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500				16.00	16.00	19.00
		116	5580				16.00	16.00	19.00
		124	5620				15.00	15.00	18.00
		132	5660				16.00	16.00	19.00
		144	5720				15.50	15.50	18.50
	802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00
		116	5580				16.50	16.50	19.50
		124	5620				16.00	16.00	19.00
		132	5660				16.50	16.50	19.50
		144	5720				16.00	16.00	19.00
	802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00
		110	5550				16.50	16.50	19.50
		126	5630				17.00	17.00	20.00
		134	5670				19.50	19.50	22.50
		142	5710				17.50	17.50	20.50
	802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00
		116	5580				16.50	16.50	19.50
		124	5620				16.00	16.00	19.00
		132	5660				16.50	16.50	19.50
		144	5720				16.00	16.00	19.00
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				20.00	20.00	23.00
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				20.00	20.00	23.00

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				20.00	20.00	23.00
802.11ac-VHT160 MCS0		163	5815				20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				20.00	20.00	23.00
802.11ax-HE160 MCS0		163	5815				20.00	20.00	23.00

<Power index 4> RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		19.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
	802.11g 6Mbps	1	2412					21.00	21.00	24.00
		6	2437					21.00	21.00	24.00
		11	2462					20.50	20.50	23.50
		12	2467					16.00	16.00	19.00
		13	2472					13.00	13.00	16.00
	802.11n-HT20 MCS0	1	2412					20.50	20.50	23.50
		6	2437					21.00	21.00	24.00
		11	2462					19.00	19.00	22.00
		12	2467					16.50	16.50	19.50
		13	2472					14.50	14.50	17.50
	802.11ac-VHT20 MCS0	1	2412					20.50	20.50	23.50
		6	2437					21.00	21.00	24.00
		11	2462					19.00	19.00	22.00
		12	2467					16.50	16.50	19.50
		13	2472					14.50	14.50	17.50
	802.11ax-HE20 MCS0	1	2412					20.50	20.50	23.50
		6	2437					21.00	21.00	24.00
		11	2462					19.00	19.00	22.00
		12	2467					16.50	16.50	19.50
13		2472					14.50	14.50	17.50	



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				19.50	19.50	22.50	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
802.11n-HT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ac-VHT40 MCS0	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				20.00	20.00	23.00	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4		
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00		
		56	5280				19.00	19.00	22.00		
		60	5300				19.50	19.50	22.50		
		64	5320				19.00	19.00	22.00		
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				20.00	20.00	23.00		
	802.11n-HT40 MCS0	54	5270				20.00	20.00	23.00		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				20.00	20.00	23.00		
	802.11ac-VHT40 MCS0	54	5270				20.00	20.00	23.00		
		62	5310				17.00	17.00	20.00		
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50		
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50		
	802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00		
		56	5280				19.00	19.00	22.00		
		60	5300				20.00	20.00	23.00		
		64	5320				19.00	19.00	22.00		
802.11ax-HE40 MCS0	54	5270				20.00	20.00	23.00			
	62	5310				17.00	17.00	20.00			
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50			
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50			



				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	100	5500				16.00	16.00	19.00	
	116	5580				16.00	16.00	19.00	
	124	5620				15.00	15.00	18.00	
	132	5660				16.00	16.00	19.00	
	144	5720				15.50	15.50	18.50	
802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				20.00	20.00	23.00
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				20.00	20.00	23.00

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				20.00	20.00	23.00
802.11ac-VHT160 MCS0		163	5815				20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				20.00	20.00	23.00
802.11ax-HE160 MCS0		163	5815				20.00	20.00	23.00

<Power index 5> Non-RSDB

<5GHz WLAN>

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180				17.00	17.00	20.00	
	40	5200				18.00	18.00	21.00	
	44	5220				19.50	19.50	22.50	
	48	5240				18.00	18.00	21.00	
802.11n-HT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
802.11n-HT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
802.11ac-VHT40 MCS0	48	5240				19.00	19.00	22.00	
	38	5190				16.00	16.00	19.00	
	46	5230				20.00	20.00	23.00	
802.11ac-VHT80 MCS0	42	5210				16.00	16.00	19.00	
802.11ax-HE20 MCS0	36	5180				18.50	18.50	21.50	
	40	5200				19.00	19.00	22.00	
	44	5220				20.00	20.00	23.00	
	48	5240				19.00	19.00	22.00	
802.11ax-HE40 MCS0	38	5190				16.50	16.50	19.50	
	46	5230				20.00	20.00	23.00	
802.11ax-HE80 MCS0	42	5210				16.00	16.00	19.00	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260				18.00	18.00	21.00
		56	5280				19.00	19.00	22.00
		60	5300				19.50	19.50	22.50
		64	5320				19.00	19.00	22.00
	802.11n-HT20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
	802.11n-HT40 MCS0	54	5270				20.00	20.00	23.00
		62	5310				17.00	17.00	20.00
	802.11ac-VHT20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
	802.11ac-VHT40 MCS0	54	5270				20.00	20.00	23.00
		62	5310				17.00	17.00	20.00
	802.11ac-VHT80 MCS0	58	5290				16.50	16.50	19.50
	802.11ac-VHT160 MCS0	50	5250				13.50	13.50	16.50
	802.11ax-HE20 MCS0	52	5260				19.00	19.00	22.00
		56	5280				19.00	19.00	22.00
		60	5300				20.00	20.00	23.00
		64	5320				19.00	19.00	22.00
802.11ax-HE40 MCS0	54	5270				20.00	20.00	23.00	
	62	5310				17.00	17.00	20.00	
802.11ax-HE80 MCS0	58	5290				16.50	16.50	19.50	
802.11ax-HE160 MCS0	50	5250				13.50	13.50	16.50	



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500				16.00	16.00	19.00
		116	5580				16.00	16.00	19.00
		124	5620				15.00	15.00	18.00
		132	5660				16.00	16.00	19.00
		144	5720				15.50	15.50	18.50
	802.11n-HT20 MCS0	100	5500				16.00	16.00	19.00
		116	5580				16.50	16.50	19.50
		124	5620				16.00	16.00	19.00
		132	5660				16.50	16.50	19.50
		144	5720				16.00	16.00	19.00
	802.11n-HT40 MCS0	102	5510				17.00	17.00	20.00
		110	5550				16.50	16.50	19.50
		126	5630				17.00	17.00	20.00
		134	5670				19.50	19.50	22.50
		142	5710				17.50	17.50	20.50
	802.11ac-VHT20 MCS0	100	5500				16.00	16.00	19.00
		116	5580				16.50	16.50	19.50
		124	5620				16.00	16.00	19.00
		132	5660				16.50	16.50	19.50
		144	5720				16.00	16.00	19.00
802.11ac-VHT40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ac-VHT80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ac-VHT160 MCS0	114	5570				14.50	14.50	17.50	
802.11ax-HE20 MCS0	100	5500				16.00	16.00	19.00	
	116	5580				16.50	16.50	19.50	
	124	5620				16.00	16.00	19.00	
	132	5660				16.50	16.50	19.50	
	144	5720				16.00	16.00	19.00	
802.11ax-HE40 MCS0	102	5510				17.00	17.00	20.00	
	110	5550				16.50	16.50	19.50	
	126	5630				17.00	17.00	20.00	
	134	5670				19.50	19.50	22.50	
	142	5710				17.50	17.50	20.50	
802.11ax-HE80 MCS0	106	5530				17.00	17.00	20.00	
	122	5610				19.00	19.00	22.00	
	138	5690				18.50	18.50	21.50	
802.11ax-HE160 MCS0	114	5570				14.50	14.50	17.50	

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11n-HT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ac-VHT40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ac-VHT80 MCS0		155	5775				20.00	20.00	23.00
802.11ax-HE20 MCS0		149	5745				16.00	16.00	19.00
		157	5785				16.00	16.00	19.00
		165	5825				17.50	17.50	20.50
802.11ax-HE40 MCS0		151	5755				18.50	18.50	21.50
		159	5795				18.50	18.50	21.50
802.11ax-HE80 MCS0		155	5775				20.00	20.00	23.00

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				16.00	16.00	19.00
802.11n-HT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11n-HT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ac-VHT40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ac-VHT80 MCS0		171	5855				20.00	20.00	23.00
802.11ac-VHT160 MCS0		163	5815				20.00	20.00	23.00
802.11ax-HE20 MCS0		169	5845				17.00	17.00	20.00
		173	5865				17.00	17.00	20.00
		177	5885				17.50	17.50	20.50
802.11ax-HE40 MCS0		167	5835				18.50	18.50	21.50
		175	5875				18.50	18.50	21.50
802.11ax-HE80 MCS0		171	5855				20.00	20.00	23.00
802.11ax-HE160 MCS0		163	5815				20.00	20.00	23.00

<Power index 6> Non-RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		11.50	
		6	2437		11.50	
		11	2462		11.50	
		12	2467		11.50	
		13	2472		11.50	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		19.00	
		6	2437		19.00	
		11	2462		19.00	
		12	2467		19.00	
		13	2472		19.00	

Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit		
	802.11g 6Mbps			1	2412	11.50	19.00	19.70			
				6	2437	11.50	19.00	19.70			
				11	2462	11.50	19.00	19.70			
				12	2467	11.50	16.00	17.30			
				13	2472	11.50	13.50	15.60			
	802.11n-HT20 MCS0			1	2412	11.50	19.00	19.70			
				6	2437	11.50	19.00	19.70			
				11	2462	11.50	19.00	19.70			
				12	2467	11.50	16.50	17.70			
				13	2472	11.50	14.50	16.30			
	802.11ac-VHT20 MCS0			1	2412	11.50	19.00	19.70			
				6	2437	11.50	19.00	19.70			
				11	2462	11.50	19.00	19.70			
				12	2467	11.50	16.50	17.70			
				13	2472	11.50	14.50	16.30			
	802.11ax-HE20 MCS0			1	2412	11.50	19.00	19.70			
				6	2437	11.50	19.00	19.70			
				11	2462	11.50	19.00	19.70			
12				2467	11.50	16.50	17.70				
13				2472	11.50	14.50	16.30				



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	8.00	17.00	17.50				
	40	5200	8.00	18.00	18.40				
	44	5220	8.00	19.50	19.80				
	48	5240	8.00	18.00	18.40				
802.11n-HT20 MCS0	36	5180	8.00	18.50	18.90				
	40	5200	8.00	19.00	19.30				
	44	5220	8.00	19.50	19.80				
802.11n-HT40 MCS0	48	5240	8.00	19.00	19.30				
	38	5190	8.00	16.00	16.60				
	46	5230	8.00	19.50	19.80				
802.11ac-VHT20 MCS0	36	5180	8.00	18.50	18.90				
	40	5200	8.00	19.00	19.30				
	44	5220	8.00	19.50	19.80				
	48	5240	8.00	19.00	19.30				
802.11ac-VHT40 MCS0	38	5190	8.00	16.00	16.60				
	46	5230	8.00	19.50	19.80				
802.11ac-VHT80 MCS0	42	5210	8.00	16.00	16.60				
802.11ax-HE20 MCS0	36	5180	8.00	18.50	18.90				
	40	5200	8.00	19.00	19.30				
	44	5220	8.00	19.50	19.80				
	48	5240	8.00	19.00	19.30				
802.11ax-HE40 MCS0	38	5190	8.00	16.50	17.10				
	46	5230	8.00	19.50	19.80				
802.11ax-HE80 MCS0	42	5210	8.00	16.00	16.60				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	8.00	18.00	18.40			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
		64	5320	8.00	19.00	19.30			
	802.11n-HT20 MCS0	52	5260	8.00	19.00	19.30			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
	802.11n-HT40 MCS0	54	5270	8.00	19.50	19.80			
		62	5310	8.00	17.00	17.50			
	802.11ac-VHT20 MCS0	52	5260	8.00	19.00	19.30			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
	802.11ac-VHT40 MCS0	54	5270	8.00	19.50	19.80			
		62	5310	8.00	17.00	17.50			
	802.11ac-VHT80 MCS0	58	5290	8.00	16.50	17.10			
	802.11ac-VHT160 MCS0	50	5250	8.00	13.50	14.60			
	802.11ax-HE20 MCS0	52	5260	8.00	19.00	19.30			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
		64	5320	8.00	19.00	19.30			
802.11ax-HE40 MCS0	54	5270	8.00	19.50	19.80				
	62	5310	8.00	17.00	17.50				
802.11ax-HE80 MCS0	58	5290	8.00	16.50	17.10				
802.11ax-HE160 MCS0	50	5250	8.00	13.50	14.60				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	8.00	16.00	16.60			
		116	5580	8.00	16.00	16.60			
		124	5620	8.00	15.00	15.80			
		132	5660	8.00	16.00	16.60			
		144	5720	8.00	15.50	16.20			
	802.11n-HT20 MCS0	100	5500	8.00	16.00	16.60			
		116	5580	8.00	16.50	17.10			
		124	5620	8.00	16.00	16.60			
		132	5660	8.00	16.50	17.10			
		144	5720	8.00	16.00	16.60			
	802.11n-HT40 MCS0	102	5510	8.00	17.00	17.50			
		110	5550	8.00	16.50	17.10			
		126	5630	8.00	17.00	17.50			
		134	5670	8.00	19.50	19.80			
		142	5710	8.00	17.50	18.00			
	802.11ac-VHT20 MCS0	100	5500	8.00	16.00	16.60			
		116	5580	8.00	16.50	17.10			
		124	5620	8.00	16.00	16.60			
		132	5660	8.00	16.50	17.10			
		144	5720	8.00	16.00	16.60			
802.11ac-VHT40 MCS0	102	5510	8.00	17.00	17.50				
	110	5550	8.00	16.50	17.10				
	126	5630	8.00	17.00	17.50				
	134	5670	8.00	19.50	19.80				
	142	5710	8.00	17.50	18.00				
802.11ac-VHT80 MCS0	106	5530	8.00	17.00	17.50				
	122	5610	8.00	19.00	19.30				
	138	5690	8.00	18.50	18.90				
802.11ac-VHT160 MCS0	114	5570	8.00	14.50	15.40				
802.11ax-HE20 MCS0	100	5500	8.00	16.00	16.60				
	116	5580	8.00	16.50	17.10				
	124	5620	8.00	16.00	16.60				
	132	5660	8.00	16.50	17.10				
	144	5720	8.00	16.00	16.60				
802.11ax-HE40 MCS0	102	5510	8.00	17.00	17.50				
	110	5550	8.00	16.50	17.10				
	126	5630	8.00	17.00	17.50				
	134	5670	8.00	19.50	19.80				
	142	5710	8.00	17.50	18.00				
802.11ax-HE80 MCS0	106	5530	8.00	17.00	17.50				
	122	5610	8.00	19.00	19.30				
	138	5690	8.00	18.50	18.90				
802.11ax-HE160 MCS0	114	5570	8.00	14.50	15.40				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
	802.11n-HT20 MCS0	149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
	802.11n-HT40 MCS0	151	5755	8.00	18.50	18.90			
		159	5795	8.00	18.50	18.90			
	802.11ac-VHT20 MCS0	149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
	802.11ac-VHT40 MCS0	151	5755	8.00	18.50	18.90			
159		5795	8.00	18.50	18.90				
802.11ac-VHT80 MCS0	155	5775	8.00	20.00	20.30				
802.11ax-HE20 MCS0	149	5745	8.00	16.00	16.60				
	157	5785	8.00	16.00	16.60				
	165	5825	8.00	17.50	18.00				
802.11ax-HE40 MCS0	151	5755	8.00	18.50	18.90				
	159	5795	8.00	18.50	18.90				
802.11ax-HE80 MCS0	155	5775	8.00	20.00	20.30				

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	169	5845	8.00	17.00	17.50				
	173	5865	8.00	17.00	17.50				
	177	5885	8.00	16.00	16.60				
802.11n-HT20 MCS0	169	5845	8.00	17.00	17.50				
	173	5865	8.00	17.00	17.50				
	177	5885	8.00	17.50	18.00				
802.11n-HT40 MCS0	167	5835	8.00	18.50	18.90				
	175	5875	8.00	18.50	18.90				
802.11ac-VHT20 MCS0	169	5845	8.00	17.00	17.50				
	173	5865	8.00	17.00	17.50				
	177	5885	8.00	17.50	18.00				
802.11ac-VHT40 MCS0	167	5835	8.00	18.50	18.90				
	175	5875	8.00	18.50	18.90				
802.11ac-VHT80 MCS0	171	5855	8.00	20.00	20.30				
802.11ac-VHT160 MCS0	163	5815	8.00	20.00	20.30				
802.11ax-HE20 MCS0	169	5845	8.00	17.00	17.50				
	173	5865	8.00	17.00	17.50				
	177	5885	8.00	17.50	18.00				
802.11ax-HE40 MCS0	167	5835	8.00	18.50	18.90				
	175	5875	8.00	18.50	18.90				
802.11ax-HE80 MCS0	171	5855	8.00	20.00	20.30				
802.11ax-HE160 MCS0	163	5815	8.00	20.00	20.30				

<Power index 6> RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		9.00	
		6	2437		9.00	
		11	2462		9.00	
		12	2467		9.00	
		13	2472		9.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		16.00	
		6	2437		16.00	
		11	2462		16.00	
		12	2467		16.00	
		13	2472		16.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps		1	2412	9.00	16.00	16.80			
			6	2437	9.00	16.00	16.80			
			11	2462	9.00	16.00	16.80			
			12	2467	9.00	16.00	16.80			
			13	2472	9.00	13.50	14.80			
	802.11n-HT20 MCS0		1	2412	9.00	16.00	16.80			
			6	2437	9.00	16.00	16.80			
			11	2462	9.00	16.00	16.80			
			12	2467	9.00	16.00	16.80			
			13	2472	9.00	14.50	15.60			
	802.11ac-VHT20 MCS0		1	2412	9.00	16.00	16.80			
			6	2437	9.00	16.00	16.80			
			11	2462	9.00	16.00	16.80			
			12	2467	9.00	16.00	16.80			
			13	2472	9.00	14.50	15.60			
	802.11ax-HE20 MCS0		1	2412	9.00	16.00	16.80			
			6	2437	9.00	16.00	16.80			
			11	2462	9.00	16.00	16.80			
12			2467	9.00	16.00	16.80				
13			2472	9.00	14.50	15.60				

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	8.00	17.00	17.50				
	40	5200	8.00	18.00	18.40				
	44	5220	8.00	19.50	19.80				
	48	5240	8.00	18.00	18.40				
802.11n-HT20 MCS0	36	5180	8.00	18.50	18.90				
	40	5200	8.00	19.00	19.30				
	44	5220	8.00	19.50	19.80				
802.11n-HT40 MCS0	48	5240	8.00	19.00	19.30				
	38	5190	8.00	16.00	16.60				
	46	5230	8.00	19.50	19.80				
802.11ac-VHT20 MCS0	36	5180	8.00	18.50	18.90				
	40	5200	8.00	19.00	19.30				
	44	5220	8.00	19.50	19.80				
	48	5240	8.00	19.00	19.30				
802.11ac-VHT40 MCS0	38	5190	8.00	16.00	16.60				
	46	5230	8.00	19.50	19.80				
802.11ac-VHT80 MCS0	42	5210	8.00	16.00	16.60				
802.11ax-HE20 MCS0	36	5180	8.00	18.50	18.90				
	40	5200	8.00	19.00	19.30				
	44	5220	8.00	19.50	19.80				
	48	5240	8.00	19.00	19.30				
802.11ax-HE40 MCS0	38	5190	8.00	16.50	17.10				
	46	5230	8.00	19.50	19.80				
802.11ax-HE80 MCS0	42	5210	8.00	16.00	16.60				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	8.00	18.00	18.40			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
		64	5320	8.00	19.00	19.30			
	802.11n-HT20 MCS0	52	5260	8.00	19.00	19.30			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
	802.11n-HT40 MCS0	54	5270	8.00	19.50	19.80			
		62	5310	8.00	17.00	17.50			
	802.11ac-VHT20 MCS0	52	5260	8.00	19.00	19.30			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
	802.11ac-VHT40 MCS0	54	5270	8.00	19.50	19.80			
		62	5310	8.00	17.00	17.50			
	802.11ac-VHT80 MCS0	58	5290	8.00	16.50	17.10			
	802.11ac-VHT160 MCS0	50	5250	8.00	13.50	14.60			
	802.11ax-HE20 MCS0	52	5260	8.00	19.00	19.30			
		56	5280	8.00	19.00	19.30			
		60	5300	8.00	19.50	19.80			
		64	5320	8.00	19.00	19.30			
802.11ax-HE40 MCS0	54	5270	8.00	19.50	19.80				
	62	5310	8.00	17.00	17.50				
802.11ax-HE80 MCS0	58	5290	8.00	16.50	17.10				
802.11ax-HE160 MCS0	50	5250	8.00	13.50	14.60				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	8.00	16.00	16.60			
		116	5580	8.00	16.00	16.60			
		124	5620	8.00	15.00	15.80			
		132	5660	8.00	16.00	16.60			
		144	5720	8.00	15.50	16.20			
	802.11n-HT20 MCS0	100	5500	8.00	16.00	16.60			
		116	5580	8.00	16.50	17.10			
		124	5620	8.00	16.00	16.60			
		132	5660	8.00	16.50	17.10			
		144	5720	8.00	16.00	16.60			
	802.11n-HT40 MCS0	102	5510	8.00	17.00	17.50			
		110	5550	8.00	16.50	17.10			
		126	5630	8.00	17.00	17.50			
		134	5670	8.00	19.50	19.80			
		142	5710	8.00	17.50	18.00			
	802.11ac-VHT20 MCS0	100	5500	8.00	16.00	16.60			
		116	5580	8.00	16.50	17.10			
		124	5620	8.00	16.00	16.60			
		132	5660	8.00	16.50	17.10			
		144	5720	8.00	16.00	16.60			
802.11ac-VHT40 MCS0	102	5510	8.00	17.00	17.50				
	110	5550	8.00	16.50	17.10				
	126	5630	8.00	17.00	17.50				
	134	5670	8.00	19.50	19.80				
	142	5710	8.00	17.50	18.00				
802.11ac-VHT80 MCS0	106	5530	8.00	17.00	17.50				
	122	5610	8.00	19.00	19.30				
	138	5690	8.00	18.50	18.90				
802.11ac-VHT160 MCS0	114	5570	8.00	14.50	15.40				
802.11ax-HE20 MCS0	100	5500	8.00	16.00	16.60				
	116	5580	8.00	16.50	17.10				
	124	5620	8.00	16.00	16.60				
	132	5660	8.00	16.50	17.10				
	144	5720	8.00	16.00	16.60				
802.11ax-HE40 MCS0	102	5510	8.00	17.00	17.50				
	110	5550	8.00	16.50	17.10				
	126	5630	8.00	17.00	17.50				
	134	5670	8.00	19.50	19.80				
	142	5710	8.00	17.50	18.00				
802.11ax-HE80 MCS0	106	5530	8.00	17.00	17.50				
	122	5610	8.00	19.00	19.30				
	138	5690	8.00	18.50	18.90				
802.11ax-HE160 MCS0	114	5570	8.00	14.50	15.40				

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
802.11n-HT20 MCS0		149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
802.11n-HT40 MCS0		151	5755	8.00	18.50	18.90			
		159	5795	8.00	18.50	18.90			
802.11ac-VHT20 MCS0		149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
802.11ac-VHT40 MCS0		151	5755	8.00	18.50	18.90			
		159	5795	8.00	18.50	18.90			
802.11ac-VHT80 MCS0		155	5775	8.00	20.00	20.30			
802.11ax-HE20 MCS0		149	5745	8.00	16.00	16.60			
		157	5785	8.00	16.00	16.60			
		165	5825	8.00	17.50	18.00			
802.11ax-HE40 MCS0		151	5755	8.00	18.50	18.90			
		159	5795	8.00	18.50	18.90			
802.11ax-HE80 MCS0		155	5775	8.00	20.00	20.30			

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	8.00	17.00	17.50			
		173	5865	8.00	17.00	17.50			
		177	5885	8.00	16.00	16.60			
802.11n-HT20 MCS0		169	5845	8.00	17.00	17.50			
		173	5865	8.00	17.00	17.50			
		177	5885	8.00	17.50	18.00			
802.11n-HT40 MCS0		167	5835	8.00	18.50	18.90			
		175	5875	8.00	18.50	18.90			
802.11ac-VHT20 MCS0		169	5845	8.00	17.00	17.50			
		173	5865	8.00	17.00	17.50			
		177	5885	8.00	17.50	18.00			
802.11ac-VHT40 MCS0		167	5835	8.00	18.50	18.90			
		175	5875	8.00	18.50	18.90			
802.11ac-VHT80 MCS0		171	5855	8.00	20.00	20.30			
802.11ac-VHT160 MCS0		163	5815	8.00	20.00	20.30			
802.11ax-HE20 MCS0		169	5845	8.00	17.00	17.50			
		173	5865	8.00	17.00	17.50			
		177	5885	8.00	17.50	18.00			
802.11ax-HE40 MCS0		167	5835	8.00	18.50	18.90			
		175	5875	8.00	18.50	18.90			
802.11ax-HE80 MCS0		171	5855	8.00	20.00	20.30			
802.11ax-HE160 MCS0		163	5815	8.00	20.00	20.30			



<Power index 7> Non-RSDB

<2.4GHz WLAN>

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

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412		15.50	21.00	22.10			
		6	2437		15.50	21.00	22.10			
		11	2462		15.50	20.50	21.70			
		12	2467		15.50	16.00	18.80			
		13	2472		13.00	13.00	16.00			
	802.11n-HT20 MCS0	1	2412		15.50	20.50	21.70			
		6	2437		15.50	21.00	22.10			
		11	2462		15.50	19.00	20.60			
		12	2467		15.50	16.50	19.00			
	802.11ac-VHT20 MCS0	13	2472		14.50	14.50	17.50			
		1	2412		15.50	20.50	21.70			
		6	2437		15.50	21.00	22.10			
		11	2462		15.50	19.00	20.60			
	802.11ax-HE20 MCS0	12	2467		15.50	16.50	19.00			
		13	2472		14.50	14.50	17.50			
		1	2412		15.50	20.50	21.70			
		6	2437		15.50	21.00	22.10			
	802.11ax-HE20 MCS0	11	2462		15.50	19.00	20.60			
12		2467		15.50	16.50	19.00				
13		2472		14.50	14.50	17.50				

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	13.50	17.00	18.60				
	40	5200	13.50	18.00	19.30				
	44	5220	13.50	19.50	20.50				
	48	5240	13.50	18.00	19.30				
802.11n-HT20 MCS0	36	5180	13.50	18.50	19.70				
	40	5200	13.50	19.00	20.10				
	44	5220	13.50	20.00	20.90				
802.11n-HT40 MCS0	48	5240	13.50	19.00	20.10				
	38	5190	13.50	16.00	17.90				
	46	5230	13.50	20.00	20.90				
802.11ac-VHT20 MCS0	36	5180	13.50	18.50	19.70				
	40	5200	13.50	19.00	20.10				
	44	5220	13.50	20.00	20.90				
	48	5240	13.50	19.00	20.10				
802.11ac-VHT40 MCS0	38	5190	13.50	16.00	17.90				
	46	5230	13.50	20.00	20.90				
802.11ac-VHT80 MCS0	42	5210	13.50	16.00	17.90				
802.11ax-HE20 MCS0	36	5180	13.50	18.50	19.70				
	40	5200	13.50	19.00	20.10				
	44	5220	13.50	20.00	20.90				
	48	5240	13.50	19.00	20.10				
802.11ax-HE40 MCS0	38	5190	13.50	16.50	18.30				
	46	5230	13.50	20.00	20.90				
802.11ax-HE80 MCS0	42	5210	13.50	16.00	17.90				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.50	18.00	19.30			
		56	5280	13.50	19.00	20.10			
		60	5300	13.50	19.50	20.50			
		64	5320	13.50	19.00	20.10			
	802.11n-HT20 MCS0	52	5260	13.50	19.00	20.10			
		56	5280	13.50	19.00	20.10			
		60	5300	13.50	20.00	20.90			
	802.11n-HT40 MCS0	54	5270	13.50	20.00	20.90			
		62	5310	13.50	17.00	18.60			
	802.11ac-VHT20 MCS0	52	5260	13.50	19.00	20.10			
		56	5280	13.50	19.00	20.10			
		60	5300	13.50	20.00	20.90			
	802.11ac-VHT40 MCS0	54	5270	13.50	20.00	20.90			
		62	5310	13.50	17.00	18.60			
	802.11ac-VHT80 MCS0	58	5290	13.50	16.50	18.30			
	802.11ac-VHT160 MCS0	50	5250	13.50	13.50	16.50			
802.11ax-HE20 MCS0	52	5260	13.50	19.00	20.10				
	56	5280	13.50	19.00	20.10				
	60	5300	13.50	20.00	20.90				
	64	5320	13.50	19.00	20.10				
802.11ax-HE40 MCS0	54	5270	13.50	20.00	20.90				
	62	5310	13.50	17.00	18.60				
802.11ax-HE80 MCS0	58	5290	13.50	16.50	18.30				
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.00	16.00	17.80			
		116	5580	13.00	16.00	17.80			
		124	5620	13.00	15.00	17.10			
		132	5660	13.00	16.00	17.80			
		144	5720	13.00	15.50	17.40			
	802.11n-HT20 MCS0	100	5500	13.00	16.00	17.80			
		116	5580	13.00	16.50	18.10			
		124	5620	13.00	16.00	17.80			
		132	5660	13.00	16.50	18.10			
		144	5720	13.00	16.00	17.80			
	802.11n-HT40 MCS0	102	5510	13.00	17.00	18.50			
		110	5550	13.00	16.50	18.10			
		126	5630	13.00	17.00	18.50			
		134	5670	13.00	19.50	20.40			
		142	5710	13.00	17.50	18.80			
	802.11ac-VHT20 MCS0	100	5500	13.00	16.00	17.80			
		116	5580	13.00	16.50	18.10			
		124	5620	13.00	16.00	17.80			
		132	5660	13.00	16.50	18.10			
		144	5720	13.00	16.00	17.80			
802.11ac-VHT40 MCS0	102	5510	13.00	17.00	18.50				
	110	5550	13.00	16.50	18.10				
	126	5630	13.00	17.00	18.50				
	134	5670	13.00	19.50	20.40				
	142	5710	13.00	17.50	18.80				
802.11ac-VHT80 MCS0	106	5530	13.00	17.00	18.50				
	122	5610	13.00	19.00	20.00				
	138	5690	13.00	18.50	19.60				
802.11ac-VHT160 MCS0	114	5570	13.00	14.50	16.80				
802.11ax-HE20 MCS0	100	5500	13.00	16.00	17.80				
	116	5580	13.00	16.50	18.10				
	124	5620	13.00	16.00	17.80				
	132	5660	13.00	16.50	18.10				
	144	5720	13.00	16.00	17.80				
802.11ax-HE40 MCS0	102	5510	13.00	17.00	18.50				
	110	5550	13.00	16.50	18.10				
	126	5630	13.00	17.00	18.50				
	134	5670	13.00	19.50	20.40				
	142	5710	13.00	17.50	18.80				
802.11ax-HE80 MCS0	106	5530	13.00	17.00	18.50				
	122	5610	13.00	19.00	20.00				
	138	5690	13.00	18.50	19.60				
802.11ax-HE160 MCS0	114	5570	13.00	14.50	16.80				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11n-HT20 MCS0		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11n-HT40 MCS0		151	5755	14.00	18.50	19.80			
		159	5795	14.00	18.50	19.80			
802.11ac-VHT20 MCS0		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11ac-VHT40 MCS0		151	5755	14.00	18.50	19.80			
		159	5795	14.00	18.50	19.80			
802.11ac-VHT80 MCS0		155	5775	14.00	20.00	21.00			
802.11ax-HE20 MCS0		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11ax-HE40 MCS0		151	5755	14.00	18.50	19.80			
		159	5795	14.00	18.50	19.80			
802.11ax-HE80 MCS0		155	5775	14.00	20.00	21.00			

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	16.00	18.10			
802.11n-HT20 MCS0		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	17.50	19.10			
802.11n-HT40 MCS0		167	5835	14.00	18.50	19.80			
		175	5875	14.00	18.50	19.80			
802.11ac-VHT20 MCS0		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	17.50	19.10			
802.11ac-VHT40 MCS0		167	5835	14.00	18.50	19.80			
		175	5875	14.00	18.50	19.80			
802.11ac-VHT80 MCS0		171	5855	14.00	20.00	21.00			
802.11ac-VHT160 MCS0		163	5815	14.00	20.00	21.00			
802.11ax-HE20 MCS0		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	17.50	19.10			
802.11ax-HE40 MCS0		167	5835	14.00	18.50	19.80			
		175	5875	14.00	18.50	19.80			
802.11ax-HE80 MCS0		171	5855	14.00	20.00	21.00			
802.11ax-HE160 MCS0		163	5815	14.00	20.00	21.00			

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<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	14.00	2412	14.00	
		6	14.00	2437	14.00	
		11	14.00	2462	14.00	
		12	14.00	2467	14.00	
		13	14.00	2472	14.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	21.00	2412	21.00	
		6	21.00	2437	21.00	
		11	21.00	2462	21.00	
		12	21.00	2467	21.00	
		13	20.00	2472	20.00	

Burst Average Power (dBm)																																			
Device mode				Open mode			Closed mode																												
Transmit Antenna				MIMO			MIMO																												
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4																										
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit																										
	802.11g 6Mbps			1	2412	14.00	21.00	21.80																											
												6	2437	14.00	21.00	21.80																			
																				11	2462	14.00	20.50	21.40											
																												12	2467	14.00	16.00	18.10			
	802.11n-HT20 MCS0			1	2412	14.00	20.50	21.40																											
												6	2437	14.00	19.00	20.20																			
																				11	2462	14.00	16.50	18.40											
																												13	2472	14.00	14.50	17.30			
	802.11ac-VHT20 MCS0			1	2412	14.00	20.50	21.40																											
												6	2437	14.00	19.00	20.20																			
																				11	2462	14.00	16.50	18.40											
																												13	2472	14.00	14.50	17.30			
	802.11ax-HE20 MCS0			1	2412	14.00	20.50	21.40																											
												6	2437	14.00	19.00	20.20																			
																				11	2462	14.00	16.50	18.40											
																												13	2472	14.00	14.50	17.30			



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	12.00	17.00	18.20				
	40	5200	12.00	18.00	19.00				
	44	5220	12.00	19.50	20.20				
	48	5240	12.00	18.00	19.00				
802.11n-HT20 MCS0	36	5180	12.00	18.50	19.40				
	40	5200	12.00	19.00	19.80				
	44	5220	12.00	20.00	20.60				
802.11n-HT40 MCS0	48	5240	12.00	19.00	19.80				
	38	5190	12.00	16.00	17.50				
	46	5230	12.00	20.00	20.60				
802.11ac-VHT20 MCS0	36	5180	12.00	18.50	19.40				
	40	5200	12.00	19.00	19.80				
	44	5220	12.00	20.00	20.60				
	48	5240	12.00	19.00	19.80				
802.11ac-VHT40 MCS0	38	5190	12.00	16.00	17.50				
	46	5230	12.00	20.00	20.60				
802.11ac-VHT80 MCS0	42	5210	12.00	16.00	17.50				
802.11ax-HE20 MCS0	36	5180	12.00	18.50	19.40				
	40	5200	12.00	19.00	19.80				
	44	5220	12.00	20.00	20.60				
	48	5240	12.00	19.00	19.80				
802.11ax-HE40 MCS0	38	5190	12.00	16.50	17.80				
	46	5230	12.00	20.00	20.60				
802.11ax-HE80 MCS0	42	5210	12.00	16.00	17.50				



Burst Average Power (dBm)									
Device mode			Open mode			Closed mode			
Transmit Antenna			MIMO			MIMO			
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	12.00	18.00	19.00			
		56	5280	12.00	19.00	19.80			
		60	5300	12.00	19.50	20.20			
		64	5320	12.00	19.00	19.80			
	802.11n-HT20 MCS0	52	5260	12.00	19.00	19.80			
		56	5280	12.00	19.00	19.80			
		60	5300	12.00	20.00	20.60			
	802.11n-HT40 MCS0	54	5270	12.00	20.00	20.60			
		62	5310	12.00	17.00	18.20			
	802.11ac-VHT20 MCS0	52	5260	12.00	19.00	19.80			
		56	5280	12.00	19.00	19.80			
		60	5300	12.00	20.00	20.60			
	802.11ac-VHT40 MCS0	54	5270	12.00	20.00	20.60			
		62	5310	12.00	17.00	18.20			
	802.11ac-VHT80 MCS0	58	5290	12.00	16.50	17.80			
	802.11ac-VHT160 MCS0	50	5250	12.00	13.50	15.80			
802.11ax-HE20 MCS0	52	5260	12.00	19.00	19.80				
	56	5280	12.00	19.00	19.80				
	60	5300	12.00	20.00	20.60				
	64	5320	12.00	19.00	19.80				
802.11ax-HE40 MCS0	54	5270	12.00	20.00	20.60				
	62	5310	12.00	17.00	18.20				
802.11ax-HE80 MCS0	58	5290	12.00	16.50	17.80				
802.11ax-HE160 MCS0	50	5250	12.00	13.50	15.80				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	11.50	16.00	17.30			
		116	5580	11.50	16.00	17.30			
		124	5620	11.50	15.00	16.60			
		132	5660	11.50	16.00	17.30			
		144	5720	11.50	15.50	17.00			
	802.11n-HT20 MCS0	100	5500	11.50	16.00	17.30			
		116	5580	11.50	16.50	17.70			
		124	5620	11.50	16.00	17.30			
		132	5660	11.50	16.50	17.70			
	802.11n-HT40 MCS0	102	5510	11.50	17.00	18.10			
		110	5550	11.50	16.50	17.70			
		126	5630	11.50	17.00	18.10			
		134	5670	11.50	19.50	20.10			
	802.11ac-VHT20 MCS0	102	5510	11.50	17.00	18.10			
		110	5550	11.50	16.50	17.70			
		126	5630	11.50	17.00	18.10			
		134	5670	11.50	19.50	20.10			
	802.11ac-VHT40 MCS0	102	5510	11.50	17.00	18.10			
		110	5550	11.50	16.50	17.70			
		126	5630	11.50	17.00	18.10			
134		5670	11.50	19.50	20.10				
802.11ac-VHT80 MCS0	106	5530	11.50	17.00	18.10				
	122	5610	11.50	19.00	19.70				
802.11ac-VHT160 MCS0	114	5570	11.50	14.50	16.30				
	138	5690	11.50	18.50	19.30				
802.11ax-HE20 MCS0	100	5500	11.50	16.00	17.30				
	116	5580	11.50	16.50	17.70				
	124	5620	11.50	16.00	17.30				
	132	5660	11.50	16.50	17.70				
	144	5720	11.50	16.00	17.30				
802.11ax-HE40 MCS0	102	5510	11.50	17.00	18.10				
	110	5550	11.50	16.50	17.70				
	126	5630	11.50	17.00	18.10				
	134	5670	11.50	19.50	20.10				
802.11ax-HE80 MCS0	106	5530	11.50	17.00	18.10				
	122	5610	11.50	19.00	19.70				
	138	5690	11.50	18.50	19.30				
802.11ax-HE160 MCS0	114	5570	11.50	14.50	16.30				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	12.00	16.00	17.50			
		157	5785	12.00	16.00	17.50			
		165	5825	12.00	17.50	18.60			
	802.11n-HT20 MCS0	149	5745	12.00	16.00	17.50			
		157	5785	12.00	16.00	17.50			
		165	5825	12.00	17.50	18.60			
	802.11n-HT40 MCS0	151	5755	12.00	18.50	19.40			
		159	5795	12.00	18.50	19.40			
	802.11ac-VHT20 MCS0	149	5745	12.00	16.00	17.50			
		157	5785	12.00	16.00	17.50			
		165	5825	12.00	17.50	18.60			
	802.11ac-VHT40 MCS0	151	5755	12.00	18.50	19.40			
		159	5795	12.00	18.50	19.40			
	802.11ac-VHT80 MCS0	155	5775	12.00	20.00	20.60			
	802.11ax-HE20 MCS0	149	5745	12.00	16.00	17.50			
		157	5785	12.00	16.00	17.50			
		165	5825	12.00	17.50	18.60			
	802.11ax-HE40 MCS0	151	5755	12.00	18.50	19.40			
159		5795	12.00	18.50	19.40				
802.11ax-HE80 MCS0	155	5775	12.00	20.00	20.60				

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.9GHz WLAN	802.11a 6Mbps	169	5845	12.00	17.00	18.20			
		173	5865	12.00	17.00	18.20			
		177	5885	12.00	16.00	17.50			
	802.11n-HT20 MCS0	169	5845	12.00	17.00	18.20			
		173	5865	12.00	17.00	18.20			
		177	5885	12.00	17.50	18.60			
	802.11n-HT40 MCS0	167	5835	12.00	18.50	19.40			
		175	5875	12.00	18.50	19.40			
	802.11ac-VHT20 MCS0	169	5845	12.00	17.00	18.20			
		173	5865	12.00	17.00	18.20			
		177	5885	12.00	17.50	18.60			
	802.11ac-VHT40 MCS0	167	5835	12.00	18.50	19.40			
		175	5875	12.00	18.50	19.40			
	802.11ac-VHT80 MCS0	171	5855	12.00	20.00	20.60			
	802.11ac-VHT160 MCS0	163	5815	12.00	20.00	20.60			
	802.11ax-HE20 MCS0	169	5845	12.00	17.00	18.20			
		173	5865	12.00	17.00	18.20			
		177	5885	12.00	17.50	18.60			
802.11ax-HE40 MCS0	167	5835	12.00	18.50	19.40				
	175	5875	12.00	18.50	19.40				
802.11ax-HE80 MCS0	171	5855	12.00	20.00	20.60				
802.11ax-HE160 MCS0	163	5815	12.00	20.00	20.60				



<Power index 8> Non-RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		19.00	
		6	2437		19.00	
		11	2462		19.00	
		12	2467		19.00	
		13	2472		19.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		20.00	
		6	2437		20.00	
		11	2462		20.00	
		12	2467		20.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412		19.00	20.00	22.50			
		6	2437		19.00	20.00	22.50			
		11	2462		19.00	20.00	22.50			
		12	2467		16.00	16.00	19.00			
		13	2472		13.00	13.00	16.00			
	802.11n-HT20 MCS0	1	2412		19.00	20.00	22.50			
		6	2437		19.00	20.00	22.50			
		11	2462		19.00	19.00	22.00			
		12	2467		16.50	16.50	19.50			
	802.11ac-VHT20 MCS0	1	2412		19.00	20.00	22.50			
		6	2437		19.00	20.00	22.50			
		11	2462		19.00	19.00	22.00			
		12	2467		16.50	16.50	19.50			
	802.11ax-HE20 MCS0	1	2412		19.00	20.00	22.50			
		6	2437		19.00	20.00	22.50			
		11	2462		19.00	19.00	22.00			
		12	2467		16.50	16.50	19.50			
			13	2472		14.50	14.50	17.50		

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	13.50	17.00	18.60				
	40	5200	13.50	18.00	19.30				
	44	5220	13.50	18.00	19.30				
	48	5240	13.50	18.00	19.30				
802.11n-HT20 MCS0	36	5180	13.50	18.00	19.30				
	40	5200	13.50	18.00	19.30				
	44	5220	13.50	18.00	19.30				
802.11n-HT40 MCS0	38	5190	13.50	16.00	17.90				
	46	5230	13.50	18.00	19.30				
	48	5240	13.50	18.00	19.30				
802.11ac-VHT20 MCS0	36	5180	13.50	18.00	19.30				
	40	5200	13.50	18.00	19.30				
	44	5220	13.50	18.00	19.30				
802.11ac-VHT40 MCS0	38	5190	13.50	16.00	17.90				
	46	5230	13.50	18.00	19.30				
	48	5240	13.50	18.00	19.30				
802.11ac-VHT80 MCS0	42	5210	13.50	16.00	17.90				
802.11ax-HE20 MCS0	36	5180	13.50	18.00	19.30				
	40	5200	13.50	18.00	19.30				
	44	5220	13.50	18.00	19.30				
	48	5240	13.50	18.00	19.30				
802.11ax-HE40 MCS0	38	5190	13.50	16.50	18.30				
	46	5230	13.50	18.00	19.30				
802.11ax-HE80 MCS0	42	5210	13.50	16.00	17.90				



Burst Average Power (dBm)									
Device mode			Open mode			Closed mode			
Transmit Antenna			MIMO			MIMO			
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.50	18.00	19.30			
		56	5280	13.50	18.00	19.30			
		60	5300	13.50	18.00	19.30			
		64	5320	13.50	18.00	19.30			
	802.11n-HT20 MCS0	52	5260	13.50	18.00	19.30			
		56	5280	13.50	18.00	19.30			
		60	5300	13.50	18.00	19.30			
	802.11n-HT40 MCS0	54	5270	13.50	18.00	19.30			
		62	5310	13.50	17.00	18.60			
	802.11ac-VHT20 MCS0	52	5260	13.50	18.00	19.30			
		56	5280	13.50	18.00	19.30			
		60	5300	13.50	18.00	19.30			
	802.11ac-VHT40 MCS0	54	5270	13.50	18.00	19.30			
		62	5310	13.50	17.00	18.60			
	802.11ac-VHT80 MCS0	58	5290	13.50	16.50	18.30			
	802.11ac-VHT160 MCS0	50	5250	13.00	13.50	16.50			
802.11ax-HE20 MCS0	52	5260	13.50	18.00	19.30				
	56	5280	13.50	18.00	19.30				
	60	5300	13.50	18.00	19.30				
	64	5320	13.50	18.00	19.30				
802.11ax-HE40 MCS0	54	5270	13.50	18.00	19.30				
	62	5310	13.50	17.00	18.60				
802.11ax-HE80 MCS0	58	5290	13.50	16.50	18.30				
802.11ax-HE160 MCS0	50	5250	13.00	13.50	16.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.50	16.00	17.90			
		116	5580	13.50	16.00	17.90			
		124	5620	13.50	15.00	17.30			
		132	5660	13.50	16.00	17.90			
		144	5720	13.50	15.50	17.60			
	802.11n-HT20 MCS0	100	5500	13.50	16.00	17.90			
		116	5580	13.50	16.50	18.30			
		124	5620	13.50	16.00	17.90			
		132	5660	13.50	16.50	18.30			
		144	5720	13.50	16.00	17.90			
	802.11n-HT40 MCS0	102	5510	13.50	17.00	18.60			
		110	5550	13.50	16.50	18.30			
		126	5630	13.50	17.00	18.60			
		134	5670	13.50	19.50	20.50			
		142	5710	13.50	17.50	19.00			
	802.11ac-VHT20 MCS0	100	5500	13.50	16.00	17.90			
		116	5580	13.50	16.50	18.30			
		124	5620	13.50	16.00	17.90			
		132	5660	13.50	16.50	18.30			
		144	5720	13.50	16.00	17.90			
802.11ac-VHT40 MCS0	102	5510	13.50	17.00	18.60				
	110	5550	13.50	16.50	18.30				
	126	5630	13.50	17.00	18.60				
	134	5670	13.50	19.50	20.50				
	142	5710	13.50	17.50	19.00				
802.11ac-VHT80 MCS0	106	5530	13.50	17.00	18.60				
	122	5610	13.50	19.00	20.10				
	138	5690	13.50	18.50	19.70				
802.11ac-VHT160 MCS0	114	5570	13.50	14.50	17.00				
802.11ax-HE20 MCS0	100	5500	13.50	16.00	17.90				
	116	5580	13.50	16.50	18.30				
	124	5620	13.50	16.00	17.90				
	132	5660	13.50	16.50	18.30				
	144	5720	13.50	16.00	17.90				
802.11ax-HE40 MCS0	102	5510	13.50	17.00	18.60				
	110	5550	13.50	16.50	18.30				
	126	5630	13.50	17.00	18.60				
	134	5670	13.50	19.50	20.50				
	142	5710	13.50	17.50	19.00				
802.11ax-HE80 MCS0	106	5530	13.50	17.00	18.60				
	122	5610	13.50	19.00	20.10				
	138	5690	13.50	18.50	19.70				
802.11ax-HE160 MCS0	114	5570	13.50	14.50	17.00				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11n-HT20 MCS0		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11n-HT40 MCS0		151	5755	14.00	18.50	19.80			
		159	5795	14.00	18.50	19.80			
802.11ac-VHT20 MCS0		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11ac-VHT40 MCS0		151	5755	14.00	18.50	19.80			
		159	5795	14.00	18.50	19.80			
802.11ac-VHT80 MCS0		155	5775	14.00	20.00	21.00			
802.11ax-HE20 MCS0		149	5745	14.00	16.00	18.10			
		157	5785	14.00	16.00	18.10			
		165	5825	14.00	17.50	19.10			
802.11ax-HE40 MCS0		151	5755	14.00	18.50	19.80			
		159	5795	14.00	18.50	19.80			
802.11ax-HE80 MCS0		155	5775	14.00	20.00	21.00			

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	16.00	18.10			
802.11n-HT20 MCS0		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	17.50	19.10			
802.11n-HT40 MCS0		167	5835	14.00	18.50	19.80			
		175	5875	14.00	18.50	19.80			
802.11ac-VHT20 MCS0		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	17.50	19.10			
802.11ac-VHT40 MCS0		167	5835	14.00	18.50	19.80			
		175	5875	14.00	18.50	19.80			
802.11ac-VHT80 MCS0		171	5855	14.00	20.00	21.00			
802.11ac-VHT160 MCS0		163	5815	14.00	20.00	21.00			
802.11ax-HE20 MCS0		169	5845	14.00	17.00	18.80			
		173	5865	14.00	17.00	18.80			
		177	5885	14.00	17.50	19.10			
802.11ax-HE40 MCS0		167	5835	14.00	18.50	19.80			
		175	5875	14.00	18.50	19.80			
802.11ax-HE80 MCS0		171	5855	14.00	20.00	21.00			
802.11ax-HE160 MCS0		163	5815	14.00	20.00	21.00			

<Power index 8> RSDB

<2.4GHz WLAN>

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

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Tune-Up Limit	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		17.00	
		6	2437		17.00	
		11	2462		17.00	
		12	2467		17.00	
		13	2472		17.00	

Burst Average Power (dBm)											
Device mode				Open mode			Closed mode				
Transmit Antenna				MIMO			MIMO				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit		
	802.11g 6Mbps			1	2412	15.50	17.00	19.30			
				6	2437	15.50	17.00	19.30			
				11	2462	15.50	17.00	19.30			
				12	2467	15.50	16.00	18.80			
				13	2472	13.00	13.00	16.00			
	802.11n-HT20 MCS0			1	2412	15.50	17.00	19.30			
				6	2437	15.50	17.00	19.30			
				11	2462	15.50	17.00	19.30			
				12	2467	15.50	16.50	19.00			
	802.11ac-VHT20 MCS0			1	2412	15.50	17.00	19.30			
				6	2437	15.50	17.00	19.30			
				11	2462	15.50	17.00	19.30			
				12	2467	15.50	16.50	19.00			
	802.11ax-HE20 MCS0			1	2412	15.50	17.00	19.30			
				6	2437	15.50	17.00	19.30			
				11	2462	15.50	17.00	19.30			
				12	2467	15.50	16.50	19.00			
				13	2472	14.50	14.50	17.50			

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	11.50	16.00	17.30				
	40	5200	11.50	16.00	17.30				
	44	5220	11.50	16.00	17.30				
	48	5240	11.50	16.00	17.30				
802.11n-HT20 MCS0	36	5180	11.50	16.00	17.30				
	40	5200	11.50	16.00	17.30				
	44	5220	11.50	16.00	17.30				
802.11n-HT40 MCS0	38	5190	11.50	16.00	17.30				
	46	5230	11.50	16.00	17.30				
	48	5240	11.50	16.00	17.30				
802.11ac-VHT20 MCS0	36	5180	11.50	16.00	17.30				
	40	5200	11.50	16.00	17.30				
	44	5220	11.50	16.00	17.30				
	48	5240	11.50	16.00	17.30				
802.11ac-VHT40 MCS0	38	5190	11.50	16.00	17.30				
	46	5230	11.50	16.00	17.30				
802.11ac-VHT80 MCS0	42	5210	11.50	16.00	17.30				
802.11ax-HE20 MCS0	36	5180	11.50	16.00	17.30				
	40	5200	11.50	16.00	17.30				
	44	5220	11.50	16.00	17.30				
	48	5240	11.50	16.00	17.30				
802.11ax-HE40 MCS0	38	5190	11.50	16.00	17.30				
	46	5230	11.50	16.00	17.30				
802.11ax-HE80 MCS0	42	5210	11.50	16.00	17.30				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	11.50	16.00	17.30			
		56	5280	11.50	16.00	17.30			
		60	5300	11.50	16.00	17.30			
		64	5320	11.50	16.00	17.30			
	802.11n-HT20 MCS0	52	5260	11.50	16.00	17.30			
		56	5280	11.50	16.00	17.30			
		64	5320	11.50	16.00	17.30			
	802.11n-HT40 MCS0	54	5270	11.50	16.00	17.30			
		62	5310	11.50	16.00	17.30			
	802.11ac-VHT20 MCS0	52	5260	11.50	16.00	17.30			
		56	5280	11.50	16.00	17.30			
		60	5300	11.50	16.00	17.30			
		64	5320	11.50	16.00	17.30			
	802.11ac-VHT40 MCS0	54	5270	11.50	16.00	17.30			
		62	5310	11.50	16.00	17.30			
	802.11ac-VHT80 MCS0	58	5290	11.50	16.00	17.30			
802.11ac-VHT160 MCS0	50	5250	11.50	13.50	15.60				
802.11ax-HE20 MCS0	52	5260	11.50	16.00	17.30				
	56	5280	11.50	16.00	17.30				
	60	5300	11.50	16.00	17.30				
	64	5320	11.50	16.00	17.30				
802.11ax-HE40 MCS0	54	5270	11.50	16.00	17.30				
	62	5310	11.50	16.00	17.30				
802.11ax-HE80 MCS0	58	5290	11.50	16.00	17.30				
802.11ax-HE160 MCS0	50	5250	11.50	13.50	15.60				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	12.00	16.00	17.50			
		116	5580	12.00	16.00	17.50			
		124	5620	12.00	15.00	16.80			
		132	5660	12.00	16.00	17.50			
		144	5720	12.00	15.50	17.10			
	802.11n-HT20 MCS0	100	5500	12.00	16.00	17.50			
		116	5580	12.00	16.50	17.80			
		124	5620	12.00	16.00	17.50			
		132	5660	12.00	16.50	17.80			
		144	5720	12.00	16.00	17.50			
	802.11n-HT40 MCS0	102	5510	12.00	17.00	18.20			
		110	5550	12.00	16.50	17.80			
		126	5630	12.00	17.00	18.20			
		134	5670	12.00	19.00	19.80			
		142	5710	12.00	17.50	18.60			
	802.11ac-VHT20 MCS0	100	5500	12.00	16.00	17.50			
		116	5580	12.00	16.50	17.80			
		124	5620	12.00	16.00	17.50			
		132	5660	12.00	16.50	17.80			
		144	5720	12.00	16.00	17.50			
802.11ac-VHT40 MCS0	102	5510	12.00	17.00	18.20				
	110	5550	12.00	16.50	17.80				
	126	5630	12.00	17.00	18.20				
	134	5670	12.00	19.00	19.80				
	142	5710	12.00	17.50	18.60				
802.11ac-VHT80 MCS0	106	5530	12.00	17.00	18.20				
	122	5610	12.00	19.00	19.80				
	138	5690	12.00	18.50	19.40				
802.11ac-VHT160 MCS0	114	5570	12.00	14.50	16.40				
802.11ax-HE20 MCS0	100	5500	12.00	16.00	17.50				
	116	5580	12.00	16.50	17.80				
	124	5620	12.00	16.00	17.50				
	132	5660	12.00	16.50	17.80				
	144	5720	12.00	16.00	17.50				
802.11ax-HE40 MCS0	102	5510	12.00	17.00	18.20				
	110	5550	12.00	16.50	17.80				
	126	5630	12.00	17.00	18.20				
	134	5670	12.00	19.00	19.80				
	142	5710	12.00	17.50	18.60				
802.11ax-HE80 MCS0	106	5530	12.00	17.00	18.20				
	122	5610	12.00	19.00	19.80				
	138	5690	12.00	18.50	19.40				
802.11ax-HE160 MCS0	114	5570	12.00	14.50	16.40				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	12.50	16.00	17.60			
		157	5785	12.50	16.00	17.60			
		165	5825	12.50	17.50	18.70			
	802.11n-HT20 MCS0	149	5745	12.50	16.00	17.60			
		157	5785	12.50	16.00	17.60			
		165	5825	12.50	17.50	18.70			
	802.11n-HT40 MCS0	151	5755	12.50	18.50	19.50			
		159	5795	12.50	18.50	19.50			
	802.11ac-VHT20 MCS0	149	5745	12.50	16.00	17.60			
		157	5785	12.50	16.00	17.60			
		165	5825	12.50	17.50	18.70			
	802.11ac-VHT40 MCS0	151	5755	12.50	18.50	19.50			
159		5795	12.50	18.50	19.50				
802.11ac-VHT80 MCS0	155	5775	12.50	19.50	20.30				
802.11ax-HE20 MCS0	149	5745	12.50	16.00	17.60				
	157	5785	12.50	16.00	17.60				
	165	5825	12.50	17.50	18.70				
802.11ax-HE40 MCS0	151	5755	12.50	18.50	19.50				
	159	5795	12.50	18.50	19.50				
802.11ax-HE80 MCS0	155	5775	12.50	19.50	20.30				

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.9GHz WLAN	802.11a 6Mbps	169	5845	12.50	17.00	18.60			
		173	5865	12.50	17.00	18.60			
		177	5885	12.50	16.00	17.90			
	802.11n-HT20 MCS0	169	5845	12.50	17.00	18.60			
		173	5865	12.50	17.00	18.60			
		177	5885	12.50	17.50	19.00			
	802.11n-HT40 MCS0	167	5835	12.50	18.50	19.70			
		175	5875	12.50	18.50	19.70			
	802.11ac-VHT20 MCS0	169	5845	12.50	17.00	18.60			
		173	5865	12.50	17.00	18.60			
		177	5885	12.50	17.50	19.00			
	802.11ac-VHT40 MCS0	167	5835	12.50	18.50	19.70			
175		5875	12.50	18.50	19.70				
802.11ac-VHT80 MCS0	171	5855	12.50	19.50	20.30				
802.11ac-VHT160 MCS0	163	5815	12.50	19.50	20.30				
802.11ax-HE20 MCS0	169	5845	12.50	17.00	18.60				
	173	5865	12.50	17.00	18.60				
	177	5885	12.50	17.50	19.00				
802.11ax-HE40 MCS0	167	5835	12.50	18.50	19.70				
	175	5875	12.50	18.50	19.70				
802.11ax-HE80 MCS0	171	5855	12.50	19.50	20.30				
802.11ax-HE160 MCS0	163	5815	12.50	19.50	20.30				



<Power index 9> Non-RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		19.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)												
Device mode				Open mode			Closed mode					
Transmit Antenna				MIMO			MIMO					
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4			
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit			
	802.11g 6Mbps	1	2412		21.00	21.00	24.00					
		6	2437		21.00	21.00	24.00					
		11	2462		20.50	20.50	23.50					
		12	2467		16.00	16.00	19.00					
		13	2472		13.00	13.00	16.00					
	802.11n-HT20 MCS0	1	2412		20.50	20.50	23.50					
		6	2437		21.00	21.00	24.00					
		11	2462		19.00	19.00	22.00					
		12	2467		16.50	16.50	19.50					
	802.11ac-VHT20 MCS0	1	2412		20.50	20.50	23.50					
		6	2437		21.00	21.00	24.00					
		11	2462		19.00	19.00	22.00					
		12	2467		16.50	16.50	19.50					
	802.11ax-HE20 MCS0	1	2412		20.50	20.50	23.50					
		6	2437		21.00	21.00	24.00					
		11	2462		19.00	19.00	22.00					
		12	2467		16.50	16.50	19.50					
					13	2472		14.50	14.50	17.50		



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
802.11a 6Mbps	36	5180	17.00	17.00	20.00				
	40	5200	18.00	18.00	21.00				
	44	5220	19.50	19.50	22.50				
	48	5240	18.00	18.00	21.00				
802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50				
	40	5200	19.00	19.00	22.00				
	44	5220	19.50	20.00	22.80				
	48	5240	19.00	19.00	22.00				
802.11n-HT40 MCS0	38	5190	16.00	16.00	19.00				
	46	5230	19.50	20.00	22.80				
802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50				
	40	5200	19.00	19.00	22.00				
	44	5220	19.50	20.00	22.80				
	48	5240	19.00	19.00	22.00				
802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.00				
	46	5230	19.50	20.00	22.80				
802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00				
802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50				
	40	5200	19.00	19.00	22.00				
	44	5220	19.50	20.00	22.80				
	48	5240	19.00	19.00	22.00				
802.11ax-HE40 MCS0	38	5190	16.50	16.50	19.50				
	46	5230	19.50	20.00	22.80				
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	18.00	18.00	21.00			
		56	5280	19.00	19.00	22.00			
		60	5300	19.50	19.50	22.50			
		64	5320	19.00	19.00	22.00			
	802.11n-HT20 MCS0	52	5260	19.00	19.00	22.00			
		56	5280	19.00	19.00	22.00			
		60	5300	19.50	20.00	22.80			
	802.11n-HT40 MCS0	54	5270	19.50	20.00	22.80			
		62	5310	17.00	17.00	20.00			
	802.11ac-VHT20 MCS0	52	5260	19.00	19.00	22.00			
		56	5280	19.00	19.00	22.00			
		60	5300	19.50	20.00	22.80			
802.11ac-VHT40 MCS0	54	5270	19.50	20.00	22.80				
	62	5310	17.00	17.00	20.00				
802.11ac-VHT80 MCS0	58	5290	16.50	16.50	19.50				
802.11ac-VHT160 MCS0	50	5250	13.50	13.50	16.50				
802.11ax-HE20 MCS0	52	5260	19.00	19.00	22.00				
	56	5280	19.00	19.00	22.00				
	60	5300	19.50	20.00	22.80				
	64	5320	19.00	19.00	22.00				
802.11ax-HE40 MCS0	54	5270	19.50	20.00	22.80				
	62	5310	17.00	17.00	20.00				
802.11ax-HE80 MCS0	58	5290	16.50	16.50	19.50				
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.00			
		116	5580	16.00	16.00	19.00			
		124	5620	15.00	15.00	18.00			
		132	5660	16.00	16.00	19.00			
		144	5720	15.50	15.50	18.50			
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.00			
		116	5580	16.50	16.50	19.50			
		124	5620	16.00	16.00	19.00			
		132	5660	16.50	16.50	19.50			
		144	5720	16.00	16.00	19.00			
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00			
		110	5550	16.50	16.50	19.50			
		126	5630	17.00	17.00	20.00			
		134	5670	19.50	19.50	22.50			
		142	5710	17.50	17.50	20.50			
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.00			
		116	5580	16.50	16.50	19.50			
		124	5620	16.00	16.00	19.00			
		132	5660	16.50	16.50	19.50			
		144	5720	16.00	16.00	19.00			
802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00				
	110	5550	16.50	16.50	19.50				
	126	5630	17.00	17.00	20.00				
	134	5670	19.50	19.50	22.50				
	142	5710	17.50	17.50	20.50				
802.11ac-VHT80 MCS0	106	5530	17.00	17.00	20.00				
	122	5610	19.00	19.00	22.00				
	138	5690	18.50	18.50	21.50				
802.11ac-VHT160 MCS0	114	5570	14.50	14.50	17.50				
802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.00				
	116	5580	16.50	16.50	19.50				
	124	5620	16.00	16.00	19.00				
	132	5660	16.50	16.50	19.50				
	144	5720	16.00	16.00	19.00				
802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.00				
	110	5550	16.50	16.50	19.50				
	126	5630	17.00	17.00	20.00				
	134	5670	19.50	19.50	22.50				
	142	5710	17.50	17.50	20.50				
802.11ax-HE80 MCS0	106	5530	17.00	17.00	20.00				
	122	5610	19.00	19.00	22.00				
	138	5690	18.50	18.50	21.50				
802.11ax-HE160 MCS0	114	5570	14.50	14.50	17.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
	802.11n-HT20 MCS0	149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
	802.11n-HT40 MCS0	151	5755	18.50	18.50	21.50			
		159	5795	18.50	18.50	21.50			
	802.11ac-VHT20 MCS0	149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
	802.11ac-VHT40 MCS0	151	5755	18.50	18.50	21.50			
159		5795	18.50	18.50	21.50				
802.11ac-VHT80 MCS0	155	5775	20.00	20.00	23.00				
802.11ax-HE20 MCS0	149	5745	16.00	16.00	19.00				
	157	5785	16.00	16.00	19.00				
	165	5825	17.50	17.50	20.50				
802.11ax-HE40 MCS0	151	5755	18.50	18.50	21.50				
	159	5795	18.50	18.50	21.50				
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.00				

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.9GHz WLAN	802.11a 6Mbps	169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	16.00	16.00	19.00			
	802.11n-HT20 MCS0	169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	17.50	17.50	20.50			
	802.11n-HT40 MCS0	167	5835	18.50	18.50	21.50			
		175	5875	18.50	18.50	21.50			
	802.11ac-VHT20 MCS0	169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	17.50	17.50	20.50			
	802.11ac-VHT40 MCS0	167	5835	18.50	18.50	21.50			
175		5875	18.50	18.50	21.50				
802.11ac-VHT80 MCS0	171	5855	20.00	20.00	23.00				
802.11ac-VHT160 MCS0	163	5815	20.00	20.00	23.00				
802.11ax-HE20 MCS0	169	5845	17.00	17.00	20.00				
	173	5865	17.00	17.00	20.00				
	177	5885	17.50	17.50	20.50				
802.11ax-HE40 MCS0	167	5835	18.50	18.50	21.50				
	175	5875	18.50	18.50	21.50				
802.11ax-HE80 MCS0	171	5855	20.00	20.00	23.00				
802.11ax-HE160 MCS0	163	5815	20.00	20.00	23.00				



<Power index 9> RSDB

<2.4GHz WLAN>

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 3		SISO Ant 3	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		20.50	
		6	2437		20.50	
		11	2462		20.50	
		12	2467		20.50	
		13	2472		19.00	

Burst Average Power (dBm)						
Device mode			Open mode		Closed mode	
Transmit Antenna			SISO Ant 4		SISO Ant 4	
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Tune-Up Limit		
	802.11b 1Mbps	1	2412		21.00	
		6	2437		21.00	
		11	2462		21.00	
		12	2467		21.00	
		13	2472		20.00	

Burst Average Power (dBm)										
Device mode				Open mode			Closed mode			
Transmit Antenna				MIMO			MIMO			
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
	802.11g 6Mbps	1	2412		20.50	21.00	23.80			
		6	2437		20.50	21.00	23.80			
		11	2462		20.50	20.50	23.50			
		12	2467		16.00	16.00	19.00			
		13	2472		13.00	13.00	16.00			
	802.11n-HT20 MCS0	1	2412		20.50	20.50	23.50			
		6	2437		20.50	21.00	23.80			
		11	2462		19.00	19.00	22.00			
		12	2467		16.50	16.50	19.50			
	802.11ac-VHT20 MCS0	1	2412		20.50	20.50	23.50			
		6	2437		21.00	21.00	24.00			
		11	2462		19.00	19.00	22.00			
		12	2467		16.50	16.50	19.50			
	802.11ax-HE20 MCS0	1	2412		20.50	20.50	23.50			
		6	2437		21.00	21.00	24.00			
		11	2462		19.00	19.00	22.00			
		12	2467		16.50	16.50	19.50			
			13	2472		14.50	17.50			



<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.00	17.00	20.00			
		40	5200	17.50	18.00	20.80			
		44	5220	17.50	19.50	21.60			
		48	5240	17.50	18.00	20.80			
	802.11n-HT20 MCS0	36	5180	17.50	18.50	21.00			
		40	5200	17.50	19.00	21.30			
		44	5220	17.50	20.00	21.90			
		48	5240	17.50	19.00	21.30			
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.00			
		46	5230	17.50	20.00	21.90			
	802.11ac-VHT20 MCS0	36	5180	17.50	18.50	21.00			
		40	5200	17.50	19.00	21.30			
44		5220	17.50	20.00	21.90				
48		5240	17.50	19.00	21.30				
802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.00				
	46	5230	17.50	20.00	21.90				
802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00				
802.11ax-HE20 MCS0	36	5180	17.50	18.50	21.00				
	40	5200	17.50	19.00	21.30				
	44	5220	17.50	20.00	21.90				
	48	5240	17.50	19.00	21.30				
802.11ax-HE40 MCS0	38	5190	16.50	16.50	19.50				
	46	5230	17.50	20.00	21.90				
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.50	18.00	20.80			
		56	5280	17.50	19.00	21.30			
		60	5300	17.50	19.50	21.60			
		64	5320	17.50	19.00	21.30			
	802.11n-HT20 MCS0	52	5260	17.50	19.00	21.30			
		56	5280	17.50	19.00	21.30			
		60	5300	17.50	20.00	21.90			
	802.11n-HT40 MCS0	54	5270	17.50	20.00	21.90			
		62	5310	17.00	17.00	20.00			
	802.11ac-VHT20 MCS0	52	5260	17.50	19.00	21.30			
		56	5280	17.50	19.00	21.30			
		60	5300	17.50	20.00	21.90			
802.11ac-VHT40 MCS0	54	5270	17.50	20.00	21.90				
	62	5310	17.00	17.00	20.00				
802.11ac-VHT80 MCS0	58	5290	16.50	16.50	19.50				
802.11ac-VHT160 MCS0	50	5250	13.50	13.50	16.50				
802.11ax-HE20 MCS0	52	5260	17.50	19.00	21.30				
	56	5280	17.50	19.00	21.30				
	60	5300	17.50	20.00	21.90				
	64	5320	17.50	19.00	21.30				
802.11ax-HE40 MCS0	54	5270	17.50	20.00	21.90				
	62	5310	17.00	17.00	20.00				
802.11ax-HE80 MCS0	58	5290	16.50	16.50	19.50				
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.00			
		116	5580	16.00	16.00	19.00			
		124	5620	15.00	15.00	18.00			
		132	5660	16.00	16.00	19.00			
		144	5720	15.50	15.50	18.50			
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.00			
		116	5580	16.50	16.50	19.50			
		124	5620	16.00	16.00	19.00			
		132	5660	16.50	16.50	19.50			
		144	5720	16.00	16.00	19.00			
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00			
		110	5550	16.50	16.50	19.50			
		126	5630	17.00	17.00	20.00			
		134	5670	18.00	19.50	21.80			
		142	5710	17.50	17.50	20.50			
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.00			
		116	5580	16.50	16.50	19.50			
		124	5620	16.00	16.00	19.00			
		132	5660	16.50	16.50	19.50			
		144	5720	16.00	16.00	19.00			
802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00				
	110	5550	16.50	16.50	19.50				
	126	5630	17.00	17.00	20.00				
	134	5670	18.00	19.50	21.80				
	142	5710	17.50	17.50	20.50				
802.11ac-VHT80 MCS0	106	5530	17.00	17.00	20.00				
	122	5610	18.00	19.00	21.50				
	138	5690	18.00	18.50	21.30				
802.11ac-VHT160 MCS0	114	5570	14.50	14.50	17.50				
802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.00				
	116	5580	16.50	16.50	19.50				
	124	5620	16.00	16.00	19.00				
	132	5660	16.50	16.50	19.50				
	144	5720	16.00	16.00	19.00				
802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.00				
	110	5550	16.50	16.50	19.50				
	126	5630	17.00	17.00	20.00				
	134	5670	18.00	19.50	21.80				
	142	5710	17.50	17.50	20.50				
802.11ax-HE80 MCS0	106	5530	17.00	17.00	20.00				
	122	5610	18.00	19.00	21.50				
	138	5690	18.00	18.50	21.30				
802.11ax-HE160 MCS0	114	5570	14.50	14.50	17.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
802.11n-HT20 MCS0		149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
802.11n-HT40 MCS0		151	5755	18.50	18.50	21.50			
		159	5795	18.50	18.50	21.50			
802.11ac-VHT20 MCS0		149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
802.11ac-VHT40 MCS0		151	5755	18.50	18.50	21.50			
		159	5795	18.50	18.50	21.50			
802.11ac-VHT80 MCS0		155	5775	18.50	20.00	22.30			
802.11ax-HE20 MCS0		149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
802.11ax-HE40 MCS0		151	5755	18.50	18.50	21.50			
		159	5795	18.50	18.50	21.50			
802.11ax-HE80 MCS0		155	5775	18.50	20.00	22.30			

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
5.9GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
				Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	16.00	16.00	19.00			
802.11n-HT20 MCS0		169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
802.11n-HT40 MCS0		167	5835	18.50	18.50	21.50			
		175	5875	18.50	18.50	21.50			
802.11ac-VHT20 MCS0		169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	17.50	17.50	20.50			
802.11ac-VHT40 MCS0		167	5835	18.50	18.50	21.50			
		175	5875	18.50	18.50	21.50			
802.11ac-VHT80 MCS0		171	5855	18.50	20.00	22.30			
802.11ac-VHT160 MCS0		163	5815	18.50	20.00	22.30			
802.11ax-HE20 MCS0		169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	17.50	17.50	20.50			
802.11ax-HE40 MCS0		167	5835	18.50	18.50	21.50			
		175	5875	18.50	18.50	21.50			
802.11ax-HE80 MCS0		171	5855	18.50	20.00	22.30			
802.11ax-HE160 MCS0		163	5815	18.50	20.00	22.30			



<Power index 10> Non RSDB

<5GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.00	17.00	20.00			
		40	5200	18.00	18.00	21.00			
		44	5220	19.50	19.50	22.50			
		48	5240	18.00	18.00	21.00			
	802.11n-HT20 MCS0	36	5180	18.50	18.50	21.50			
		40	5200	19.00	19.00	22.00			
		44	5220	19.50	20.00	22.80			
		48	5240	19.00	19.00	22.00			
	802.11n-HT40 MCS0	38	5190	16.00	16.00	19.00			
		46	5230	19.50	20.00	22.80			
	802.11ac-VHT20 MCS0	36	5180	18.50	18.50	21.50			
		40	5200	19.00	19.00	22.00			
44		5220	19.50	20.00	22.80				
48		5240	19.00	19.00	22.00				
802.11ac-VHT40 MCS0	38	5190	16.00	16.00	19.00				
	46	5230	19.50	20.00	22.80				
802.11ac-VHT80 MCS0	42	5210	16.00	16.00	19.00				
802.11ax-HE20 MCS0	36	5180	18.50	18.50	21.50				
	40	5200	19.00	19.00	22.00				
	44	5220	19.50	20.00	22.80				
	48	5240	19.00	19.00	22.00				
802.11ax-HE40 MCS0	38	5190	16.50	16.50	19.50				
	46	5230	19.50	20.00	22.80				
802.11ax-HE80 MCS0	42	5210	16.00	16.00	19.00				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	18.00	18.00	21.00			
		56	5280	19.00	19.00	22.00			
		60	5300	19.50	19.50	22.50			
		64	5320	19.00	19.00	22.00			
	802.11n-HT20 MCS0	52	5260	19.00	19.00	22.00			
		56	5280	19.00	19.00	22.00			
		60	5300	19.50	20.00	22.80			
	802.11n-HT40 MCS0	54	5270	19.50	20.00	22.80			
		62	5310	17.00	17.00	20.00			
	802.11ac-VHT20 MCS0	52	5260	19.00	19.00	22.00			
		56	5280	19.00	19.00	22.00			
		60	5300	19.50	20.00	22.80			
802.11ac-VHT40 MCS0	54	5270	19.50	20.00	22.80				
	62	5310	17.00	17.00	20.00				
802.11ac-VHT80 MCS0	58	5290	16.50	16.50	19.50				
802.11ac-VHT160 MCS0	50	5250	13.50	13.50	16.50				
802.11ax-HE20 MCS0	52	5260	19.00	19.00	22.00				
	56	5280	19.00	19.00	22.00				
	60	5300	19.50	20.00	22.80				
	64	5320	19.00	19.00	22.00				
802.11ax-HE40 MCS0	54	5270	19.50	20.00	22.80				
	62	5310	17.00	17.00	20.00				
802.11ax-HE80 MCS0	58	5290	16.50	16.50	19.50				
802.11ax-HE160 MCS0	50	5250	13.50	13.50	16.50				



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.00	16.00	19.00			
		116	5580	16.00	16.00	19.00			
		124	5620	15.00	15.00	18.00			
		132	5660	16.00	16.00	19.00			
		144	5720	15.50	15.50	18.50			
	802.11n-HT20 MCS0	100	5500	16.00	16.00	19.00			
		116	5580	16.50	16.50	19.50			
		124	5620	16.00	16.00	19.00			
		132	5660	16.50	16.50	19.50			
	802.11n-HT40 MCS0	102	5510	17.00	17.00	20.00			
		110	5550	16.50	16.50	19.50			
		126	5630	17.00	17.00	20.00			
		134	5670	19.50	19.50	22.50			
	802.11ac-VHT20 MCS0	100	5500	16.00	16.00	19.00			
		116	5580	16.50	16.50	19.50			
		124	5620	16.00	16.00	19.00			
		132	5660	16.50	16.50	19.50			
	802.11ac-VHT40 MCS0	102	5510	17.00	17.00	20.00			
		110	5550	16.50	16.50	19.50			
		126	5630	17.00	17.00	20.00			
134		5670	19.50	19.50	22.50				
802.11ac-VHT80 MCS0	106	5530	17.00	17.00	20.00				
	122	5610	19.00	19.00	22.00				
	138	5690	18.50	18.50	21.50				
	802.11ac-VHT160 MCS0	114	5570	14.50	14.50	17.50			
802.11ax-HE20 MCS0	100	5500	16.00	16.00	19.00				
	116	5580	16.50	16.50	19.50				
	124	5620	16.00	16.00	19.00				
	132	5660	16.50	16.50	19.50				
	144	5720	16.00	16.00	19.00				
802.11ax-HE40 MCS0	102	5510	17.00	17.00	20.00				
	110	5550	16.50	16.50	19.50				
	126	5630	17.00	17.00	20.00				
	134	5670	19.50	19.50	22.50				
802.11ax-HE80 MCS0	106	5530	17.00	17.00	20.00				
	122	5610	19.00	19.00	22.00				
	138	5690	18.50	18.50	21.50				
	802.11ax-HE160 MCS0	114	5570	14.50	14.50	17.50			



Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
	802.11n-HT20 MCS0	149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
	802.11n-HT40 MCS0	151	5755	18.50	18.50	21.50			
		159	5795	18.50	18.50	21.50			
	802.11ac-VHT20 MCS0	149	5745	16.00	16.00	19.00			
		157	5785	16.00	16.00	19.00			
		165	5825	17.50	17.50	20.50			
	802.11ac-VHT40 MCS0	151	5755	18.50	18.50	21.50			
159		5795	18.50	18.50	21.50				
802.11ac-VHT80 MCS0	155	5775	20.00	20.00	23.00				
802.11ax-HE20 MCS0	149	5745	16.00	16.00	19.00				
	157	5785	16.00	16.00	19.00				
	165	5825	17.50	17.50	20.50				
802.11ax-HE40 MCS0	151	5755	18.50	18.50	21.50				
	159	5795	18.50	18.50	21.50				
802.11ax-HE80 MCS0	155	5775	20.00	20.00	23.00				

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
5.9GHz WLAN	802.11a 6Mbps	169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	16.00	16.00	19.00			
	802.11n-HT20 MCS0	169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	17.50	17.50	20.50			
	802.11n-HT40 MCS0	167	5835	18.50	18.50	21.50			
		175	5875	18.50	18.50	21.50			
	802.11ac-VHT20 MCS0	169	5845	17.00	17.00	20.00			
		173	5865	17.00	17.00	20.00			
		177	5885	17.50	17.50	20.50			
	802.11ac-VHT40 MCS0	167	5835	18.50	18.50	21.50			
175		5875	18.50	18.50	21.50				
802.11ac-VHT80 MCS0	171	5855	20.00	20.00	23.00				
802.11ac-VHT160 MCS0	163	5815	20.00	20.00	23.00				
802.11ax-HE20 MCS0	169	5845	17.00	17.00	20.00				
	173	5865	17.00	17.00	20.00				
	177	5885	17.50	17.50	20.50				
802.11ax-HE40 MCS0	167	5835	18.50	18.50	21.50				
	175	5875	18.50	18.50	21.50				
802.11ax-HE80 MCS0	171	5855	20.00	20.00	23.00				
802.11ax-HE160 MCS0	163	5815	20.00	20.00	23.00				



<Maximum Power - Power Index 0>

Standard Power client (SP)

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	20.50	20.50	23.50	20.50	20.50	23.50
		57	6235	20.00	20.00	23.00	20.00	20.00	23.00
		113	6515						
		173	6815	20.50	20.50	23.50	20.50	20.50	23.50
		233	7115						
	802.11ax-HE20 MCS0	1	5955	19.50	19.50	22.50	19.50	19.50	22.50
		57	6235	19.50	19.50	22.50	19.50	19.50	22.50
		113	6515						
		173	6815	20.00	20.00	23.00	20.00	20.00	23.00
		233	7115						
	802.11ax-HE40 MCS0	3	5965	20.00	20.00	23.00	20.00	20.00	23.00
		59	6245	19.50	19.50	22.50	19.50	19.50	22.50
		107	6485						
		171	6805	20.00	20.00	23.00	20.00	20.00	23.00
		227	7085						
	802.11ax-HE80 MCS0	7	5985	20.00	20.00	23.00	20.00	20.00	23.00
		71	6305	19.00	19.00	22.00	19.00	19.00	22.00
		119	6545						
		167	6785	19.50	19.50	22.50	19.50	19.50	22.50
		215	7025						
802.11ax- HE160 MCS0	15	6025	19.00	19.00	22.00	19.00	19.00	22.00	
	47	6185	18.00	18.00	21.00	18.00	18.00	21.00	
	111	6505							
	143	6665	19.00	19.00	22.00	19.00	19.00	22.00	
	207	6985							



<Power Index 1> Non-RSDB / RSDB

Standard Power client (SP)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4			Ant 3+4			
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955				17.50	17.50	20.50
		57	6235				17.50	17.50	20.50
		113	6515						
		173	6815				20.50	20.50	23.50
	802.11ax-HE20 MCS0	1	5955				17.50	17.50	20.50
		57	6235				17.50	17.50	20.50
		113	6515						
		173	6815				20.00	20.00	23.00
	802.11ax-HE40 MCS0	3	5965				17.50	17.50	20.50
		59	6245				17.50	17.50	20.50
		107	6485						
		171	6805				20.00	20.00	23.00
	802.11ax-HE80 MCS0	7	5985				17.50	17.50	20.50
		71	6305				17.50	17.50	20.50
		119	6545						
		167	6785				19.50	19.50	22.50
	802.11ax- HE160 MCS0	15	6025				17.50	17.50	20.50
		47	6185				17.50	17.50	20.50
		111	6505						
		143	6665				19.00	19.00	22.00
		207	6985						



<Power Index 2 / Power Index 3 / Power Index 4> Non-RSDB / RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955				20.50	20.50	23.50
		57	6235				20.00	20.00	23.00
		113	6515						
		173	6815				20.50	20.50	23.50
		233	7115						
	802.11ax-HE20 MCS0	1	5955				19.50	19.50	22.50
		57	6235				19.50	19.50	22.50
		113	6515						
		173	6815				20.00	20.00	23.00
		233	7115						
	802.11ax-HE40 MCS0	3	5965				20.00	20.00	23.00
		59	6245				19.50	19.50	22.50
		107	6485						
		171	6805				20.00	20.00	23.00
	802.11ax-HE80 MCS0	227	7085						
		7	5985				20.00	20.00	23.00
		71	6305				19.00	19.00	22.00
		119	6545						
	802.11ax- HE160 MCS0	167	6785				19.50	19.50	22.50
		215	7025						
15		6025				19.00	19.00	22.00	
47		6185				18.00	18.00	21.00	
111		6505							
	143	6665				19.00	19.00	22.00	
	207	6985							



<Power Index 5> Non-RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955				20.50	20.50	23.50
		57	6235				20.00	20.00	23.00
		113	6515						
		173	6815				20.50	20.50	23.50
		233	7115						
	802.11ax-HE20 MCS0	1	5955				19.50	19.50	22.50
		57	6235				19.50	19.50	22.50
		113	6515						
		173	6815				20.00	20.00	23.00
		233	7115						
	802.11ax-HE40 MCS0	3	5965				20.00	20.00	23.00
		59	6245				19.50	19.50	22.50
		107	6485						
		171	6805				20.00	20.00	23.00
	802.11ax-HE80 MCS0	227	7085						
		7	5985				20.00	20.00	23.00
		71	6305				19.00	19.00	22.00
		119	6545						
	802.11ax- HE160 MCS0	167	6785				19.50	19.50	22.50
		215	7025						
15		6025				19.00	19.00	22.00	
47		6185				18.00	18.00	21.00	
111		6505							
	143	6665				19.00	19.00	22.00	
	207	6985							



<Power Index 6> Non-RSDB / RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO						
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	11.00	13.00	15.10			
		57	6235	9.00	11.00	13.10			
		113	6515						
		173	6815	11.50	13.50	15.60			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	11.00	13.00	15.10			
		57	6235	9.00	11.00	13.10			
		113	6515						
		173	6815	11.50	13.50	15.60			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	11.00	13.00	15.10			
		59	6245	9.00	11.00	13.10			
		107	6485						
		171	6805	11.50	13.50	15.60			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	11.00	13.00	15.10			
		71	6305	9.00	11.00	13.10			
		119	6545						
		167	6785	11.50	13.50	15.60			
		215	7025						
802.11ax- HE160 MCS0	15	6025	11.00	13.00	15.10				
	47	6185	9.00	11.00	13.10				
	111	6505							
	143	6665	11.50	13.50	15.60				
	207	6985							



<Power Index 7> Non-RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	17.50	18.50	21.00			
		57	6235	15.50	17.00	19.30			
		113	6515						
		173	6815	18.50	18.50	21.50			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	17.50	18.50	21.00			
		57	6235	15.50	17.00	19.30			
		113	6515						
		173	6815	18.50	18.50	21.50			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	17.50	18.50	21.00			
		59	6245	15.50	17.00	19.30			
		107	6485						
		171	6805	18.50	18.50	21.50			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	17.50	18.50	21.00			
		71	6305	15.50	17.00	19.30			
		119	6545						
		167	6785	18.50	18.50	21.50			
		215	7025						
802.11ax- HE160 MCS0	15	6025	17.50	18.50	21.00				
	47	6185	15.50	17.00	19.30				
	111	6505							
	143	6665	18.50	18.50	21.50				
	207	6985							



<Power Index 7> RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	16.00	18.00	21.00			
		57	6235	14.00	16.00	19.30			
		113	6515						
		173	6815	17.00	18.50	21.50			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	16.00	18.00	21.00			
		57	6235	14.00	16.00	19.30			
		113	6515						
		173	6815	17.00	18.50	21.50			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	16.00	18.00	21.00			
		59	6245	14.00	16.00	19.30			
		107	6485						
		171	6805	17.00	18.50	21.50			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	16.00	18.00	21.00			
		71	6305	14.00	16.00	19.30			
		119	6545						
		167	6785	17.00	18.50	21.50			
		215	7025						
802.11ax- HE160 MCS0	15	6025	16.00	18.00	21.00				
	47	6185	14.00	16.00	19.30				
	111	6505							
	143	6665	17.00	18.50	21.50				
	207	6985							



<Power Index 8> Non-RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	13.50	13.50	16.50			
		57	6235	13.00	13.00	16.00			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	13.50	13.50	16.50			
		57	6235	13.00	13.00	16.00			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	13.50	13.50	16.50			
		59	6245	13.00	13.00	16.00			
		107	6485						
		171	6805	11.50	11.50	14.50			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	13.50	13.50	16.50			
		71	6305	13.00	13.00	16.00			
		119	6545						
		167	6785	11.50	11.50	14.50			
		215	7025						
802.11ax- HE160 MCS0	15	6025	13.50	13.50	16.50				
	47	6185	13.00	13.00	16.00				
	111	6505							
	143	6665	11.50	11.50	14.50				
	207	6985							



<Power Index 8> RSDB

Standard Power client (SP)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	13.00	13.00	16.00			
		57	6235	12.50	12.50	15.50			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	13.00	13.00	16.00			
		57	6235	12.50	12.50	15.50			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	13.00	13.00	16.00			
		59	6245	12.50	12.50	15.50			
		107	6485						
		171	6805	11.50	11.50	14.50			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	13.00	13.00	16.00			
		71	6305	12.50	12.50	15.50			
		119	6545						
		167	6785	11.50	11.50	14.50			
		215	7025						
802.11ax- HE160 MCS0	15	6025	13.00	13.00	16.00				
	47	6185	12.50	12.50	15.50				
	111	6505							
	143	6665	11.50	11.50	14.50				
	207	6985							



<Power Index 9> Non-RSDB / RSDB

Standard Power client (SP)

<6GHz WLAN>

Device mode				Burst Average Power (dBm)					
Transmit Antenna				Open mode			Closed mode		
Mode	Channel	Frequency (MHz)	MIMO			MIMO			
			Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	Ant 3+4(3) Tune-Up Limit	Ant 3+4(4) Tune-Up Limit	Ant 3+4 Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	13.50	13.50	16.50			
		57	6235	13.00	13.00	16.00			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	13.50	13.50	16.50			
		57	6235	13.00	13.00	16.00			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	13.50	13.50	16.50			
		59	6245	13.00	13.00	16.00			
		107	6485						
		171	6805	11.50	11.50	14.50			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	13.50	13.50	16.50			
		71	6305	13.00	13.00	16.00			
		119	6545						
		167	6785	11.50	11.50	14.50			
		215	7025						
802.11ax- HE160 MCS0	15	6025	13.50	13.50	16.50				
	47	6185	13.00	13.00	16.00				
	111	6505							
	143	6665	11.50	11.50	14.50				
	207	6985							

<Index 10> Non-RSDB

Standard Power client (SP)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	13.50	13.50	16.50			
		57	6235	13.00	13.00	16.00			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE20 MCS0	1	5955	13.50	13.50	16.50			
		57	6235	13.00	13.00	16.00			
		113	6515						
		173	6815	11.50	11.50	14.50			
		233	7115						
	802.11ax-HE40 MCS0	3	5965	13.50	13.50	16.50			
		59	6245	13.00	13.00	16.00			
		107	6485						
		171	6805	11.50	11.50	14.50			
		227	7085						
	802.11ax-HE80 MCS0	7	5985	13.50	13.50	16.50			
		71	6305	13.00	13.00	16.00			
		119	6545						
		167	6785	11.50	11.50	14.50			
		215	7025						
802.11ax- HE160 MCS0	15	6025	13.50	13.50	16.50				
	47	6185	13.00	13.00	16.00				
	111	6505							
	143	6665	11.50	11.50	14.50				
	207	6985							



<Maximum Power - Power Index 0>

Low Power Indoor (LPI)

				Burst Average Power (dBm)								
Device mode				Open mode			Closed mode					
Transmit Antenna				MIMO			MIMO					
Mode	Channel	Frequency (MHz)	Ant 3+4(3)			Ant 3+4(4)			Ant 3+4			
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50	5.50	5.50	8.50	5.50	5.50	8.50
		57	6235	5.50	5.50	8.50	5.50	5.50	8.50	5.50	5.50	8.50
		113	6515	6.00	6.00	9.00	6.00	6.00	9.00	6.00	6.00	9.00
		173	6815	7.00	7.00	10.00	7.00	7.00	10.00	7.00	7.00	10.00
		233	7115	7.00	7.00	10.00	7.00	7.00	10.00	7.00	7.00	10.00
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50	6.50	6.50	9.50	6.50	6.50	9.50
		57	6235	5.50	5.50	8.50	5.50	5.50	8.50	5.50	5.50	8.50
		113	6515	6.50	6.50	9.50	6.50	6.50	9.50	6.50	6.50	9.50
		173	6815	7.00	7.00	10.00	7.00	7.00	10.00	7.00	7.00	10.00
		233	7115	9.00	9.00	12.00	9.00	9.00	12.00	9.00	9.00	12.00
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50	9.50	9.50	12.50	9.50	9.50	12.50
		59	6245	9.00	9.00	12.00	9.00	9.00	12.00	9.00	9.00	12.00
		107	6485	10.00	10.00	13.00	10.00	10.00	13.00	10.00	10.00	13.00
		171	6805	10.50	10.50	13.50	10.50	10.50	13.50	10.50	10.50	13.50
		227	7085	12.50	12.50	15.50	12.50	12.50	15.50	12.50	12.50	15.50
	802.11ax-HE80 MCS0	7	5985	11.50	11.50	14.50	11.50	11.50	14.50	11.50	11.50	14.50
		71	6305	11.50	11.50	14.50	11.50	11.50	14.50	11.50	11.50	14.50
		119	6545	13.00	13.00	16.00	13.00	13.00	16.00	13.00	13.00	16.00
		167	6785	13.00	13.00	16.00	13.00	13.00	16.00	13.00	13.00	16.00
		215	7025	13.50	13.50	16.50	13.50	13.50	16.50	13.50	13.50	16.50
802.11ax- HE160 MCS0	15	6025	14.50	14.50	17.50	14.50	14.50	17.50	14.50	14.50	17.50	
	47	6185	14.50	14.50	17.50	14.50	14.50	17.50	14.50	14.50	17.50	
	111	6505	16.00	16.00	19.00	16.00	16.00	19.00	16.00	16.00	19.00	
	143	6665	15.50	15.50	18.50	15.50	15.50	18.50	15.50	15.50	18.50	
	207	6985	16.00	16.00	19.00	16.00	16.00	19.00	16.00	16.00	19.00	



<Power Index 1 / Power Index 2 / Power Index 3 / Power Index 4> Non-RSDB / RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955				5.50	5.50	8.50
		57	6235				5.50	5.50	8.50
		113	6515				6.00	6.00	9.00
		173	6815				7.00	7.00	10.00
	802.11ax-HE20 MCS0	233	7115				7.00	7.00	10.00
		1	5955				6.50	6.50	9.50
		57	6235				5.50	5.50	8.50
		113	6515				6.50	6.50	9.50
	802.11ax-HE40 MCS0	173	6815				7.00	7.00	10.00
		233	7115				9.00	9.00	12.00
		3	5965				9.50	9.50	12.50
		59	6245				9.00	9.00	12.00
	802.11ax-HE80 MCS0	107	6485				10.00	10.00	13.00
		171	6805				10.50	10.50	13.50
		227	7085				12.50	12.50	15.50
		7	5985				11.50	11.50	14.50
	802.11ax-HE160 MCS0	71	6305				11.50	11.50	14.50
		119	6545				13.00	13.00	16.00
		167	6785				13.00	13.00	16.00
		215	7025				13.50	13.50	16.50
802.11ax-HE160 MCS0	15	6025				14.50	14.50	17.50	
	47	6185				14.50	14.50	17.50	
	111	6505				16.00	16.00	19.00	
	143	6665				15.50	15.50	18.50	
		207	6985				16.00	16.00	19.00



<Power Index 5> Non-RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955				5.50	5.50	8.50
		57	6235				5.50	5.50	8.50
		113	6515				6.00	6.00	9.00
		173	6815				7.00	7.00	10.00
		233	7115				7.00	7.00	10.00
	802.11ax-HE20 MCS0	1	5955				6.50	6.50	9.50
		57	6235				5.50	5.50	8.50
		113	6515				6.50	6.50	9.50
		173	6815				7.00	7.00	10.00
		233	7115				9.00	9.00	12.00
	802.11ax-HE40 MCS0	3	5965				9.50	9.50	12.50
		59	6245				9.00	9.00	12.00
		107	6485				10.00	10.00	13.00
		171	6805				10.50	10.50	13.50
		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				13.00	13.00	16.00
		167	6785				13.00	13.00	16.00
		215	7025				13.50	13.50	16.50
802.11ax- HE160 MCS0	15	6025				14.50	14.50	17.50	
	47	6185				14.50	14.50	17.50	
	111	6505				16.00	16.00	19.00	
	143	6665				15.50	15.50	18.50	
	207	6985				16.00	16.00	19.00	



<Power Index 6> Non-RSDB / RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	8.50	9.00	11.80			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		227	7085	8.50	9.00	11.80			
	802.11ax-HE80 MCS0	7	5985	11.00	11.50	14.30			
		71	6305	9.00	11.00	13.10			
		119	6545	11.00	13.00	15.10			
		167	6785	11.50	13.00	15.30			
		215	7025	8.50	9.00	11.80			
802.11ax- HE160 MCS0	15	6025	11.00	13.00	15.10				
	47	6185	9.00	11.00	13.10				
	111	6505	11.00	13.00	15.10				
	143	6665	11.50	13.50	15.60				
	207	6985	8.50	9.00	11.80				



<Power Index 7> Non-RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	9.00	9.00	12.00			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		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	13.00	13.00	16.00			
		167	6785	13.00	13.00	16.00			
		215	7025	13.50	13.50	16.50			
802.11ax- HE160 MCS0	15	6025	14.50	14.50	17.50				
	47	6185	14.50	14.50	17.50				
	111	6505	16.00	16.00	19.00				
	143	6665	15.50	15.50	18.50				
	207	6985	16.00	16.00	19.00				



<Power Index 7> RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

Burst Average Power (dBm)									
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	9.00	9.00	12.00			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		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	13.00	13.00	16.00			
		167	6785	13.00	13.00	16.00			
		215	7025	13.50	13.50	16.50			
802.11ax- HE160 MCS0	15	6025	14.50	14.50	17.50				
	47	6185	13.00	14.50	17.50				
	111	6505	16.00	16.00	19.00				
	143	6665	15.50	15.50	18.50				
	207	6985	15.50	16.00	19.00				



<Power Index 8> Non-RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	9.00	9.00	12.00			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		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	11.50	11.50	14.50			
		167	6785	11.50	11.50	14.50			
		215	7025	13.00	13.00	16.00			
802.11ax- HE160 MCS0	15	6025	13.50	13.50	16.50				
	47	6185	13.00	13.00	16.00				
	111	6505	11.50	11.50	14.50				
	143	6665	11.50	11.50	14.50				
	207	6985	13.00	13.00	16.00				



<Power Index 8> RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	9.00	9.00	12.00			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		227	7085	11.50	11.50	14.50			
	802.11ax-HE80 MCS0	7	5985	11.50	11.50	14.50			
		71	6305	11.50	11.50	14.50			
		119	6545	11.50	11.50	14.50			
		167	6785	11.50	11.50	14.50			
		215	7025	11.50	11.50	14.50			
802.11ax- HE160 MCS0	15	6025	13.00	13.00	16.00				
	47	6185	12.50	12.50	15.50				
	111	6505	11.50	11.50	14.50				
	143	6665	11.50	11.50	14.50				
	207	6985	11.50	11.50	14.50				



<Power Index 9> Non-RSDB / RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	9.00	9.00	12.00			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		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	11.50	11.50	14.50			
		167	6785	11.50	11.50	14.50			
		215	7025	13.00	13.00	16.00			
802.11ax- HE160 MCS0	15	6025	13.50	13.50	16.50				
	47	6185	13.00	13.00	16.00				
	111	6505	11.50	11.50	14.50				
	143	6665	11.50	11.50	14.50				
	207	6985	13.00	13.00	16.00				



<Power Index 10> Non-RSDB

Low Power Indoor (LPI)

<6GHz WLAN>

				Burst Average Power (dBm)					
Device mode				Open mode			Closed mode		
Transmit Antenna				MIMO			MIMO		
Mode	Channel	Frequency (MHz)	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
			Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	Tune-Up Limit	
WiFi 6E	802.11a 6Mbps	1	5955	5.50	5.50	8.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.00	6.00	9.00			
		173	6815	7.00	7.00	10.00			
		233	7115	7.00	7.00	10.00			
	802.11ax-HE20 MCS0	1	5955	6.50	6.50	9.50			
		57	6235	5.50	5.50	8.50			
		113	6515	6.50	6.50	9.50			
		173	6815	7.00	7.00	10.00			
		233	7115	9.00	9.00	12.00			
	802.11ax-HE40 MCS0	3	5965	9.50	9.50	12.50			
		59	6245	9.00	9.00	12.00			
		107	6485	10.00	10.00	13.00			
		171	6805	10.50	10.50	13.50			
		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	11.50	11.50	14.50			
		167	6785	11.50	11.50	14.50			
		215	7025	13.00	13.00	16.00			
802.11ax- HE160 MCS0	15	6025	13.50	13.50	16.50				
	47	6185	13.00	13.00	16.00				
	111	6505	11.50	11.50	14.50				
	143	6665	11.50	11.50	14.50				
	207	6985	13.00	13.00	16.00				



<Bluetooth Maximum Power>

General Note:

1. The device implements the power management for Bluetooth SAR compliance for different exposure conditions and user cases. In each exposure condition, the power index selection is determined by the user cases as tested in Section 15 of this report. Full details about the proprietary power management decision are illustrated in the operational description
2. 3+4(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3.
3. 3+4(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4.

<Maximum Power – Power Index 0>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21.00	18.50	17.50	21.00	21.00	21.00	18.50	17.50	21.00	21.00

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21.00	18.50	17.00	21.00	21.00	21.00	18.50	17.00	21.00	21.00

Burst Average Power (dBm)																					
Device mode		Open mode									Closed mode										
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps				
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
		Tune-up Limit	18.00	18.00	21.00	15.00	15.00	18.00	15.00	15.00	18.00	18.00	18.00	21.00	15.00	15.00	18.00	15.00	15.00	18.00	15.00

Burst Average Power (dBm)													
Device mode		Open mode						Closed mode					
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	19.50	19.50	22.50	21.00	21.00	24.00	19.50	19.50	22.50	21.00	21.00



<Power Index 1>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						16.50	16.50	16.50	16.50	16.50

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						21.00	18.50	17.00	21.00	21.00

Burst Average Power (dBm)																				
Device mode		Open mode									Closed mode									
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps			
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
Tune-up Limit											16.00	18.00	20.10	15.00	15.00	18.00	15.00	15.00	18.00	

Burst Average Power (dBm)															
Device mode		Open mode						Closed mode							
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps				
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
Tune-up Limit										16.00	18.00	20.10	16.00	18.00	20.10

<Power Index 2>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						15.50	15.50	15.50	15.50	15.50

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						18.00	18.00	17.00	18.00	18.00

Burst Average Power (dBm)																				
Device mode		Open mode									Closed mode									
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps			
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	
Tune-up Limit											15.50	18.00	19.90	15.00	18.00	19.80	15.00	18.00	19.80	

Burst Average Power (dBm)															
Device mode		Open mode						Closed mode							
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps				
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
Tune-up Limit										15.50	15.50	18.50	15.50	18.00	19.90



<Power Index 3>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						18.50	18.50	17.50	18.50	18.50

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						20.00	18.50	17.00	20.00	20.00

Burst Average Power (dBm)																			
Device mode		Open mode									Closed mode								
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
Tune-up Limit											18.00	18.00	21.00	15.00	15.00	18.00	15.00	15.00	18.00

Burst Average Power (dBm)															
Device mode		Open mode						Closed mode							
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps				
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
Tune-up Limit										18.00	18.00	21.00	18.00	18.00	21.00

<Power Index 4>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						21.00	18.50	17.50	21.00	21.00

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit						21.00	18.50	17.00	21.00	21.00

Burst Average Power (dBm)																			
Device mode		Open mode									Closed mode								
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
Tune-up Limit											18.00	18.00	21.00	15.00	15.00	18.00	15.00	15.00	18.00

Burst Average Power (dBm)															
Device mode		Open mode						Closed mode							
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps				
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4		
Tune-up Limit										18.00	18.00	21.00	18.00	18.00	21.00



<Power Index 5>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	8.50	8.50	8.50	8.50	8.50					

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	13.50	13.50	13.50	13.50	13.50					

Burst Average Power (dBm)																			
Device mode		Open mode									Closed mode								
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	8.50	13.50	14.70	8.50	13.50	14.70	8.50	13.50	14.70								

Burst Average Power (dBm)													
Device mode		Open mode						Closed mode					
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	8.50	13.50	14.70	8.50	13.50	14.70					

<Power Index 6>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	14.00	14.00	14.00	14.00	14.00					

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	15.00	15.00	15.00	15.00	15.00					

Burst Average Power (dBm)																			
Device mode		Open mode									Closed mode								
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	13.50	13.50	16.50	13.50	13.50	16.50	13.50	13.50	16.50								

Burst Average Power (dBm)													
Device mode		Open mode						Closed mode					
Mode	LE	1Mbps			2Mbps			1Mbps			2Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	13.50	13.50	16.50	13.50	13.50	16.50					



<Power Index 7>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18.00	18.00	17.50	18.00	18.00					

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	18.00	18.00	17.00	18.00	18.00					

Burst Average Power (dBm)																			
Device mode		Open mode									Closed mode								
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	18.00	18.00	21.00	15.00	15.00	18.00	15.00	15.00	18.00								

Burst Average Power (dBm)													
Device mode		Open mode					Closed mode						
Mode	LE	1Mbps			2Mbps		1Mbps			2Mbps			
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	18.00	18.00	21.00	18.00	18.00	21.00					

<Power Index 8>

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 3			Ant 3		Ant 3			Ant 3	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21.00	18.50	17.50	21.00	21.00					

Burst Average Power (dBm)										
Device mode	Open mode					Closed mode				
Mode	Ant 4			Ant 4		Ant 4			Ant 4	
	BR / EDR			LE		BR / EDR			LE	
	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps	1Mbps	2Mbps	3Mbps	1Mbps	2Mbps
Tune-up Limit	21.00	18.50	17.00	21.00	21.00					

Burst Average Power (dBm)																			
Device mode		Open mode									Closed mode								
Mode	BR / EDR	1Mbps			2Mbps			3Mbps			1Mbps			2Mbps			3Mbps		
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	18.00	18.00	21.00	15.00	15.00	18.00	15.00	15.00	18.00								

Burst Average Power (dBm)													
Device mode		Open mode					Closed mode						
Mode	LE	1Mbps			2Mbps		1Mbps			2Mbps			
		Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4	Ant 3+4(3)	Ant 3+4(4)	Ant 3+4
		Tune-up Limit	18.00	18.00	21.00	18.00	18.00	21.00					



2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05																																																															
FCC ID	A4RG9FPL																																																														
Equipment Name	Phone																																																														
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz																																																														
Channel Bandwidth	LTE Band 2: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12: 1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 71: 5MHz, 10MHz, 15MHz, 20MHz																																																														
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM																																																														
LTE Voice / Data requirements	Voice and Data																																																														
LTE MPR permanently built-in by design	<p>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3</p> <table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>	Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3	256 QAM	≥ 1						≤ 5
Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)																																																								
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																																									
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																																								
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																																								
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																																								
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2																																																								
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3																																																								
256 QAM	≥ 1						≤ 5																																																								
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)																																																														
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																														
Power reduction applied to satisfy SAR compliance	The device has several different power modes for each exposure conditions SAR compliance; power selection is determined by the device's positioning and usage scenarios. Detail refer to operational description.																																																														
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 13.																																																														
LTE Carrier Aggregation Additional Information	This device supports maximum of 6 carriers in the downlink and 2 carriers in the uplink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.																																																														



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



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



2.4 General 5G NR SAR Test and Reporting Considerations

5G NR Information								
FCC ID	A4RG9FPL							
Equipment Name	Phone							
Operating Frequency Range of each 5G NR transmission band	5G NR n2: 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n30: 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n71: 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz							
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz, 50MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n14: 5MHz, 10MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz 30MHz, 40MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 15MHz, 20MHz 5G NR n41: 10MHz, 15MHz, 20MHz, 30MHz, 40MHz, 50MHz, 60MHz,70MHz, 80MHz, 90MHz, 100MHz 5G NR n48: 10MHz, 15MHz, 20MHz, 40MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25MHz, 30MHz, 40MHz 5G NR n71: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n77: 10MHz, 15MHz, 20MHz, 25 MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz							
SCS	FDD: SCS15KHz, TDD: SCS30KHz							
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM							
A-MPR (Additional MPR) disabled for SAR Testing?	Yes							
LTE Anchor Bands for n2	LTE B2/4/5/7/12/13/14/30/48/66/71							
LTE Anchor Bands for n5	LTE B2/7/30/48/66							
LTE Anchor Bands for n7	LTE B2/5/12/13/66/71							
LTE Anchor Bands for n12	LTE B2/7/66							
LTE Anchor Bands for n25	LTE B2/12/13/26/48/66							
LTE Anchor Bands for n30	LTE B2/5/12/14/66							
LTE Anchor Bands for n38	LTE B2/4/5/12/66/71							
LTE Anchor Bands for n41	LTE B2/4/5/12/25/26/66/71							
LTE Anchor Bands for n48	LTE B2/66							
LTE Anchor Bands for n66	LTE B2/5/7/12/13/14/25/30/48/66/71							
LTE Anchor Bands for n71	LTE B2/7/66							
LTE Anchor Bands for n77	LTE B2/5/7/12/13/14/25/26/30/41/66							
NR Band 2								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900
NR Band 5								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839



NR Band 7																						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz							
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)						
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510	502500	2512.5	503000	2515	504000	2520	505000	2525						
M	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535	507000	2535						
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560	511500	2557.5	511000	2555	510000	2550	509000	2545						
NR Band 12																						
	Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 15MHz													
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)							
L	140300		701.5		140800		704		141300		706.5											
M	141500		707.5		141500		707.5		141500		707.5											
H	142700		713.5		142200		711		141700		708.5											
NR Band 14																						
	Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 10MHz													
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)							
L	158100		790.5						158600		793											
M	158600		793																			
H	159100		795.5																			
NR Band 25																						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz									
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)						
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865	374000	1870								
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5								
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900	379000	1895								
NR Band 30																						
	Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 10MHz													
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)							
L	461500		2307.5						462000		2310											
M	462000		2310																			
H	462500		2312.5																			
NR Band 38																						
	Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz													
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)							
L	515004		2575.02		515502		2577.51		516000		2580											
M	519000		2595		519000		2595		519000		2595											
H	522996		2614.98		522498		2612.49		522000		2610											
NR Band 41																						
	Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth 100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500202	2501.01	500700	2503.5	501204	2506.02	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
H	537000	2685	536496	2682.48	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640
NR Band 48																						
	Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz				Bandwidth 40MHz									
	Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)							
L	637000		3555		637168		3557.52		637334		3560.01		638000		3570							
M	641666		3624.99		641666		3624.99		641666		3624.99		641666		3624.99							
H	646332		3694.98		646166		3692.49		646000		3690		645332		3679.98							
NR Band 66																						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz		Bandwidth 40MHz									
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)						
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725	346000	1730								
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745								
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765	352000	1760								



NR Band 71																								
Bandwidth 5MHz				Bandwidth 10MHz				Bandwidth 15MHz				Bandwidth 20MHz												
Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)										
L	133100		665.5		133600		668		13410		670.5		134600		673									
M	136100		680.5		136100		680.5		136100		680.5		136100		680.5									
H	139100		695.5		138600		693		13810		690.5		137600		688									
NR Band 77																								
Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz		
Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		
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	3967.50	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930
NR Band 77(3450MHz ~ 3550MHz)																								
Bandwidth10MHz		Bandwidth15MHz		Bandwidth 20MHz		Bandwidth25MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz		
Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		Ch. #		Freq. (MHz)		
L	630334	3455.01	630500	3457.5	630668	3460.02	630834	3462.51	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495		
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
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		



2.5 Sensor Triggering angle and power verification

General Note:

- The following guidance should be applied to device that use Hall Effect or gravity sensors to detect lid angle for the purpose of power reduction:
 Step 1: With the lid is in closed mode (0 degrees), open the screen in 10 degree steps until laptop mode is obtained
 Step 2: Lower the screen 5 degrees. Closed mode should be reobtained. If not keep lowering in 5 degree steps
 Step 3: Open the screen in 1 degree steps until device is reobtained
 Step 4: Continue opening the screen in 1 degree steps until at least 5 degrees past where device was obtained
 Step 5: Then continue opening the screen in 10 degree steps until device is obtained
 Step 6: Power measurements should be taken at each step
 Step 7: Reverse this procedure going from device in open mode back down to device into closed mode
- WLAN and BT function is turned off to associate with body-worn standalone mode, the verification is to observe the power transition between index 3 (close mode) and index 5 (open mode) versus lid angle change
- WWAN function is turned off to associate with body-worn standalone mode, the verification is to observe the power transition between index 3 (close mode) and index 8 (open mode) versus lid angle change

		when the screen angle is from 0 degree to 180 degree																										
Wireless	Band	GSM		WCDMA		4G LTE										5G NR FR1												
		Ant 0	Ant 2	Ant 0	Ant 2	Ant 0					Ant 2					Ant 6	Ant 0					Ant 2					Ant 6	
		GSM850 (4 Tx slots)	GSM1900 (4 Tx slots)	B5	B2	B4	B12/17	B13	B14	B26/5	B71	B7	B25/2	B30	B38/41	B66/4	B48	N5	N12	N14	N71	N7	N25/2	N30	N41/38	N66	N48	N77
Closed mode to open mode	0	29.4	26.1	23.3	20.9	21.0	24.4	24.3	24.4	24.2	24.6	19.3	21.6	19.9	19.6	21.6	24.1	24.6	24.8	24.4	24.6	19.5	21.7	20.3	19.7	21.3	24.5	23.4
	1	29.4	26.1	23.3	20.9	21.0	24.4	24.3	24.4	24.2	24.6	19.3	21.6	19.9	19.6	21.6	24.1	24.6	24.8	24.4	24.6	19.5	21.7	20.3	19.7	21.3	24.5	23.4
	2	29.4	26.1	23.3	20.9	21.0	24.4	24.3	24.4	24.2	24.6	19.3	21.6	19.9	19.6	21.6	24.1	24.6	24.8	24.4	24.6	19.5	21.7	20.3	19.7	21.3	24.5	23.4
	3	29.4	26.1	23.3	20.9	21.0	24.4	24.3	24.4	24.2	24.6	19.3	21.6	19.9	19.6	21.6	24.1	24.6	24.8	24.4	24.6	19.5	21.7	20.3	19.7	21.3	24.5	23.4
	4	29.4	26.1	23.3	20.9	21.0	24.4	24.3	24.4	24.2	24.6	19.3	21.6	19.9	19.6	21.6	24.1	24.6	24.8	24.4	24.6	19.5	21.7	20.3	19.7	21.3	24.5	23.4
	5	29.4	26.1	23.3	20.9	21.0	24.4	24.3	24.4	24.2	24.6	19.3	21.6	19.9	19.6	21.6	24.1	24.6	24.8	24.4	24.6	19.5	21.7	20.3	19.7	21.3	24.5	23.4
	6	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	7	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	8	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	9	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	10	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	20	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	30	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	40	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	50	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	60	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	70	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	80	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	90	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	100	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
110	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
120	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
130	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
140	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
150	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
160	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
170	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
180	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7	
Open mode to closed mode	180	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	170	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	160	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	150	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	140	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	130	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	120	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	110	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	100	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7
	90	27.5	23.7	23.3	20.3	19.4	24.4	24.3	24.4	24.2	24.6	20.1	20.4	20.1	18.8	19.4	19.8	24.6	24.8	24.4	24.6	20.4	20.6	20.3	18.8	20.2	19.9	19.7



Table with 28 columns and 19 rows of SAR test data. Columns represent frequency bands (80-0 MHz) and SAR values (27.5-29.4). Rows represent distance from the device (80-0 cm).

Table with 28 columns and 20 rows of SAR test data. Columns represent frequency bands (GSM, WCDMA, 4G LTE, 5G NR FR1) and SAR values. Rows represent screen angle (0-150 degrees) and mode (Closed/Open mode).



140	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
130	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
120	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
110	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
100	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
90	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
80	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
70	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
60	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
50	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
40	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
30	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
20	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
10	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
9	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
8	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
7	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
6	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
5	29.1	26.2	23.2	22.1	20.6	24.3	24.2	24.3	24.5	24.5	23.6	23.5	21.7	21.5	21.0	18.8	24.4	24.5	24.7	24.4	24.6	23.0	21.0	23.8	21.0	20.1	20.1
4	29.1	26.2	23.2	23.7	21.1	24.3	24.2	24.3	24.5	24.5	24.3	24.3	22.4	24.2	21.7	23.3	24.4	24.5	24.7	24.4	24.6	23.0	21.0	24.0	22.0	24.3	23.6
3	29.1	26.2	23.2	23.7	21.1	24.3	24.2	24.3	24.5	24.5	24.3	24.3	22.4	24.2	21.7	23.3	24.4	24.5	24.7	24.4	24.6	23.0	21.0	24.0	22.0	24.3	23.6
2	29.1	26.2	23.2	23.7	21.1	24.3	24.2	24.3	24.5	24.5	24.3	24.3	22.4	24.2	21.7	23.3	24.4	24.5	24.7	24.4	24.6	23.0	21.0	24.0	22.0	24.3	23.6
1	29.1	26.2	23.2	23.7	21.1	24.3	24.2	24.3	24.5	24.5	24.3	24.3	22.4	24.2	21.7	23.3	24.4	24.5	24.7	24.4	24.6	23.0	21.0	24.0	22.0	24.3	23.6
0	29.1	26.2	23.2	23.7	21.1	24.3	24.2	24.3	24.5	24.5	24.3	24.3	22.4	24.2	21.7	23.3	24.4	24.5	24.7	24.4	24.6	23.0	21.0	24.0	22.0	24.3	23.6

when the screen angle is from 0 degree to 180 degree											
Screen angle (degree) v.s. power	Wireless										
	Band	WLAN Ant 3					WLAN Ant 4				
		2.4GHz WLAN	5.2/5.3GHz WLAN	5.5GHz WLAN	5.8GHz WLAN	6GHz WLAN	2.4GHz WLAN	5.2/5.3GHz WLAN	5.5GHz WLAN	5.8GHz WLAN	6GHz WLAN
Closed mode to open mode	0	19.5	17.5	14.4	14.3	14.5	19.8	17.3	14.4	14.6	14.0
	1	19.5	17.5	14.4	14.3	14.5	19.8	17.3	14.4	14.6	14.0
	2	19.5	17.5	14.4	14.3	14.5	19.8	17.3	14.4	14.6	14.0
	3	19.5	17.5	14.4	14.3	14.5	19.8	17.3	14.4	14.6	14.0
	4	19.5	17.5	14.4	14.3	14.5	19.8	17.3	14.4	14.6	14.0
	5	19.5	17.5	14.4	14.3	14.5	19.8	17.3	14.4	14.6	14.0
	6	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	7	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	8	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	9	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	10	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	20	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	30	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	40	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	50	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	60	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	70	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
80	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
90	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
100	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
110	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
120	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
130	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
140	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
150	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
160	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
170	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	



FCC SAR TEST REPORT

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Open mode to closed mode	180	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	180	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	170	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	160	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	150	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	140	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	130	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	120	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	110	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	100	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	90	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	80	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	70	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	60	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	50	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	40	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	30	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	20	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	10	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
	9	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0
8	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
7	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
6	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
5	18.9	12.6	13.3	13.3	12.9	18.5	16.8	14.4	14.6	12.0	
4	19.5	17.5	14.4	14.3	14.5	18.7	17.3	14.4	14.6	14.0	
3	19.5	17.5	14.4	14.3	14.5	18.7	17.3	14.4	14.6	14.0	
2	19.5	17.5	14.4	14.3	14.5	18.7	17.3	14.4	14.6	14.0	
1	19.5	17.5	14.4	14.3	14.5	18.7	17.3	14.4	14.6	14.0	
0	19.5	17.5	14.4	14.3	14.5	18.7	17.3	14.4	14.6	14.0	



3. TAS feature for RF Exposure compliance

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

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

Pmax	Maximum Tx power that can be transmitted physically from RFIC for a given RAT
SAR_FCC_limit	SAR limit specified by FCC 1.6 W/kg averaged over 1-gram, for head and body exposure, and 4 W/kg averaged over 10-gram, for extremity exposure
PD_FCC_limit	PD limit specified by FCC, 10 W/m ² averaged over 4 cm ²
Plimit	The time-averaged RF power that corresponds to SAR_target or PD_target.



3.1 SAR Characterization – Power Table

General Note:

1. The P_{limit} values correspond to SAR_{design target}.
2. GSM and WCDMA don't support time average feature of dynamic power varying, the power will be fixed at the static reduce power level at different exposure conditions for RF exposure compliance. For the GSM (TDD) P_{limit} power levels in the table correspond to the burst average power levels which don't account for TX duty cycle.

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

Wireless technology/ band (No Accounting duty cycle)	Antenna	Duty cycle	Maximum Power	Closed mode						Open mode						P _{Max} Burst average power (dBm)
				Head		Hotspot	Body-worn		Head		Hotspot	Body-worn/Extremity				
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous			
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7	Index 8	Index 9	Index 10	Index 11		
				P limit						P limit						
Burst average power (dBm)						Burst average power (dBm)										
GSM850 GPRS 1TX	0	12.50%	32.5	39.0	38.2	35.7	38.0	37.2	37.9	37.1	34.2	35.0	34.2	32.5		
GSM850 GPRS 2TX	0	25.00%	31.5	36.0	35.2	32.7	35.0	34.2	34.9	34.1	31.2	32.0	31.2	31.5		
GSM850 GPRS 3TX	0	37.50%	30.0	34.3	33.5	31.0	33.3	32.5	33.2	32.4	29.5	30.3	29.5	30.0		
GSM850 GPRS 4TX	0	50.00%	29.0	33.0	32.2	29.7	32.0	31.2	31.9	31.1	28.2	29.0	28.2	29.0		
GSM850 EDGE 1TX	0	12.50%	27.0	39.0	38.2	35.7	38.0	37.2	37.9	37.1	34.2	35.0	34.2	27.0		
GSM850 EDGE 2TX	0	25.00%	26.5	36.0	35.2	32.7	35.0	34.2	34.9	34.1	31.2	32.0	31.2	26.5		
GSM850 EDGE 3TX	0	37.50%	26.0	34.3	33.5	31.0	33.3	32.5	33.2	32.4	29.5	30.3	29.5	26.0		
GSM850 EDGE 4TX	0	50.00%	24.0	33.0	32.2	29.7	32.0	31.2	31.9	31.1	28.2	29.0	28.2	24.0		
GSM1900 GPRS 1TX	2	12.50%	30.0	40.1	39.3	27.5	33.0	32.2	39.1	38.3	27.9	30.1	29.3	30.0		
GSM1900 GPRS 2TX	2	25.00%	28.5	37.1	36.3	24.5	30.0	29.2	36.1	35.3	24.9	27.1	26.3	28.5		
GSM1900 GPRS 3TX	2	37.50%	27.5	35.4	34.6	22.8	28.3	27.5	34.4	33.6	23.2	25.4	24.6	27.5		
GSM1900 GPRS 4TX	2	50.00%	26.5	34.1	33.3	21.5	27.0	26.2	33.1	32.3	21.9	24.1	23.3	26.5		
GSM1900 EDGE 1TX	2	12.50%	25.0	40.1	39.3	27.5	33.0	32.2	39.1	38.3	27.9	30.1	29.3	25.0		
GSM1900 EDGE 2TX	2	25.00%	24.0	37.1	36.3	24.5	30.0	29.2	36.1	35.3	24.9	27.1	26.3	24.0		
GSM1900 EDGE 3TX	2	37.50%	23.5	35.4	34.6	22.8	28.3	27.5	34.4	33.6	23.2	25.4	24.6	23.5		
GSM1900 EDGE 4TX	2	50.00%	22.5	34.1	33.3	21.5	27.0	26.2	33.1	32.3	21.9	24.1	23.3	22.5		
WCDMA B2	2	100.00%	24.2	30.9	30.1	17.6	21.6	20.8	29.1	28.3	18.6	20.8	20.0	24.2		
WCDMA B4	2	100.00%	24.7	32.4	31.6	18.8	21.3	20.5	28.2	27.4	18.6	19.6	18.8	24.7		
WCDMA B5	0	100.00%	24.0	29.4	28.6	26.2	27.5	26.7	28.1	27.3	24.8	25.6	24.8	24.0		

Wireless technology/ band (No Accounting duty cycle)	Antenna	Duty cycle	Maximum Power	Closed mode						Open mode						P _{Max} Burst average power (dBm)
				Head		Hotspot	Body-worn		Head		Hotspot	Body-worn/Extremity				
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous			
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7	Index 8	Index 9	Index 10	Index 11		
				P limit						P limit						
Burst average power (dBm)						Burst average power (dBm)										
GSM850 GPRS 1TX	1	12.50%	32.5	39.0	38.2	35.7	38.0	37.2	33.3	32.5	36.8	37.6	36.8	32.5		
GSM850 GPRS 2TX	1	25.00%	31.5	36.0	35.2	32.7	35.0	34.2	30.3	29.5	33.8	34.6	33.8	31.5		
GSM850 GPRS 3TX	1	37.50%	30.0	34.3	33.5	31.0	33.3	32.5	28.6	27.8	32.1	32.9	32.1	30.0		
GSM850 GPRS 4TX	1	50.00%	29.0	33.0	32.2	29.7	32.0	31.2	27.3	26.5	30.8	31.6	30.8	29.0		
GSM850 EDGE 1TX	1	12.50%	27.0	39.0	38.2	35.7	38.0	37.2	33.3	32.5	36.8	37.6	36.8	32.5		
GSM850 EDGE 2TX	1	25.00%	26.5	36.0	35.2	32.7	35.0	34.2	30.3	29.5	33.8	34.6	33.8	31.5		
GSM850 EDGE 3TX	1	37.50%	26.0	34.3	33.5	31.0	33.3	32.5	28.6	27.8	32.1	32.9	32.1	30.0		
GSM850 EDGE 4TX	1	50.00%	24.0	33.0	32.2	29.7	32.0	31.2	27.3	26.5	30.8	31.6	30.8	29.0		
GSM1900 GPRS 1TX	0	12.50%	30.0	41.4	40.6	33.2	37.2	36.4	36.0	35.2	31.5	32.3	31.5	30.0		
GSM1900 GPRS 2TX	0	25.00%	28.5	38.4	37.6	30.2	34.2	33.4	33.0	32.2	28.5	29.3	28.5	28.5		
GSM1900 GPRS 3TX	0	37.50%	27.5	36.7	35.9	28.5	32.5	31.7	31.3	30.5	26.8	27.6	26.8	27.5		
GSM1900 GPRS 4TX	0	50.00%	26.5	35.4	34.6	27.2	31.2	30.4	30.0	29.2	25.5	26.3	25.5	26.5		
GSM1900 EDGE 1TX	0	12.50%	25.0	41.4	40.6	33.2	37.2	36.4	36.0	35.2	31.5	32.3	31.5	30.0		
GSM1900 EDGE 2TX	0	25.00%	24.0	38.4	37.6	30.2	34.2	33.4	33.0	32.2	28.5	29.3	28.5	28.5		
GSM1900 EDGE 3TX	0	37.50%	23.5	36.7	35.9	28.5	32.5	31.7	31.3	30.5	26.8	27.6	26.8	27.5		
GSM1900 EDGE 4TX	0	50.00%	22.5	35.4	34.6	27.2	31.2	30.4	30.0	29.2	25.5	26.3	25.5	26.5		
WCDMA B2	0	100.00%	24.2	30.4	29.6	24.9	26.2	25.4	25.8	25.0	20.9	21.7	20.9	24.2		
WCDMA B4	0	100.00%	24.7	30.6	29.8	20.2	21.4	20.6	26.9	26.1	20.1	20.9	20.1	24.7		
WCDMA B5	1	100.00%	24.0	28.3	27.5	27.6	28.4	27.6	22.0	21.2	25.7	26.5	25.7	24.0		



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

Wireless technology/ band (Accounting duty cycle)	Antenna	Duty cycle	Maximum Power	Closed mode						Open mode						PMax Time average power (dBm)
				Head		Hotspot	Body-worn		Head		Hotspot	Body-worn/Extremity				
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous			
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7	Index 8	Index 9	Index 10	Index 11		
				P limit						P limit						
Burst average power (dBm)						Burst average power (dBm)										
LTE B7	2	100.00%	24.7	32.7	31.9	17.5	19.7	18.9	31.7	30.9	17.6	19.3	18.5	24.7		
LTE B12/17	0	100.00%	24.7	31.9	31.1	27.9	28.7	27.9	32.7	31.9	25.8	26.6	25.8	24.7		
LTE B13	0	100.00%	24.7	29.7	28.9	27.0	27.8	27.0	28.6	27.8	25.4	26.2	25.4	24.7		
LTE B14	0	100.00%	24.7	29.6	28.8	26.9	27.7	26.9	28.4	27.6	25.7	26.5	25.7	24.7		
LTE B25/2	2	100.00%	24.7	30.4	29.6	17.9	22.0	21.2	30.1	29.3	18.5	20.7	19.9	24.7		
LTE B26/5	0	100.00%	24.7	29.3	28.5	25.8	27.5	26.7	28.4	27.6	25.8	26.6	25.8	24.7		
LTE B30	2	100.00%	22.7	31.5	30.7	17.1	20.3	19.5	32.9	32.1	18.0	20.5	19.7	22.7		
LTE B41/38 PC3	2	63.30%	22.8	32.9	32.1	17.9	20.1	19.3	32.1	31.3	17.3	19.0	18.2	22.4		
LTE B41/38 PC2	2	43.30%												22.8		
LTE B48 PC3	6	63.30%	22.7	30.9	30.1	24.5	25.3	24.5	27.2	26.4	19.2	20.0	19.2	22.7		
LTE B66/4	2	100.00%	24.7	30.7	29.9	18.5	21.4	20.6	28.4	27.6	18.8	19.6	18.8	24.7		
LTE B71	0	100.00%	24.7	34.9	34.1	28.6	29.4	28.6	31.0	30.2	25.3	26.1	25.3	24.7		
FR1 n5	0	100.00%	24.7	30.0	29.2	26.2	27.8	27.0	29.0	28.2	25.9	26.7	25.9	24.7		
FR1 n7	2	100.00%	24.7	33.2	32.4	17.4	19.6	18.8	33.9	33.1	18.0	20.5	19.7	24.7		
FR1 n12	0	100.00%	24.7	31.8	31.0	27.7	28.5	27.7	30.2	29.4	25.8	26.6	25.8	24.7		
FR1 n14	0	100.00%	24.7	29.4	28.6	26.3	27.1	26.3	28.7	27.9	25.4	26.2	25.4	24.7		
FR1 n25/2	2	100.00%	24.7	30.7	29.9	17.9	22.0	21.2	30.8	30.0	18.7	21.0	20.2	24.7		
FR1 n30	2	100.00%	22.7	33.1	32.3	17.2	20.6	19.8	34.0	33.2	17.7	20.6	19.8	22.7		
FR1 n38 PC3	2	100.00%	24.7	32.0	31.2	17.6	19.7	18.9	32.1	31.3	17.8	18.8	18.0	24.7		
FR1 n41 PC3	2	100.00%	24.4	32.4	31.6	17.6	19.7	18.9	32.1	31.3	17.8	18.8	18.0	24.4		
FR1 n41 PC2	2	50.00%												23.4		
FR1 n48	6	100.00%	24.7	27.8	27.0	24.0	24.8	24.0	27.3	26.5	19.2	20.0	19.2	24.7		
FR1 n66	2	100.00%	24.7	31.2	30.4	18.9	20.9	20.1	28.9	28.1	19.0	19.8	19.0	24.7		
FR1 n71	0	100.00%	24.7	33.2	32.4	27.6	28.4	27.6	31.1	30.3	25.3	26.1	25.3	24.7		
FR1 n77 PC3	6	100.00%	24.1	28.1	27.3	23.3	24.6	23.8	25.6	24.8	18.9	19.7	18.9	24.1		
FR1 n77 PC2	6	50.00%												23.1		
LTE B2	1	100.00%	24.7	15.5	14.7	19.2	20.5	19.7	13.9	13.1	18.3	19.1	18.3	24.7		
LTE B66/4	1	100.00%	24.7	19.7	18.9	23.9	27.1	26.3	17.5	16.7	21.4	22.2	21.4	24.7		
FR1 n2	1	100.00%	24.7	17.3	16.5	21.2	22.3	21.5	17.9	17.1	22.0	22.8	22.0	24.7		
FR1 n38/41 PC3	1	100.00%	24.2	27.7	26.9	27.3	28.1	27.3	16.7	15.9	21.1	21.9	21.1	24.2		
FR1 n41 PC2	1	50.00%												23.2		
FR1 n48	1	100.00%	24.3	25.9	25.1	26.4	27.2	26.4	20.6	19.8	24.2	25.0	24.2	24.3		
FR1 n66	1	100.00%	24.7	22.2	21.4	24.1	26.1	25.3	19.4	18.6	23.1	23.9	23.1	24.7		
FR1 n77 PC3	1	100.00%	24.3	25.2	24.4	27.4	28.2	27.4	19.7	18.9	23.6	24.4	23.6	24.3		

1. The device additional support uplink MIMO on n41, n48 and n77.
2. LTE and 5GNR TDD: P_{limit} power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
3. Maximum target power, P_{max}, is configured in NV settings in EUT to limit maximum transmitting power. This power is converted into peak power in NV settings for TDD schemes.



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

Wireless technology/ band (Accounting duty cycle)	Antenna	Duty cycle	Maximum Power	Closed mode						Open mode						P _{Max} Time average power (dBm)
				Head		Hotspot	Body-worn		Head		Hotspot	Body-worn/Extremity				
				Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous	Standalone	Simultaneous	Simultaneous	Standalone	Simultaneous			
				Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7	Index 8	Index 9	Index 10	Index 11		
				P limit						P limit						
Burst average power (dBm)						Burst average power (dBm)										
LTE B7	0	100.00%	24.7	34.0	33.2	25.1	25.9	25.1	29.8	29.0	23.1	23.9	23.1	24.7		
LTE B12/17	1	100.00%	24.7	27.6	26.8	30.1	30.9	30.1	24.5	23.7	27.0	27.8	27.0	24.7		
LTE B13	1	100.00%	24.7	27.9	27.1	28.7	29.5	28.7	22.8	22.0	26.7	27.5	26.7	24.7		
LTE B14	1	100.00%	24.7	27.8	27.0	28.3	29.1	28.3	23.3	22.5	25.9	26.7	25.9	24.7		
LTE B25/2	0	100.00%	24.7	30.8	30.0	25.1	26.9	26.1	25.6	24.8	23.1	23.9	23.1	24.7		
LTE B26/5	1	100.00%	24.7	28.0	27.2	28.0	28.8	28.0	22.5	21.7	25.3	26.1	25.3	24.7		
LTE B30	0	100.00%	22.7	30.9	30.1	23.3	24.1	23.3	28.0	27.2	21.6	22.4	21.6	22.7		
LTE B41/38 PC3	0	63.30%	22.8	29.3	28.5	24.5	25.3	24.5	26.5	25.7	21.5	22.3	21.5	22.4		
LTE B41/38 PC2	0	43.30%												22.8		
LTE B48 PC3	2	63.30%	22.2	36.4	35.6	25.5	26.3	25.5	29.9	29.1	19.1	19.9	19.1	22.2		
LTE B66/4	0	100.00%	24.7	30.2	29.4	20.9	21.7	20.9	26.6	25.8	20.6	21.4	20.6	24.7		
LTE B71	1	100.00%	24.7	27.5	26.7	31.5	32.3	31.5	25.2	24.4	27.7	28.5	27.7	24.7		
FR1 n5	1	100.00%	24.7	28.0	27.2	27.2	28.0	27.2	22.1	21.3	25.4	26.2	25.4	24.7		
FR1 n7	0	100.00%	24.7	35.9	35.1	26.1	26.9	26.1	32.5	31.7	23.2	24.0	23.2	24.7		
FR1 n12	1	100.00%	24.7	27.4	26.6	29.2	30.0	29.2	23.9	23.1	27.1	27.9	27.1	24.7		
FR1 n14	1	100.00%	24.7	28.4	27.6	29.4	30.2	29.4	22.9	22.1	25.6	26.4	25.6	24.7		
FR1 n25/2	0	100.00%	24.7	33.6	32.8	26.1	27.0	26.2	28.7	27.9	22.7	23.5	22.7	24.7		
FR1 n30	0	100.00%	22.7	32.3	31.5	22.5	23.3	22.5	28.3	27.5	21.4	22.2	21.4	22.7		
FR1 n38 PC3	0	100.00%	24.7	31.1	30.3	25.4	26.2	25.4	29.4	28.6	22.5	23.3	22.5	24.7		
FR1 n41 PC3	0	100.00%	24.4	34.3	33.5	25.4	26.2	25.4	29.4	28.6	22.5	23.3	22.5	24.4		
FR1 n41 PC2	0	50.00%												22.4		
FR1 n48	2	100.00%	24.7	36.1	35.3	25.2	26.0	25.2	29.9	29.1	20.1	20.9	20.1	24.7		
FR1 n66	0	100.00%	24.7	32.1	31.3	22.1	23.2	22.4	26.7	25.9	20.3	21.1	20.3	24.7		
FR1 n71	1	100.00%	24.7	28.1	27.3	30.7	31.5	30.7	24.6	23.8	27.1	27.9	27.1	24.7		
FR1 n77 PC3	2	100.00%	24.1	33.0	32.2	22.3	24.8	24.0	28.6	27.8	20.3	21.1	20.3	24.1		
FR1 n77 PC2	2	50.00%												23.7		
LTE B2	5	100.00%	24.7	42.2	41.4	24.2	25.0	24.2	43.6	42.8	22.1	22.9	22.1	24.7		
LTE B66/4	5	100.00%	24.7	47.1	46.3	32.1	32.9	32.1	45.8	45.0	20.2	21.0	20.2	24.7		
FR1 n2	5	100.00%	24.7	41.6	40.8	24.1	24.9	24.1	40.3	39.5	22.8	23.6	22.8	24.7		
FR1 n38/41 PC3	5	100.00%	24.2	52.4	51.6	21.0	21.8	21.0	34.8	34.0	19.8	20.6	19.8	24.2		
FR1 n41 PC2	5	50.00%												23.2		
FR1 n48	5	100.00%	24.3	50.4	49.6	23.3	24.1	23.3	40.7	39.9	25.7	26.5	25.7	24.3		
FR1 n66	5	100.00%	24.7	45.7	44.9	30.0	31.9	31.1	51.7	50.9	21.4	22.2	21.4	24.7		
FR1 n77 PC3	5	100.00%	24.3	42.5	41.7	30.6	31.4	30.6	35.9	35.1	22.6	23.4	22.6	24.3		

1. The device additional support uplink MIMO on n41, n48 and n77.
2. LTE and 5GNR TDD: P_{limit} power levels in the table correspond to the time-averaged power levels which accounts for TX duty cycle.
3. Maximum target power, P_{max}, is configured in NV settings in EUT to limit maximum transmitting power. This power is converted into peak power in NV settings for TDD schemes.



4. RF Exposure Limits

4.1 Uncontrolled Environment

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

4.2 Controlled Environment

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

Limits for Occupational/Controlled Exposure (W/kg)

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

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

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

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



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

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

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

5. Guidance Applied

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

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

6. Specific Absorption Rate (SAR)

6.1 Introduction

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

6.2 SAR Definition

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

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

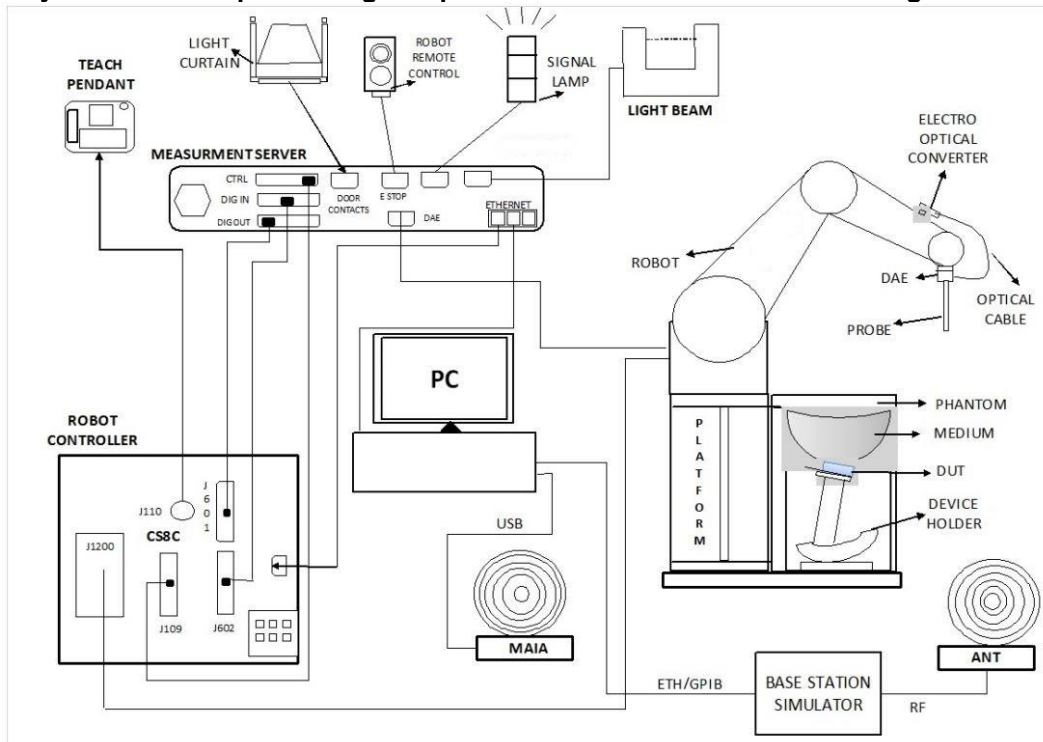
SAR is expressed in units of Watts per kilogram (W/kg)

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

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. In system validation list test site number, if the test site number is include in the Wensan Laboratory, that's mean the test data are subcontracted to Sporton International Inc. Wensan Laboratory.

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


7.2 E-Field Probe

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

<ES3DV3 Probe>

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

<EX3DV4 Probe>

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

7.3 Data Acquisition Electronics (DAE)

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

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

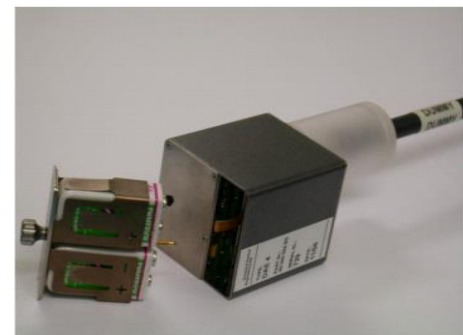



Fig 5.1 Photo of DAE


7.4 Phantom

<SAM Twin Phantom>

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

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

<ELI Phantom>

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

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

7.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

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



Mounting Device for Hand-Held Transmitters



Mounting Device Adaptor for Wide-Phones

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

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



Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

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

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

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

8.1 Spatial Peak SAR Evaluation

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

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

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

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

8.2 Power Reference Measurement

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

8.3 Area Scan

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

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

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

8.4 Zoom Scan

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

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

		≤ 3 GHz	> 3 GHz	
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}, \Delta y_{Zoom}$		≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*	
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm	
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z	≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm	
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 for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.6 Power Drift Monitoring

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



9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit ⁽²⁾	D750V3	1012	Aug. 18, 2021	Aug. 16, 2023
SPEAG	750MHz System Validation Kit	D750V3	1107	Jun. 22, 2022	Jun. 21, 2023
SPEAG	750MHz System Validation Kit	D750V3	1117	Mar. 24, 2022	Mar. 23, 2023
SPEAG	835MHz System Validation Kit ⁽²⁾	D835V2	499	Aug. 18, 2021	Aug. 16, 2023
SPEAG	1750MHz System Validation Kit	D1750V2	1120	Mar. 25, 2022	Mar. 24, 2023
SPEAG	1750MHz System Validation Kit	D1750V2	1112	Jun. 22, 2022	Jun. 21, 2023
SPEAG	1900MHz System Validation Kit ⁽²⁾	D1900V2	5d041	Aug. 19, 2021	Aug. 17, 2023
SPEAG	1900MHz System Validation Kit	D1900V2	5d185	Jun. 17, 2022	Jun. 16, 2023
SPEAG	2300MHz System Validation Kit ⁽²⁾	D2300V2	1088	Jul. 13, 2021	Jul. 11, 2023
SPEAG	2450MHz System Validation Kit ⁽²⁾	D2450V2	736	Aug. 17, 2021	Aug. 15, 2023
SPEAG	2600MHz System Validation Kit ⁽²⁾	D2600V2	1008	Aug. 17, 2021	Aug. 15, 2023
SPEAG	2600MHz System Validation Kit	D2600V2	1078	Jun. 23, 2022	Jun. 22, 2023
SPEAG	3500MHz System Validation Kit ⁽²⁾	D3500V2	1014	Jan. 17, 2022	Jan. 15, 2024
SPEAG	3500MHz System Validation Kit	D3500V2	1036	Mar. 23, 2022	Mar. 22, 2023
SPEAG	3700MHz System Validation Kit	D3700V2	1006	Jun. 20, 2022	Jun. 19, 2023
SPEAG	3700MHz System Validation Kit ⁽²⁾	D3700V2	1022	Jul. 14, 2021	Jul. 12, 2023
SPEAG	3900MHz System Validation Kit	D3900V2	1017	Apr. 22, 2022	Apr. 21, 2023
SPEAG	5GHz System Validation Kit ⁽²⁾	D5GHzV2	1171	Apr. 20, 2021	Apr. 18, 2023
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1083	Sep. 06, 2022	Sep. 05, 2023
SPEAG	5G Verification Source	10GHz	1020	Jan. 18, 2022	Jan. 17, 2023
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9441	Nov. 18, 2022	Nov. 17, 2023
SPEAG	13MHz System Validation Kit	CLA13	1022	Sep. 01, 2022	Aug. 31, 2023
SPEAG	Data Acquisition Electronics	DAE4	778	May. 30, 2022	May. 29, 2023
SPEAG	Data Acquisition Electronics	DAE4	854	Aug. 24, 2022	Aug. 23, 2023
SPEAG	Data Acquisition Electronics	DAE4	1696	Nov. 09, 2022	Nov. 08, 2023
SPEAG	Data Acquisition Electronics	DAE4	1697	Dec. 15, 2022	Dec. 14, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 28, 2022	Apr. 27, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	3925	Apr. 29, 2022	Apr. 28, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7439	Mar. 02, 2022	Mar. 01, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7692	Nov. 21, 2022	Nov. 20, 2023
RCPTWN	Thermometer	HTC-1	TM685-1	Jun. 27, 2022	Jun. 26, 2023
RCPTWN	Thermometer	HTC-1	TM560-2	Mar. 15, 2022	Mar. 14, 2023
Anritsu	Radio Communication Analyzer	MT8821C	6201074414	Aug. 19, 2022	Aug. 18, 2023
Keysight	Wireless Communication Test Set	E5515C	MY50267236	Mar. 02, 2022	Mar. 01, 2023
R&S	BT Base Station	CBT	100815	Feb. 24, 2022	Feb. 23, 2023
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Oct. 12, 2022	Oct. 11, 2023
Keysight	ENA Network Analyzer	E5071C	MY46316648	Jul. 25, 2022	Jul. 24, 2023
SPEAG	Dielectric Probe Kit	DAK-3.5	1146	Jul. 25, 2022	Jul. 24, 2023
SPEAG	Dielectric Probe Kit	DAK-12	1156	Jul. 28, 2022	Jul. 27, 2023
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3252	Jul. 25, 2022	Jul. 24, 2023
Anritsu	Power Meter	ML2495A	1419002	Aug. 16, 2022	Aug. 15, 2023
Anritsu	Power Meter	ML2496A	2119003	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Power Sensor	MA2411B	1911334	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Power Sensor	MA2411B	1911333	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 21, 2022	Jul. 20, 2023
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 19, 2021	Aug. 17, 2023
Mini-Circuits	Power Amplifier	ZHL-42W+	715701915	May. 12, 2022	May. 11, 2023
Mini-Circuits	Power Amplifier	ZVE-3W-183+	072602118	Mar. 09, 2022	Mar. 08, 2023
ATM	Dual Directional Coupler	C122H-10	P610410z-02		Note 1
Woken	Attenuator 1	WK0602-XX	N/A		Note 1
PE	Attenuator 2	PE7005-10	N/A		Note 1
PE	Attenuator 3	PE7005-3	N/A		Note 1

General Note:

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



10. System Verification

10.1 Tissue Verification

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

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

<Tissue Dielectric Parameter Check Results>

Table with 10 columns: Frequency (MHz), Liquid Temp. (°C), Conductivity (σ), Permittivity (εr), Conductivity Target (σ), Permittivity Target (εr), Delta (σ) (%), Delta (εr) (%), Limit (%), Date. It contains multiple rows of test data for various frequencies (13, 750, 835, 1750, 1900 MHz) and temperatures.



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
2300	22.5	1.667	39.294	1.67	39.50	-0.18	-0.52	±5	2022/12/16
2300	22.3	1.671	39.423	1.67	39.50	0.06	-0.19	±5	2022/12/23
2300	22.6	1.675	39.356	1.67	39.50	0.30	-0.36	±5	2023/1/6
2300	22.6	1.703	39.578	1.67	39.50	1.98	0.20	±5	2023/1/14
2300	22.7	1.679	39.196	1.67	39.50	0.54	-0.77	±5	2023/1/19
2300	22.2	1.676	39.394	1.67	39.50	0.36	-0.27	±5	2023/1/22
2600	22.8	2.053	38.461	1.96	39.00	4.74	-1.38	±5	2022/12/5
2600	22.7	1.995	38.061	1.96	39.00	1.79	-2.41	±5	2022/12/14
2600	22.2	2.011	38.455	1.96	39.00	2.60	-1.40	±5	2022/12/15
2600	22.4	2.029	38.297	1.96	39.00	3.52	-1.80	±5	2022/12/19
2600	22.2	1.999	38.375	1.96	39.00	1.99	-1.60	±5	2022/12/21
2600	22.4	2.007	38.456	1.96	39.00	2.40	-1.39	±5	2022/12/24
2600	22.5	2.008	38.151	1.96	39.00	2.45	-2.18	±5	2022/12/27
2600	22.6	2.023	38.251	1.96	39.00	3.21	-1.92	±5	2023/1/6
2600	22.7	2.050	38.439	1.96	39.00	4.59	-1.44	±5	2023/1/12
2600	22.7	2.027	38.091	1.96	39.00	3.42	-2.33	±5	2023/1/19
2600	22.2	2.035	38.369	1.96	39.00	3.83	-1.62	±5	2023/1/20
2600	22.2	2.024	38.289	1.96	39.00	3.27	-1.82	±5	2023/1/22
2600	22.5	2.040	38.479	1.96	39.00	4.08	-1.34	±5	2023/1/27
3500	22.6	2.950	38.467	2.91	37.90	1.37	1.50	±5	2022/12/7
3500	22.2	2.955	38.168	2.91	37.90	1.55	0.71	±5	2022/12/23
3500	22.4	3.007	38.432	2.91	37.90	3.33	1.40	±5	2022/12/29
3500	22.5	2.887	37.820	2.91	37.90	-0.79	-0.21	±5	2023/1/1
3500	22.3	2.996	38.410	2.91	37.90	2.96	1.35	±5	2023/1/29
3500	22.5	2.85	37.6	2.91	37.90	-2.06	-0.79	±5	2023/3/29
3700	22.6	3.112	37.694	3.12	37.70	-0.26	-0.02	±5	2022/12/17
3700	22.2	3.176	38.002	3.12	37.70	1.79	0.80	±5	2022/12/28
3700	22.3	3.123	37.746	3.12	37.70	0.10	0.12	±5	2022/12/30
3700	22.6	3.169	37.968	3.12	37.70	1.57	0.71	±5	2023/1/4
3700	22.5	3.146	37.858	3.12	37.70	0.83	0.42	±5	2023/1/5
3700	22.3	3.136	37.808	3.12	37.70	0.51	0.29	±5	2023/1/21
3700	22.2	3.062	37.438	3.12	37.70	-1.86	-0.69	±5	2023/1/28
3700	22.5	3.06	36.9	3.12	37.70	-1.92	-2.12	±5	2023/3/29
3900	22.6	3.356	37.687	3.33	37.51	0.78	0.47	±5	2022/12/6
3900	22.2	3.370	37.707	3.33	37.51	1.20	0.53	±5	2022/12/23
3900	22.4	3.427	37.971	3.33	37.51	2.91	1.23	±5	2022/12/29
3900	22.7	3.349	37.609	3.33	37.51	0.57	0.26	±5	2022/12/31
3900	22.3	3.428	38.117	3.33	37.51	2.94	1.62	±5	2023/1/30



Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Conductivity Target (σ)	Permittivity Target (ε _r)	Delta (σ) (%)	Delta (ε _r) (%)	Limit (%)	Date
2450	22.7	1.829	40.540	1.80	39.20	1.61	3.42	±5	2022/12/29
2450	22.3	1.839	38.887	1.80	39.20	2.17	-0.80	±5	2023/1/1
2450	22.5	1.812	38.919	1.80	39.20	0.67	-0.72	±5	2023/1/1
2450	22.4	1.844	38.672	1.80	39.20	2.44	-1.35	±5	2023/1/3
2450	22.5	1.807	40.036	1.80	39.20	0.39	2.13	±5	2023/1/4
2450	22.4	1.773	38.515	1.80	39.20	-1.50	-1.75	±5	2023/1/5
2450	22.9	1.785	38.956	1.80	39.20	-0.83	-0.62	±5	2023/1/10
2450	22.9	1.840	40.111	1.80	39.20	2.22	2.32	±5	2023/1/11
2450	22.4	1.804	38.748	1.80	39.20	0.22	-1.15	±5	2023/1/12
2450	22.6	1.800	38.778	1.80	39.20	0.00	-1.08	±5	2023/1/14
5250	22.4	4.716	35.230	4.71	35.95	0.13	-2.00	±5	2022/12/30
5250	22.8	4.638	36.231	4.71	35.95	-1.53	0.78	±5	2023/1/2
5250	22.5	4.701	36.616	4.71	35.95	-0.19	1.85	±5	2023/1/3
5250	22.9	4.679	36.957	4.71	35.95	-0.66	2.80	±5	2023/1/4
5250	22.5	4.662	36.594	4.71	35.95	-1.02	1.79	±5	2023/1/13
5600	22.4	5.057	34.766	5.07	35.50	-0.26	-2.07	±5	2022/12/30
5600	22.8	4.970	35.750	5.07	35.50	-1.97	0.70	±5	2023/1/2
5600	22.5	5.045	36.086	5.07	35.50	-0.49	1.65	±5	2023/1/3
5600	22.9	5.029	36.473	5.07	35.50	-0.81	2.74	±5	2023/1/4
5600	22.5	5.005	36.025	5.07	35.50	-1.28	1.48	±5	2023/1/13
5750	22.5	5.220	35.366	5.22	35.35	0.00	0.05	±5	2022/12/31
5750	22.5	5.221	35.895	5.22	35.35	0.02	1.54	±5	2023/1/3
5750	22.6	5.190	36.288	5.22	35.35	-0.57	2.65	±5	2023/1/5
5750	22.5	5.061	35.428	5.22	35.35	-3.05	0.22	±5	2023/1/8
5750	22.5	5.189	36.025	5.22	35.35	-0.59	1.91	±5	2023/1/13
5850	22.5	5.322	35.269	5.32	35.25	0.04	0.05	±5	2022/12/31
5850	22.6	5.294	36.165	5.32	35.25	-0.49	2.60	±5	2023/1/5
5850	22.5	5.179	35.248	5.32	35.25	-2.65	-0.01	±5	2023/1/8
5850	22.5	5.272	35.794	5.32	35.25	-0.90	1.54	±5	2023/1/13
6500	22.5	6.056	35.300	6.07	34.50	-0.23	2.32	±5	2023/1/6
6500	22.6	6.151	34.059	6.07	34.50	1.33	-1.28	±5	2023/1/7
6500	22.5	6.021	35.019	6.07	34.50	-0.81	1.50	±5	2023/1/9



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 (%)
SAR06	2023/1/31	13	1000	CLA13-1022	EX3DV4 - SN3925	DAE4 Sn778	0.600	0.560	0.6	7.14	0.371	0.349	0.371	6.00
SAR06	2022/12/8	750	50	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn778	0.420	8.540	8.4	-1.64	0.279	5.570	5.58	0.18
SAR06	2022/12/13	750	50	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn778	0.402	8.540	8.04	-5.85	0.263	5.570	5.26	-5.57
SAR06	2022/12/15	750	50	D750V3-1012	EX3DV4 - SN3925	DAE4 Sn778	0.401	8.560	8.02	-6.31	0.267	5.560	5.34	-3.96
SAR04	2022/12/16	750	50	D750V3-1117	EX3DV4 - SN7692	DAE4 Sn1696	0.385	8.520	7.7	-9.62	0.258	5.600	5.16	-7.86
SAR04	2022/12/17	750	50	D750V3-1117	EX3DV4 - SN7692	DAE4 Sn1696	0.384	8.520	7.68	-9.86	0.257	5.600	5.14	-8.21
SAR06	2022/12/18	750	50	D750V3-1012	EX3DV4 - SN3925	DAE4 Sn778	0.399	8.560	7.98	-6.78	0.266	5.560	5.32	-4.32
SAR04	2022/12/18	750	50	D750V3-1117	EX3DV4 - SN7692	DAE4 Sn1696	0.386	8.520	7.72	-9.39	0.256	5.600	5.12	-8.57
SAR04	2022/12/20	750	50	D750V3-1117	EX3DV4 - SN7692	DAE4 Sn1696	0.386	8.520	7.72	-9.39	0.258	5.600	5.16	-7.86
SAR06	2022/12/22	750	50	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn778	0.418	8.540	8.36	-2.11	0.278	5.570	5.56	-0.18
SAR06	2023/1/10	750	50	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn778	0.420	8.540	8.4	-1.64	0.279	5.570	5.58	0.18
SAR06	2023/1/11	750	50	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn778	0.423	8.540	8.46	-0.94	0.281	5.570	5.62	0.90
SAR06	2023/1/13	750	50	D750V3-1012	EX3DV4 - SN3925	DAE4 Sn778	0.397	8.560	7.94	-7.24	0.256	5.560	5.12	-7.91
SAR06	2023/1/16	750	50	D750V3-1107	EX3DV4 - SN3925	DAE4 Sn778	0.419	8.540	8.38	-1.87	0.278	5.570	5.56	-0.18
SAR06	2022/12/9	835	50	D835V2-499	EX3DV4 - SN3925	DAE4 Sn778	0.463	9.680	9.26	-4.34	0.295	6.280	5.9	-6.05
SAR06	2022/12/10	835	250	D835V2-499	EX3DV4 - SN3925	DAE4 Sn778	2.650	9.680	10.6	9.50	1.710	6.280	6.84	8.92
SAR04	2022/12/16	835	50	D835V2-499	EX3DV4 - SN7692	DAE4 Sn1696	0.464	9.680	9.28	-4.13	0.310	6.280	6.2	-1.27
SAR04	2022/12/19	835	50	D835V2-499	EX3DV4 - SN7692	DAE4 Sn1696	0.495	9.680	9.9	2.27	0.326	6.280	6.52	3.82
SAR06	2022/12/24	835	250	D835V2-499	EX3DV4 - SN3925	DAE4 Sn778	2.630	9.680	10.52	8.68	1.700	6.280	6.8	8.28
SAR06	2023/1/11	835	50	D835V2-499	EX3DV4 - SN3925	DAE4 Sn778	0.465	9.680	9.3	-3.93	0.297	6.280	5.94	-5.41
SAR06	2023/1/16	835	50	D835V2-499	EX3DV4 - SN3925	DAE4 Sn778	0.475	9.680	9.5	-1.86	0.308	6.280	6.16	-1.91
SAR06	2023/1/25	835	50	D835V2-499	EX3DV4 - SN3925	DAE4 Sn778	0.461	9.680	9.22	-4.75	0.294	6.280	5.88	-6.37
SAR06	2022/12/12	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn778	9.330	36.900	37.32	1.14	4.950	19.400	19.8	2.06
SAR06	2022/12/21	1750	50	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn778	1.670	36.400	33.4	-8.24	0.882	19.100	17.64	-7.64
SAR04	2022/12/23	1750	50	D1750V2-1120	EX3DV4 - SN7692	DAE4 Sn1696	1.790	36.400	35.8	-1.65	0.975	19.100	19.5	2.09
SAR06	2022/12/26	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn778	9.270	36.900	37.08	0.49	4.910	19.400	19.64	1.24
SAR06	2023/1/3	1750	50	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn778	1.700	36.900	34	-7.86	0.900	19.400	18	-7.22
SAR06	2023/1/7	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn778	9.270	36.900	37.08	0.49	4.910	19.400	19.64	1.24
SAR06	2023/1/8	1750	250	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn778	9.460	36.400	37.84	3.96	5.010	19.100	20.04	4.92
SAR06	2023/1/14	1750	250	D1750V2-1112	EX3DV4 - SN3925	DAE4 Sn778	9.330	36.900	37.32	1.14	4.950	19.400	19.8	2.06
SAR06	2023/1/18	1750	50	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn778	1.680	36.400	33.6	-7.69	0.890	19.100	17.8	-6.81
SAR06	2023/1/24	1750	50	D1750V2-1120	EX3DV4 - SN3925	DAE4 Sn778	1.700	36.400	34	-6.59	0.899	19.100	17.98	-5.86
SAR06	2022/12/11	1900	250	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	10.300	40.600	41.2	1.48	5.320	21.100	21.28	0.85
SAR06	2022/12/20	1900	50	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	1.910	40.600	38.2	-5.91	0.990	21.100	19.8	-6.16
SAR04	2022/12/22	1900	50	D1900V2-5d041	EX3DV4 - SN7692	DAE4 Sn1696	2.140	40.600	42.8	5.42	1.120	21.100	22.4	6.16
SAR06	2022/12/25	1900	250	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	10.300	40.600	41.2	1.48	5.280	21.100	21.12	0.09
SAR06	2023/1/2	1900	50	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn778	1.790	39.000	35.8	-8.21	0.919	20.400	18.38	-9.90
SAR06	2023/1/7	1900	250	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	10.200	40.600	40.8	0.49	5.250	21.100	21	-0.47
SAR06	2023/1/9	1900	50	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	1.900	40.600	38	-6.40	0.981	21.100	19.62	-7.01
SAR06	2023/1/15	1900	50	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	1.920	40.600	38.4	-5.42	1.020	21.100	20.4	-3.32
SAR06	2023/1/17	1900	50	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn778	1.920	39.000	38.4	-1.54	1.010	20.400	20.2	-0.98
SAR06	2023/1/23	1900	50	D1900V2-5d185	EX3DV4 - SN3925	DAE4 Sn778	1.790	39.000	35.8	-8.21	0.919	20.400	18.38	-9.90
SAR06	2023/1/26	1900	250	D1900V2-5d041	EX3DV4 - SN3925	DAE4 Sn778	10.100	40.600	40.4	-0.49	5.210	21.100	20.84	-1.23



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 (%)
SAR06	2022/12/16	2300	50	D2300V2-1088	EX3DV4 - SN3925	DAE4 Sn778	2.310	49.700	46.2	-7.04	1.090	24.100	21.8	-9.54
SAR04	2022/12/23	2300	50	D2300V2-1088	EX3DV4 - SN7692	DAE4 Sn1696	2.380	49.700	47.6	-4.23	1.140	24.100	22.8	-5.39
SAR06	2023/1/6	2300	50	D2300V2-1088	EX3DV4 - SN3925	DAE4 Sn778	2.480	49.700	49.6	-0.20	1.200	24.100	24	-0.41
SAR06	2023/1/14	2300	50	D2300V2-1088	EX3DV4 - SN3925	DAE4 Sn778	2.360	49.700	47.2	-5.03	1.110	24.100	22.2	-7.88
SAR06	2023/1/19	2300	50	D2300V2-1088	EX3DV4 - SN3925	DAE4 Sn778	2.460	49.700	49.2	-1.01	1.180	24.100	23.6	-2.07
SAR06	2023/1/22	2300	50	D2300V2-1088	EX3DV4 - SN3925	DAE4 Sn778	2.320	49.700	46.4	-6.64	1.090	24.100	21.8	-9.54
SAR06	2022/12/5	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.700	58.000	54	-6.90	1.230	25.800	24.6	-4.65
SAR06	2022/12/14	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.620	58.000	52.4	-9.66	1.200	25.800	24	-6.98
SAR04	2022/12/15	2600	50	D2600V2-1078	EX3DV4 - SN7692	DAE4 Sn1696	2.670	55.400	53.4	-3.61	1.240	24.900	24.8	-0.40
SAR06	2022/12/19	2600	50	D2600V2-1078	EX3DV4 - SN3925	DAE4 Sn778	2.670	55.400	53.4	-3.61	1.220	24.900	24.4	-2.01
SAR04	2022/12/21	2600	50	D2600V2-1078	EX3DV4 - SN7692	DAE4 Sn1696	2.650	55.400	53	-4.33	1.240	24.900	24.8	-0.40
SAR04	2022/12/24	2600	50	D2600V2-1078	EX3DV4 - SN7692	DAE4 Sn1696	2.660	55.400	53.2	-3.97	1.240	24.900	24.8	-0.40
SAR06	2022/12/27	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.640	58.000	52.8	-8.97	1.210	25.800	24.2	-6.20
SAR06	2023/1/6	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.660	58.000	53.2	-8.28	1.210	25.800	24.2	-6.20
SAR06	2023/1/12	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.750	58.000	55	-5.17	1.300	25.800	26	0.78
SAR06	2023/1/19	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.660	58.000	53.2	-8.28	1.220	25.800	24.4	-5.43
SAR06	2023/1/20	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.680	58.000	53.6	-7.59	1.220	25.800	24.4	-5.43
SAR06	2023/1/22	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.840	58.000	56.8	-2.07	1.280	25.800	25.6	-0.78
SAR06	2023/1/27	2600	50	D2600V2-1008	EX3DV4 - SN3925	DAE4 Sn778	2.680	58.000	53.6	-7.59	1.220	25.800	24.4	-5.43
SAR06	2022/12/7	3500	50	D3500V2-1036	EX3DV4 - SN3925	DAE4 Sn778	3.220	67.400	64.4	-4.45	1.220	25.100	24.4	-2.79
SAR06	2022/12/23	3500	50	D3500V2-1036	EX3DV4 - SN3925	DAE4 Sn778	3.060	67.400	61.2	-9.20	1.140	25.100	22.8	-9.16
SAR06	2022/12/29	3500	50	D3500V2-1036	EX3DV4 - SN3925	DAE4 Sn778	3.540	67.400	70.8	5.04	1.350	25.100	27	7.57
SAR06	2023/1/1	3500	50	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn778	3.450	67.200	69	2.68	1.330	25.100	26.6	5.98
SAR06	2023/1/29	3500	50	D3500V2-1036	EX3DV4 - SN3925	DAE4 Sn778	3.110	67.400	62.2	-7.72	1.160	25.100	23.2	-7.57
SAR06	2023/3/29	3500	100	D3500V2-1014	EX3DV4 - SN3925	DAE4 Sn778	6.420	67.200	64.2	-4.46	2.490	25.100	24.9	-0.80
SAR06	2022/12/17	3700	50	D3700V2-1006	EX3DV4 - SN3925	DAE4 Sn778	3.160	65.600	63.2	-3.66	1.130	23.700	22.6	-4.64
SAR06	2022/12/28	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	3.570	68.200	71.4	4.69	1.330	24.700	26.6	7.69
SAR06	2022/12/30	3700	100	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	6.800	68.200	68	-0.29	2.450	24.700	24.5	-0.81
SAR06	2023/1/4	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	3.560	68.200	71.2	4.40	1.330	24.700	26.6	7.69
SAR06	2023/1/5	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	3.530	68.200	70.6	3.52	1.320	24.700	26.4	6.88
SAR06	2023/1/21	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	3.520	68.200	70.4	3.23	1.310	24.700	26.2	6.07
SAR06	2023/1/28	3700	50	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	3.440	68.200	68.8	0.88	1.280	24.700	25.6	3.64
SAR06	2023/3/29	3700	100	D3700V2-1022	EX3DV4 - SN3925	DAE4 Sn778	6.290	68.200	62.9	-7.77	2.360	24.700	23.6	-4.45
SAR06	2022/12/6	3900	50	D3900V2-1017	EX3DV4 - SN3925	DAE4 Sn778	3.430	68.700	68.6	-0.15	1.220	23.900	24.4	2.09
SAR06	2022/12/23	3900	50	D3900V2-1017	EX3DV4 - SN3925	DAE4 Sn778	3.270	68.700	65.4	-4.80	1.150	23.900	23	-3.77
SAR06	2022/12/29	3900	50	D3900V2-1017	EX3DV4 - SN3925	DAE4 Sn778	3.500	68.700	70	1.89	1.250	23.900	25	4.60
SAR06	2022/12/31	3900	50	D3900V2-1017	EX3DV4 - SN3925	DAE4 Sn778	3.420	68.700	68.4	-0.44	1.220	23.900	24.4	2.09
SAR06	2023/1/30	3900	50	D3900V2-1017	EX3DV4 - SN3925	DAE4 Sn778	3.330	68.700	66.6	-3.06	1.170	23.900	23.4	-2.09

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 (%)
SAR01	2022/12/29	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	2.860	54.200	57.2	5.54	1.320	25.300	26.4	4.35
SAR06	2023/1/1	2450	50	D2450V2-736	EX3DV4 - SN3925	DAE4 Sn778	2.510	54.200	50.2	-7.38	1.170	25.300	23.4	-7.51
SAR01	2023/1/1	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	2.450	54.200	49	-9.59	1.160	25.300	23.2	-8.30
SAR01	2023/1/3	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	2.880	54.200	57.6	6.27	1.330	25.300	26.6	5.14
SAR05	2023/1/4	2450	50	D2450V2-736	EX3DV4 - SN7439	DAE4 Sn1697	2.460	54.200	49.2	-9.23	1.150	25.300	23	-9.09
SAR05	2023/1/5	2450	50	D2450V2-736	EX3DV4 - SN7439	DAE4 Sn1697	2.490	54.200	49.8	-8.12	1.180	25.300	23.6	-6.72
SAR01	2023/1/10	2450	250	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	12.300	54.200	49.2	-9.23	5.740	25.300	22.96	-9.25
SAR01	2023/1/11	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	2.880	54.200	57.6	6.27	1.330	25.300	26.6	5.14
SAR01	2023/1/12	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	2.440	54.200	48.8	-9.96	1.160	25.300	23.2	-8.30
SAR01	2023/1/14	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	2.810	54.200	56.2	3.69	1.300	25.300	26	2.77
SAR01	2022/12/30	5250	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	4.240	80.300	84.8	5.60	1.210	23.000	24.2	5.22
SAR01	2023/1/2	5250	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	8.670	80.300	86.7	7.97	2.430	23.000	24.3	5.65
SAR05	2023/1/3	5250	50	D5GHzV2-1171	EX3DV4 - SN7439	DAE4 Sn1697	3.980	80.300	79.6	-0.87	1.140	23.000	22.8	-0.87
SAR01	2023/1/4	5250	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	8.490	80.300	84.9	5.73	2.400	23.000	24	4.35
SAR01	2023/1/13	5250	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	8.710	80.300	87.1	8.47	2.440	23.000	24.4	6.09
SAR01	2022/12/30	5600	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	4.550	83.400	91	9.11	1.290	23.700	25.8	8.86
SAR01	2023/1/2	5600	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	8.850	83.400	88.5	6.12	2.450	23.700	24.5	3.38
SAR05	2023/1/3	5600	50	D5GHzV2-1171	EX3DV4 - SN7439	DAE4 Sn1697	4.170	83.400	83.4	0.00	1.150	23.700	23	-2.95
SAR01	2023/1/4	5600	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	9.090	83.400	90.9	8.99	2.530	23.700	25.3	6.75
SAR01	2023/1/13	5600	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	8.820	83.400	88.2	5.76	2.350	23.700	23.5	-0.84
SAR01	2022/12/31	5750	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	4.230	80.400	84.6	5.22	1.200	22.800	24	5.26
SAR05	2023/1/3	5750	50	D5GHzV2-1171	EX3DV4 - SN7439	DAE4 Sn1697	3.710	80.400	74.2	-7.71	1.050	22.800	21	-7.89
SAR01	2023/1/5	5750	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	7.750	80.400	77.5	-3.61	2.130	22.800	21.3	-6.58
SAR01	2023/1/8	5750	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	4.100	80.400	82	1.99	1.160	22.800	23.2	1.75
SAR01	2023/1/13	5750	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	8.670	80.400	86.7	7.84	2.400	22.800	24	5.26
SAR01	2022/12/31	5850	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	4.510	82.300	90.2	9.60	1.270	23.100	25.4	9.96
SAR01	2023/1/5	5850	100	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	7.610	82.300	76.1	-7.53	2.140	23.100	21.4	-7.36
SAR01	2023/1/8	5850	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	4.400	82.300	88	6.93	1.240	23.100	24.8	7.36
SAR01	2023/1/13	5850	50	D5GHzV2-1171	EX3DV4 - SN3642	DAE4 Sn854	3.800	82.300	76	-7.65	1.060	23.100	21.2	-8.23
SAR01	2023/1/6	6500	100	D6.5GHzV2-1083	EX3DV4 - SN3642	DAE4 Sn854	28.000	291.000	280	-3.78	5.100	53.900	51	-5.38
SAR01	2023/1/7	6500	100	D6.5GHzV2-1083	EX3DV4 - SN3642	DAE4 Sn854	27.100	291.000	271	-6.87	5.180	53.900	51.8	-3.90
SAR01	2023/1/9	6500	100	D6.5GHzV2-1083	EX3DV4 - SN3642	DAE4 Sn854	27.300	291.000	273	-6.19	5.190	53.900	51.9	-3.71

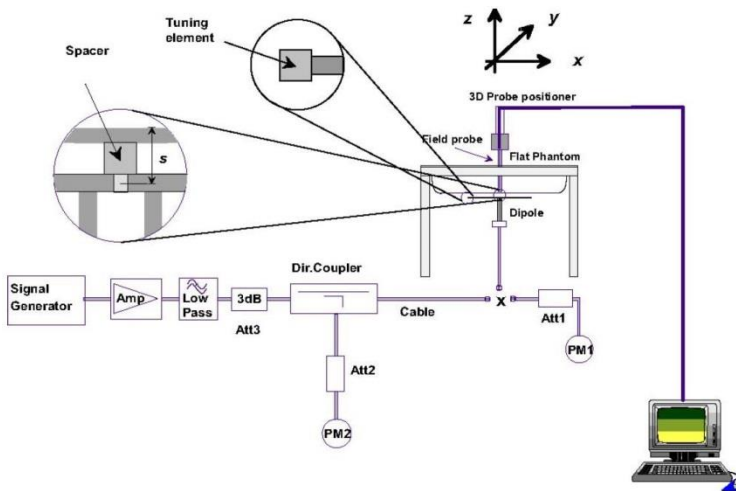


Fig 8.3.1 System Performance Check Setup



Fig 8.3.2 Setup Photo

10.3 PD System Performance Check Results

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

Test Location	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm ² (W/m ²)	Targeted 4 cm ² (W/m ²)	Deviation (dB)	Date
SAR01-HY	10G	10GHz_1020	EUmmWV4 - SN9441	Sn854	10	46	51.7	-0.51	2023/1/15

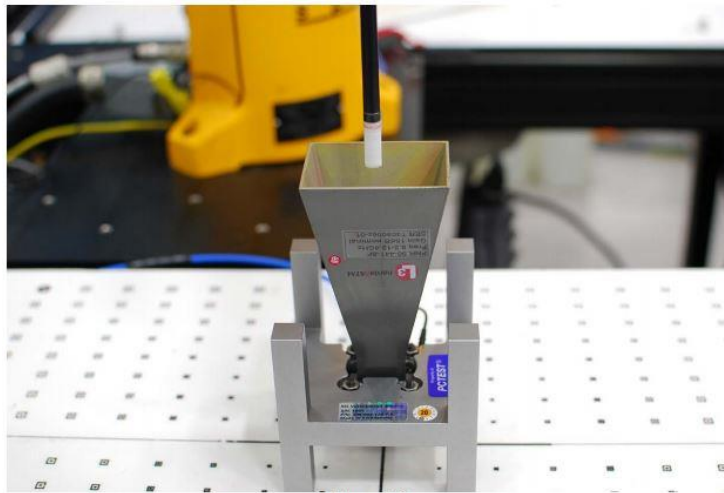


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

11. RF Exposure Positions

11.1 Ear and handset reference point

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

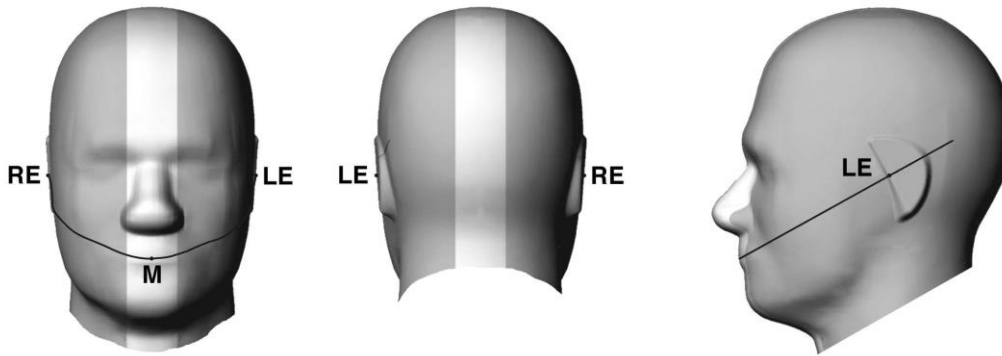


Fig 9.1.1 Front, back, and side views of SAM twin phantom

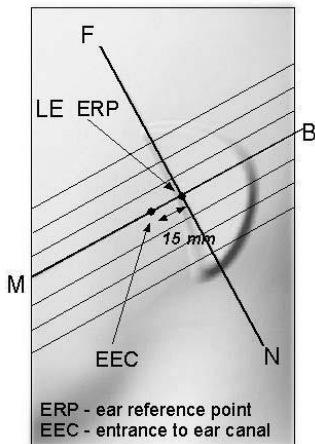


Fig 9.1.2 Close-up side view of phantom showing the ear region.

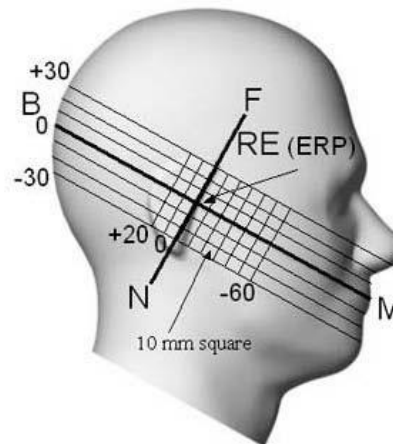


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

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

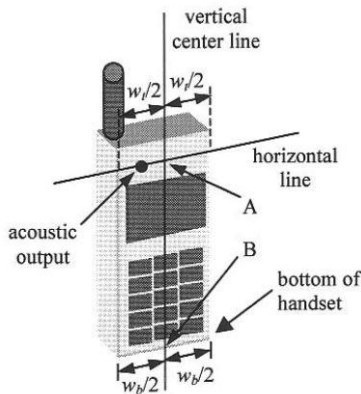


Fig 9.2.1 Handset vertical and horizontal reference lines—“fixed case”

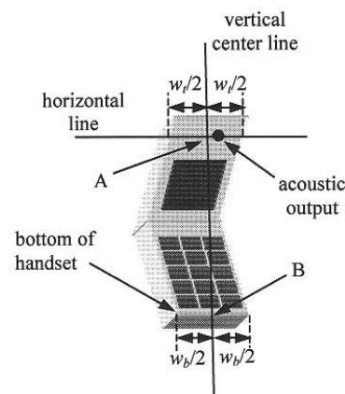


Fig 9.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

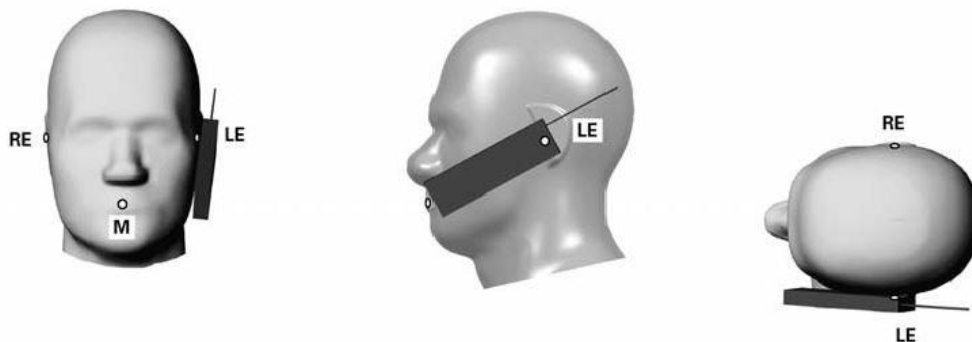


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

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

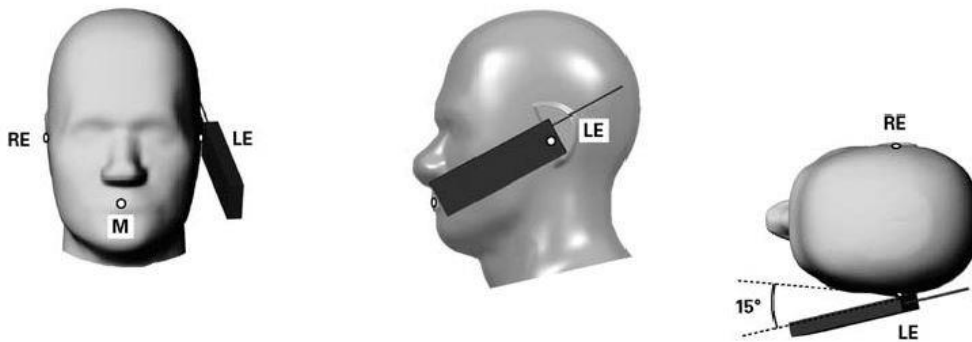


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

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

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

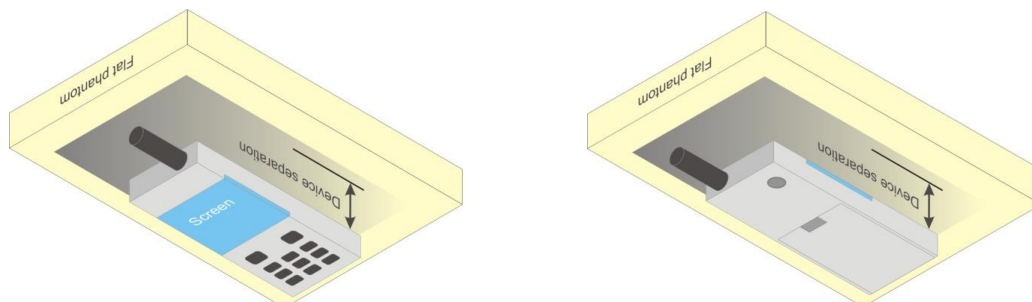


Fig 9.4 Body Worn Position

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 ($L \times W \geq 9$ cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

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

12. Measurement procedure for output power and SAR

Detail output power measurement data is in the appendix D

<GSM Note>

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

<WCDMA Note>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For HSPA+ devices supporting 16 QAM in the uplink, power measurements procedure is according to the configurations in Table C.11.1.4 of 3GPP TS 34.121-1.
4. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.
5. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
6. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

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

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

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

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

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

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

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

Setup Configuration

HSUPA Setup Configuration:

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

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

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

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

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

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

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

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

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

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting:
 - i. Set RMC 12.2Kbps + HSDPA mode.
 - ii. Set Cell Power = -25 dBm
 - iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
 - iv. Select HSDPA Uplink Parameters
 - v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
 - a). Subtest 1: $\beta_c/\beta_d=2/15$
 - b). Subtest 2: $\beta_c/\beta_d=12/15$
 - c). Subtest 3: $\beta_c/\beta_d=15/8$
 - d). Subtest 4: $\beta_c/\beta_d=15/4$
 - vi. Set Delta ACK, Delta NACK and Delta CQI = 8
 - vii. Set Ack-Nack Repetition Factor to 3
 - viii. Set CQI Feedback Cycle (k) to 4 ms
 - ix. Set CQI Repetition Factor to 2
 - x. Power Ctrl Mode = All Up bits
- d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification. A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table. Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

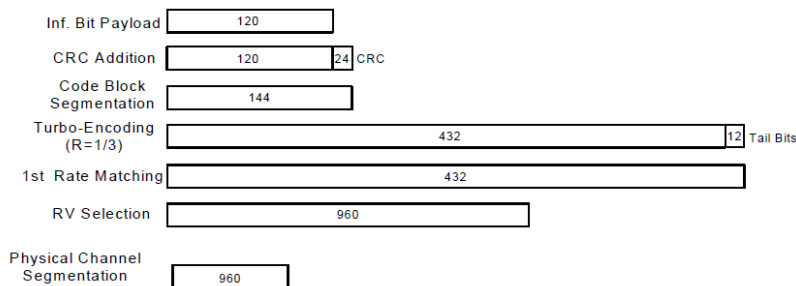


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

HSPA+ 3GPP release 7 (uplink category 7) 16QAM, Setup Configuration:

- a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- b. The RF path losses were compensated into the measurements.
- c. A call was established between EUT and Base Station with following setting * :
 - i. Call Configs = 5.2E:HSPA+:UL with 16QAM
 - ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.4, quoted from the TS 34.121-1 s5.2E
 - iii. Set Channel Parm
 - iv. Set Cell Power = -86 dBm
 - v. Set Channel Type = HSPA
 - vi. Set UE Target Power =21 dBm
 - vii. Power Ctrl Mode= All Up Bits
 - viii. Set Manual Uplink DPCH Bc/Bd = Manual
 - ix. Set Manual Uplink DPCH Bc and Bd=15,15(for 34.121-1 v8.10.0 table C11.1.4 sub-test 1)
 - x. Set HSPA Conn DL Channel Levels
 - xi. Set HS-SCCH Configs
 - xii. Set RB Test Mode Setup
 - xiii. Set Common HSUPA Parameters
 - xiv. Set Serving Grant
 - xv. Confirm that E-TFCI is equal to the target E-TFCI of 105 for sub-test 1, and other subtest's E-TFCI
- d. The transmitted maximum output power was recorded.

Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub-test	β_c (Note 3)	β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed1} : 30/15 β_{ed2} : 30/15	β_{ed3} : 24/15 β_{ed4} : 24/15	3.5	2.5	14	105	105

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

Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).

Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default.

Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signaled to use the extrapolation algorithm.

Setup Configuration

**<LTE Note>**

1. Anritsu MT8820C/MT8821 base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE band 2/4/5/17 SAR test was covered by Band 25/66/26/12; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is \leq the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

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

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

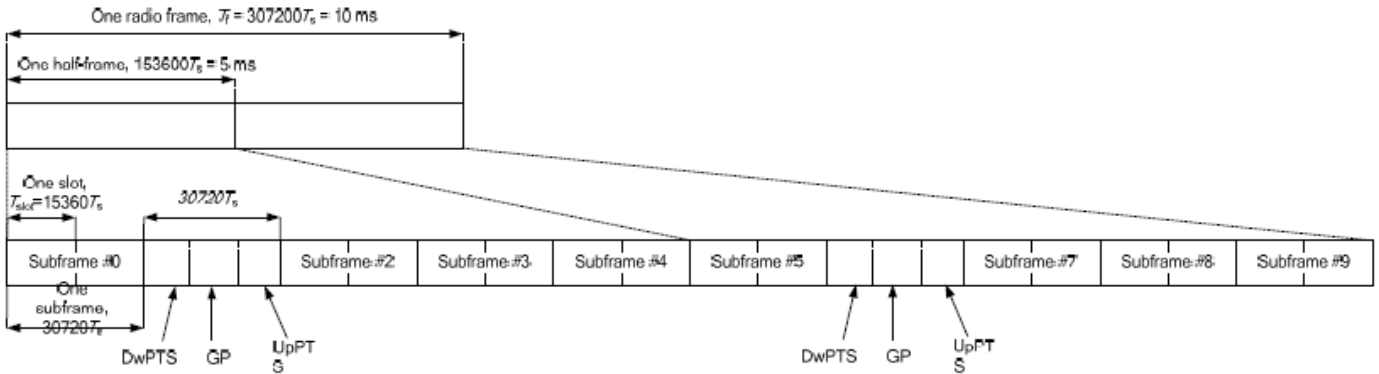


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

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

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

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

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

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

The highest duty factor is resulted from:

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

<5G NR Note>

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

<3GPP 38.101 MPR for EN-DC>

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

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

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

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

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

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



<WLAN Note>

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

<Bluetooth>

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle list below are considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation, for the duty cycle figure and output power include in appendix D.

	Power Index	Antenna	Duty Cycle %
Bluetooth	1/2/3/4/5/6/7/8	Ant 3	77.22
	1/2/3/4/5/6/7/8	Ant 4	76.83
	1/2/3/4/5/6/7/8	Ant 3+4	76.83



13. DL/UL carrier aggregation

<LTE Carrier Aggregation combinations>

General Note:

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

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation			4CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_2A-12A	293	62	CA_2A-12A-12A	293	180	CA_2A-12A-30A-66A	293
2	CA_2A-13A	295	63	CA_2A-12A-30A	293	181	CA_2A-12A-66A-66A	293
3	CA_2A-14A	300	64	CA_2A-12A-66A	293	182	CA_2A-12A-66C	293
4	CA_2A-17A		65	CA_2A-12B	293	183	CA_2A-12B-66A	293
5	CA_2A-26A	70	66	CA_2A-13A-48A	295	184	CA_2A-13A-48A-48A	295
6	CA_2A-2A	293	67	CA_2A-13A-66A	295	185	CA_2A-13A-48A-66A	295
7	CA_2A-30A	293	68	CA_2A-14A-30A	300	186	CA_2A-13A-48C	295
8	CA_2A-48A	295	69	CA_2A-14A-66A	300	187	CA_2A-13A-66A-66A	295
9	CA_2A-4A	217	70	CA_2A-26A-66A		188	CA_2A-13A-66B	295
10	CA_2A-5A	356	71	CA_2A-2A-12A	293	189	CA_2A-13A-66C	295
11	CA_2A-66A	293	72	CA_2A-2A-13A	295	190	CA_2A-14A-30A-66A	300
12	CA_2A-71A	314	73	CA_2A-2A-14A	300	191	CA_2A-14A-66A-66A	300
13	CA_2A-7A	312	74	CA_2A-2A-30A	293	192	CA_2A-2A-12A-30A	293
14	CA_2C	293	75	CA_2A-2A-4A	217	193	CA_2A-2A-12A-66A	293
15	CA_4A-12A	217	76	CA_2A-2A-5A	356	194	CA_2A-2A-12B	293
16	CA_4A-13A	86	77	CA_2A-2A-5B	356	195	CA_2A-2A-13A-66A	295
17	CA_4A-17A		78	CA_2A-2A-66A	293	196	CA_2A-2A-14A-30A	300
18	CA_4A-30A	217	79	CA_2A-2A-71A	314	197	CA_2A-2A-14A-66A	300
19	CA_4A-48A	246	80	CA_2A-2A-7A	312	198	CA_2A-2A-30A-66A	293
20	CA_4A-4A	217	81	CA_2A-30A-66A	293	199	CA_2A-2A-4A-12A	217
21	CA_4A-5A	221	82	CA_2A-48A-48A	295	200	CA_2A-2A-4A-4A	217
22	CA_4A-71A	202	83	CA_2A-48A-66A	295	201	CA_2A-2A-4A-5A	221
23	CA_4A-7A	223	84	CA_2A-48C	295	202	CA_2A-2A-4A-71A	
24	CA_5A-25A		85	CA_2A-4A-12A	217	203	CA_2A-2A-5A-30A	307
25	CA_5A-30A	307	86	CA_2A-4A-13A		204	CA_2A-2A-5A-66A	356
26	CA_5A-48A	356	87	CA_2A-4A-30A	217	205	CA_2A-2A-66A-66A	293
27	CA_5A-5A	356	88	CA_2A-4A-4A	217	206	CA_2A-2A-66A-71A	314
28	CA_5A-66A	356	89	CA_2A-4A-5A	221	207	CA_2A-2A-66B	293
29	CA_5A-7A	326	90	CA_2A-4A-71A	202	208	CA_2A-2A-66C	293
30	CA_7A-12A	312	91	CA_2A-4A-7A	223	209	CA_2A-2A-7A-66A	312
31	CA_7A-13A	333	92	CA_2A-5A-30A	307	210	CA_2A-30A-66A-66A	293
32	CA_7A-66A	312	93	CA_2A-5A-48A	356	211	CA_2A-48A-48A-66A	295
33	CA_7A-71A	314	94	CA_2A-5A-48C	356	212	CA_2A-48A-48C	295
34	CA_7A-7A	312	95	CA_2A-5A-66A	356	213	CA_2A-48A-66A-66A	295
35	CA_7C	312	96	CA_2A-5A-7A	326	214	CA_2A-48C-66A	295
36	CA_12A-12A	293	97	CA_2A-5B	356	215	CA_2A-48D	295
37	CA_12A-25A		98	CA_2A-66A-66A	293	216	CA_2A-4A-12A-12A	217
38	CA_12A-30A	293	99	CA_2A-66A-71A	312	217	CA_2A-4A-12A-30A	
39	CA_12A-48A	149	100	CA_2A-66B	293	218	CA_2A-4A-12B	217
40	CA_12A-66A	293	101	CA_2A-66C	293	219	CA_2A-4A-4A-12A	217
41	CA_12B	293	102	CA_2A-7A-12A	312	220	CA_2A-4A-4A-5A	221
42	CA_13A-48A	295	103	CA_2A-7A-13A	333	221	CA_2A-4A-5A-30A	
43	CA_13A-66A	295	104	CA_2A-7A-26A		222	CA_2A-4A-5B	221



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44	CA_14A-30A	300	105	CA_2A-7A-66A	312	223	CA_2A-4A-7A-12A	
45	CA_14A-66A	300	106	CA_2A-7A-7A	312	224	CA_2A-4A-7A-7A	223
46	CA_25A-25A	160	107	CA_2A-7C	312	225	CA_2A-4A-7C	223
47	CA_25A-26A	160	108	CA_2C-66A	293	226	CA_2A-5A-30A-66A	307
48	CA_25A-41A	279	109	CA_4A-12A-12A	217	227	CA_2A-5A-48A-66A	356
49	CA_26A-66A	141	110	CA_4A-12A-30A	217	228	CA_2A-5A-66A-66A	356
50	CA_30A-66A	293	111	CA_4A-12B	217	229	CA_2A-5A-66B	356
51	CA_38C		112	CA_4A-48C	246	230	CA_2A-5A-66C	356
52	CA_41A-41A	279	113	CA_4A-4A-12A	217	231	CA_2A-5B-30A	307
53	CA_41C	279	114	CA_4A-4A-13A	86	232	CA_2A-5B-66A	356
54	CA_48A-48A	356	115	CA_4A-4A-5A	221	233	CA_2A-66A-66A-66A	293
55	CA_48A-66A	356	116	CA_4A-4A-71A	202	234	CA_2A-66A-66A-71A	314
56	CA_48A-71A	167	117	CA_4A-4A-7A	223	235	CA_2A-66A-66B	293
57	CA_48C	356	118	CA_4A-5A-30A	221	236	CA_2A-66C-71A	314
58	CA_66A-66A	293	119	CA_4A-5B	221	237	CA_2A-7A-12A-66A	312
59	CA_66A-71A	314	120	CA_4A-7A-12A	223	238	CA_2A-7A-13A-66A	333
60	CA_66B	293	121	CA_4A-7A-7A	223	239	CA_2A-7A-66A-66A	312
61	CA_66C	293	122	CA_4A-7C	223	240	CA_2A-7A-66A-71A	314
			123	CA_5A-30A-66A	307	241	CA_2A-7A-7A-13A	333
			124	CA_5A-48A-66A	356	242	CA_2A-7A-7A-66A	312
			125	CA_5A-48C	356	243	CA_2A-7C-13A	333
			126	CA_5A-66A-66A	356	244	CA_2A-7C-66A	312
			127	CA_5A-66B	356	245	CA_2C-66A-66A	293
			128	CA_5A-66C	356	246	CA_4A-48D	
			129	CA_5A-7A-66A	326	247	CA_4A-4A-12B	217
			130	CA_5A-7A-7A	326	248	CA_4A-4A-5B	221
			131	CA_5B-30A	307	249	CA_4A-7C	223
			132	CA_5B-66A	356	250	CA_5A-30A-66A-66A	307
			133	CA_5A-66B	356	251	CA_5A-48A-66A-66A	356
			134	CA_5A-66C	356	252	CA_5A-48C-66A	356
			135	CA_5A-7A-66A	326	253	CA_5A-48D	356
			136	CA_5A-7A-7A	326	254	CA_5A-5A-66B	356
			137	CA_5B-66A	356	255	CA_5A-5A-66C	356
			138	CA_7A-12A-66A	312	256	CA_5A-7A-66A-66A	326
			139	CA_7A-12B	312	257	CA_5B-30A-66A	307
			140	CA_7A-13A-66A	333	258	CA_5B-66A-66A	356
			141	CA_7A-26A-66A		259	CA_5B-66B	356
			142	CA_7A-66A-66A	312	260	CA_5B-66C	356
			143	CA_7A-66A-71A	314	261	CA_7A-12A-66A-66A	312
			144	CA_7A-7A-13A	333	262	CA_7A-12B-66A	312
			145	CA_7A-7A-66A	312	263	CA_7A-7A-66A-66A	312
			146	CA_7C-13A	333	264	CA_7C-13A-66A	333
			147	CA_7C-66A	312	265	CA_7C-66A-66A	312
			148	CA_12A-30A-66A	293	266	CA_12A-30A-66A-66A	293
			149	CA_12A-48C		267	CA_12B-66A-66A	293
			150	CA_12A-66A-66A	293	268	CA_13A-48A-48A-66A	295
			151	CA_12A-66C	293	269	CA_13A-48A-48C	295
			152	CA_12B-66A	293	270	CA_13A-48A-66B	295
			153	CA_13A-48A-66A	295	271	CA_13A-48A-66C	295
			154	CA_13A-48C	295	272	CA_13A-48C-66A	295
			155	CA_13A-66A-66A	295	273	CA_13A-48D	295
			156	CA_13A-66B	295	274	CA_13A-66A-66B	295
			157	CA_13A-66C	295	275	CA_13A-66A-66C	295
			158	CA_14A-30A-66A	300	276	CA_13A-66D	295
			159	CA_14A-66A-66A	300	277	CA_14A-30A-66A-66A	300
			160	CA_25A-25A-26A		278	CA_14A-66A-66A-66A	300



			161	CA_25A-41C	279	279	CA_25A-41D	
			162	CA_30A-66A-66A	293	280	CA_30A-66A-66A-66A	293
			163	CA_41A-41C	279	281	CA_41E	279
			164	CA_41D	279	282	CA_48A-48A-66A-66A	295
			165	CA_48A-48A-48A	295	283	CA_48A-48A-66B	295
			166	CA_48A-48A-66A	295	284	CA_48A-48A-66C	295
			167	CA_48A-48A-71A		285	CA_48A-48C-66A	295
			168	CA_48A-48C	295	286	CA_48A-48D	295
			169	CA_48A-66A-66A	295	287	CA_48C-48C	295
			170	CA_48A-66B	295	288	CA_48C-66A-66A	295
			171	CA_48A-66C	295	289	CA_48C-66B	295
			172	CA_48C-66A	295	290	CA_48C-66C	295
			173	CA_48C-71A	173	291	CA_48D-66A	295
			174	CA_48D	295	292	CA_48E	295
			175	CA_66A-66A-66A	293			
			176	CA_66A-66A-71A	314			
			177	CA_66A-66B	293			
			178	CA_66A-66C	293			
			179	CA_66C-71A	314			

5CC Downlink Carrier Aggregation			6CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
293	CA_2A-12A-30A-66A-66A		355	CA_2A-48E-66A	356
294	CA_2A-12B-66A-66A	293	356	CA_2A-5A-48C-66A-66A	
295	CA_2A-13A-48A-48A-66A				
296	CA_2A-13A-48A-48C	295			
297	CA_2A-13A-48C-66A	295			
298	CA_2A-13A-48D	295			
299	CA_2A-13A-66A-66B	295			
300	CA_2A-14A-30A-66A-66A				
301	CA_2A-2A-12A-30A-66A	293			
302	CA_2A-2A-12A-66A-66A	293			
303	CA_2A-2A-12B-66A	293			
304	CA_2A-2A-13A-66A-66A	295			
305	CA_2A-2A-14A-30A-66A	300			
306	CA_2A-2A-14A-66A-66A	300			
307	CA_2A-2A-5A-30A-66A				
308	CA_2A-2A-5A-66A-66A	356			
309	CA_2A-2A-5A-66B	356			
310	CA_2A-2A-5A-66C	356			
311	CA_2A-2A-5B-66A	356			
312	CA_2A-2A-7A-12A-66A				
313	CA_2A-2A-7A-66A-66A	312			
314	CA_2A-2A-7A-66A-71A				
315	CA_2A-48A-48C-66A	295			
316	CA_2A-48A-48D	295			
317	CA_2A-48C-48C	295			
318	CA_2A-48C-66A-66A	295			
319	CA_2A-48D-66A	295			
320	CA_2A-48E	295			
321	CA_2A-5A-30A-66A-66A	307			
322	CA_2A-5A-48A-66A-66A	356			
323	CA_2A-5A-48C-66A	356			
324	CA_2A-5A-48D	356			



325	CA_2A-5A-5A-66A-66A	356			
326	CA_2A-5A-7A-66A-66A				
327	CA_2A-5B-30A-66A	307			
328	CA_2A-5B-66A-66A	356			
329	CA_2A-5B-66B	356			
330	CA_2A-5B-66C	356			
331	CA_2A-7A-12A-66A-66A	312			
332	CA_2A-7A-7A-66A-66A	312			
333	CA_2A-7C-13A-66A				
334	CA_2A-7C-66A-66A	312			
335	CA_4A-48E				
336	CA_5A-48C-66A-66A	356			
337	CA_5A-48D-66A	356			
338	CA_5A-7C-66A-66A	326			
339	CA_5B-30A-66A-66A	307			
340	CA_5A-7C-66A-66A	326			
341	CA_13A-48A-48C-66A	295			
342	CA_13A-48A-48D	295			
343	CA_13A-48C-48C	295			
344	CA_13A-48D-66A	295			
345	CA_13A-48E	295			
346	CA_41F	279			
347	CA_48A-48C-66B	295			
348	CA_48A-48C-66C	295			
349	CA_48A-48D-66A	295			
350	CA_48A-48E	295			
351	CA_48C-48C-66A	295			
352	CA_48C-48D	295			
353	CA_48E-66A	295			
354	CA_48F	295			

<Power verification when LTE Carrier Aggregation Active>

General Note:

- i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.
- ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.
- iii. The device supports downlink two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- vi. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

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

<Two Carrier power verification>

Configure	CA Configuration	PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-17A	2	20	1880	18900	QPSK	1	0	17	10	740	5790	24.67	24.69
	CA_4A-17A	4	20	1732.5	20175	QPSK	1	0	17	10	740	5790	24.65	24.80
	CA_5A-25A	5	10	844	20600	QPSK	1	0	25	20	1960	8340	24.19	24.34
	CA_12A-25A	12	10	704	20360	QPSK	1	0	25	20	1960	8340	24.58	24.60
	CA_38C	38	20	2595	38000	QPSK	1	0	38	20	2614.80	38198	24.46	24.64

<Three Carrier power verification>

Configure	CA Configuration	PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-26A-66A	2	20	1880	18900	QPSK	1	0	26	15	876.5	8865	66	20	2155	66886	24.50	24.69
	CA_2A-4A-13A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	13	10	751	5230	24.66	24.69
	CA_2A-7A-26A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	26	15	876.5	8865	24.57	24.69
	CA_7A-26A-66A	7	20	2560	21350	QPSK	1	0	26	15	876.5	8865	66	20	2155	66886	24.79	24.82
	CA_12A-48C	12	10	704	20360	QPSK	1	0	48	20	3641	56150	48	20	3660.8	56348	24.58	24.60
	CA_25A-25A-26A	25	20	1880	26340	QPSK	1	0	25	5	1992.5	8665	26	15	876.5	8865	24.55	24.72
	CA_48A-48A-71A	48	20	3690	56640	QPSK	1	0	48	5	3697.5	56715	71	20	634.5	68761	25.04	25.20



<Four Carrier power verification>

Configure	CA Configuration	PCC								SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	CA_2A-2A-4A-71A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	71	20	634.5	68761	24.58	24.69	
	CA_2A-4A-12A-30A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	12	10	737.5	5095	30	10	2355	9820	24.65	24.69	
	CA_2A-4A-5A-30A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	5	10	881.5	2525	30	10	2355	9820	24.53	24.69	
	CA_2A-4A-7A-12A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	12	10	737.5	5095	24.49	24.69	
	CA_4A-48D	4	20	1732.5	20175	QPSK	1	0	48	20	3641	56150	48	20	3660.8	56348	48	20	3680.6	56546	24.80	24.80	
CA_25A-41D	25	20	1880	26340	QPSK	1	0	41	20	2593	40620	41	20	2612.8	40818	41	20	2632.6	41016	24.26	24.35		

<Five Carrier power verification>

Configure	CA Configuration	PCC								SCC1				SCC2				SCC3				SCC4				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	CA_2A-12A-30A-66A-66A	2	20	1880	18900	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.67	24.69	
	CA_2A-13A-48A-48A-66A	2	20	1880	18900	QPSK	1	0	13	10	751	5230	48	20	3641	56150	48	5	3697.5	56715	66	20	2155	66886	24.53	24.69	
	CA_2A-14A-30A-66A-66A	2	20	1880	18900	QPSK	1	0	14	10	763	5330	30	10	2355	9820	66	20	2155	66886	66	5	2197.5	67311	24.54	24.69	
	CA_2A-2A-5A-30A-66A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	30	10	2355	9820	66	20	2155	66886	24.52	24.69	
	CA_2A-2A-7A-12A-66A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	7	20	2655	3100	12	10	737.5	5095	66	20	2155	66886	24.60	24.69	
	CA_2A-2A-7A-66A-71A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	7	20	2655	3100	66	20	2155	66886	71	20	634.5	68761	24.59	24.69	
	CA_2A-5A-7A-66A-66A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	7	20	2655	3100	66	20	2155	66886	66	5	2197.5	67311	24.63	24.69	
CA_2A-7C-13A-66A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	7	20	2674.8	3298	13	10	751	5230	66	20	2155	66886	24.67	24.69		

<Six Carrier power verification>

Configure	CA Configuration	PCC								SCC1				SCC2				SCC3				SCC4				SCC5				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	CA_2A-5A-48C-66A-66A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	48	20	3641	56150	48	20	3660.8	56348	66	20	2155	66886	66	5	2197.5	67311	24.60	24.69	

<LTE Uplink carrier aggregation>

2CC Uplink Carrier Aggregation	
Number	Combination
1	CA_5B
2	CA_7C
3	CA_66B
4	CA_66C
5	CA_38C
6	CA_41C

<Intra-band>

General Note:

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

TX 0

Index 2/3								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24

Index 4								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24



Index 5								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24

Index 6								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24

Index 7/8								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24

Index 9								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24

Index 10								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24

Index 11								
CA_5B_Ant 0								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.71	24
20475	20574	QPSK	1	49	1	0	22.64	24
20600	20501	QPSK	1	0	1	49	22.66	24



Index 2/3								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.05	24
21100	20902	QPSK	1	0	1	99	22.88	24
21350	21152	QPSK	1	0	1	99	22.78	24

Index 4								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	16.52	17
21100	20902	QPSK	1	0	1	99	16.29	17
21350	21152	QPSK	1	0	1	99	16.28	17

Index 5								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	18.09	19.2
21100	20902	QPSK	1	0	1	99	17.87	19.2
21350	21152	QPSK	1	0	1	99	17.78	19.2

Index 6								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	18.09	18.4
21100	20902	QPSK	1	0	1	99	17.87	18.4
21350	21152	QPSK	1	0	1	99	17.78	18.4

Index 7/8								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.05	24
21100	20902	QPSK	1	0	1	99	22.88	24
21350	21152	QPSK	1	0	1	99	22.78	24

Index 9								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	16.81	17.1
21100	20902	QPSK	1	0	1	99	16.56	17.1
21350	21152	QPSK	1	0	1	99	16.52	17.1



Index 10								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	17.56	18.8
21100	20902	QPSK	1	0	1	99	17.47	18.8
21350	21152	QPSK	1	0	1	99	17.34	18.8

Index 11								
CA_7C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	17.56	18
21100	20902	QPSK	1	0	1	99	17.47	18
21350	21152	QPSK	1	0	1	99	17.34	18

Index 2/3								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	22.79	24
132322	132229	QPSK	1	0	1	24	22.86	24
132597	132504	QPSK	1	0	1	24	23.06	24

Index 4								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	17.38	18
132322	132229	QPSK	1	0	1	24	17.42	18
132597	132504	QPSK	1	0	1	24	17.55	18

Index 5								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.88	20.9
132322	132229	QPSK	1	0	1	24	19.91	20.9
132597	132504	QPSK	1	0	1	24	20.05	20.9

Index 6								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.88	20.1
132322	132229	QPSK	1	0	1	24	19.91	20.1
132597	132504	QPSK	1	0	1	24	20.05	20.1



Index 7/8								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	22.79	24
132322	132229	QPSK	1	0	1	24	22.86	24
132597	132504	QPSK	1	0	1	24	23.06	24

Index 9								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	17.22	18.3
132322	132229	QPSK	1	0	1	24	17.41	18.3
132597	132504	QPSK	1	0	1	24	17.61	18.3

Index 10								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	17.22	19.1
132322	132229	QPSK	1	0	1	24	17.41	19.1
132597	132504	QPSK	1	0	1	24	17.61	19.1

Index 11								
CA_66B_Ant 2								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	17.22	18.3
132322	132229	QPSK	1	0	1	24	17.41	18.3
132597	132504	QPSK	1	0	1	24	17.61	18.3

Index 2/3								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	22.78	24
132322	132124	QPSK	1	0	1	99	22.92	24
132572	132374	QPSK	1	0	1	99	23.16	24

Index 4								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	17.25	18
132322	132124	QPSK	1	0	1	99	17.35	18
132572	132374	QPSK	1	0	1	99	17.63	18



Index 5								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.47	20.9
132322	132124	QPSK	1	0	1	99	19.58	20.9
132572	132374	QPSK	1	0	1	99	19.98	20.9

Index 6								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.47	20.1
132322	132124	QPSK	1	0	1	99	19.58	20.1
132572	132374	QPSK	1	0	1	99	19.98	20.1

Index 7/8								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	22.78	24
132322	132124	QPSK	1	0	1	99	22.92	24
132572	132374	QPSK	1	0	1	99	23.16	24

Index 9								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	17.28	18.3
132322	132124	QPSK	1	0	1	99	17.38	18.3
132572	132374	QPSK	1	0	1	99	17.59	18.3

Index 10								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	17.28	19.1
132322	132124	QPSK	1	0	1	99	17.38	19.1
132572	132374	QPSK	1	0	1	99	17.59	19.1

Index 11								
CA_66C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	17.28	18.3
132322	132124	QPSK	1	0	1	99	17.38	18.3
132572	132374	QPSK	1	0	1	99	17.59	18.3



Index 2/3								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.8	22
37901	38099	QPSK	1	0	0	0	20.92	22
38150	37952	QPSK	1	0	0	0	20.63	22

Index 4								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	19.37	19.4
37901	38099	QPSK	1	0	0	0	19.39	19.4
38150	37952	QPSK	1	0	0	0	19.23	19.4

Index 5								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.37	21.6
37901	38099	QPSK	1	0	0	0	20.43	21.6
38150	37952	QPSK	1	0	0	0	20.31	21.6

Index 6								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.37	20.8
37901	38099	QPSK	1	0	0	0	20.43	20.8
38150	37952	QPSK	1	0	0	0	20.31	20.8

Index 7/8								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.8	22
37901	38099	QPSK	1	0	0	0	20.92	22
38150	37952	QPSK	1	0	0	0	20.63	22

Index 9								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	18.03	18.8
37901	38099	QPSK	1	0	0	0	18.08	18.8
38150	37952	QPSK	1	0	0	0	17.88	18.8



Index 10								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	19.05	20.5
37901	38099	QPSK	1	0	0	0	19.21	20.5
38150	37952	QPSK	1	0	0	0	18.97	20.5

Index 11								
CA_38C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	19.05	19.7
37901	38099	QPSK	1	0	0	0	19.21	19.7
38150	37952	QPSK	1	0	0	0	18.97	19.7

Index 2/3								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.94	22
40185	39987	QPSK	1	0	0	0	20.73	22
40620	40422	QPSK	1	0	0	0	20.85	22
41055	40857	QPSK	1	0	0	0	20.75	22
41490	41292	QPSK	1	0	0	0	20.53	22

Index 4								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	19.37	19.4
40185	39987	QPSK	1	0	0	0	19.33	19.4
40620	40422	QPSK	1	0	0	0	19.26	19.4
41055	40857	QPSK	1	0	0	0	19.23	19.4
41490	41292	QPSK	1	0	0	0	19.02	19.4

Index 5								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.47	21.6
40185	39987	QPSK	1	0	0	0	20.41	21.6
40620	40422	QPSK	1	0	0	0	20.18	21.6
41055	40857	QPSK	1	0	0	0	20.33	21.6
41490	41292	QPSK	1	0	0	0	20.09	21.6



Index 6								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.47	20.8
40185	39987	QPSK	1	0	0	0	20.41	20.8
40620	40422	QPSK	1	0	0	0	20.18	20.8
41055	40857	QPSK	1	0	0	0	20.33	20.8
41490	41292	QPSK	1	0	0	0	20.09	20.8

Index 7/8								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.94	22
40185	39987	QPSK	1	0	0	0	20.73	22
40620	40422	QPSK	1	0	0	0	20.85	22
41055	40857	QPSK	1	0	0	0	20.75	22
41490	41292	QPSK	1	0	0	0	20.53	22

Index 9								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	18.34	18.8
40185	39987	QPSK	1	0	0	0	18.29	18.8
40620	40422	QPSK	1	0	0	0	18.33	18.8
41055	40857	QPSK	1	0	0	0	18.23	18.8
41490	41292	QPSK	1	0	0	0	18	18.8

Index 10								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	19.13	20.5
40185	39987	QPSK	1	0	0	0	19.06	20.5
40620	40422	QPSK	1	0	0	0	19.12	20.5
41055	40857	QPSK	1	0	0	0	18.93	20.5
41490	41292	QPSK	1	0	0	0	18.86	20.5

Index 11								
CA_41C_Ant 2								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	19.13	19.7
40185	39987	QPSK	1	0	0	0	19.06	19.7
40620	40422	QPSK	1	0	0	0	19.12	19.7
41055	40857	QPSK	1	0	0	0	18.93	19.7
41490	41292	QPSK	1	0	0	0	18.86	19.7



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Index 2/3								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 4								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 5								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 6								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 7								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	20.34	22
20475	20574	QPSK	1	49	1	0	20.18	22
20600	20501	QPSK	1	0	1	49	20.09	22

Index 8								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	20.34	21.2
20475	20574	QPSK	1	49	1	0	20.18	21.2
20600	20501	QPSK	1	0	1	49	20.09	21.2



Index 9								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 10								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 11								
CA_5B_Ant 1								
Combination 10MHz+10MHz (50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20450	20549	QPSK	1	0	0	0	22.55	24
20475	20574	QPSK	1	49	1	0	22.32	24
20600	20501	QPSK	1	0	1	49	22.3	24

Index 2/3								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.82	24
21100	20902	QPSK	1	0	1	99	23.66	24
21350	21152	QPSK	1	0	1	99	23.94	24

Index 4								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.82	24
21100	20902	QPSK	1	0	1	99	23.66	24
21350	21152	QPSK	1	0	1	99	23.94	24

Index 5								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.82	24
21100	20902	QPSK	1	0	1	99	23.66	24
21350	21152	QPSK	1	0	1	99	23.94	24



Index 6								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.82	24
21100	20902	QPSK	1	0	1	99	23.66	24
21350	21152	QPSK	1	0	1	99	23.94	24

Index 7								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.82	24
21100	20902	QPSK	1	0	1	99	23.66	24
21350	21152	QPSK	1	0	1	99	23.94	24

Index 8								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	23.82	24
21100	20902	QPSK	1	0	1	99	23.66	24
21350	21152	QPSK	1	0	1	99	23.94	24

Index 9								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	22.23	22.6
21100	20902	QPSK	1	0	1	99	22.07	22.6
21350	21152	QPSK	1	0	1	99	22.36	22.6

Index 10								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	22.23	23.4
21100	20902	QPSK	1	0	1	99	22.07	23.4
21350	21152	QPSK	1	0	1	99	22.36	23.4

Index 11								
CA_7C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	0	0	0	22.23	22.6
21100	20902	QPSK	1	0	1	99	22.07	22.6
21350	21152	QPSK	1	0	1	99	22.36	22.6



Index 2/3								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	23.03	24
132322	132229	QPSK	1	0	1	24	23.14	24
132597	132504	QPSK	1	0	1	24	23.2	24

Index 4								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.97	20.4
132322	132229	QPSK	1	0	1	24	20.21	20.4
132597	132504	QPSK	1	0	1	24	20.23	20.4

Index 5								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.97	21.2
132322	132229	QPSK	1	0	1	24	20.21	21.2
132597	132504	QPSK	1	0	1	24	20.23	21.2

Index 6								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.97	20.4
132322	132229	QPSK	1	0	1	24	20.21	20.4
132597	132504	QPSK	1	0	1	24	20.23	20.4

Index 7								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	23.03	24
132322	132229	QPSK	1	0	1	24	23.14	24
132597	132504	QPSK	1	0	1	24	23.2	24

Index 8								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	23.03	24
132322	132229	QPSK	1	0	1	24	23.14	24
132597	132504	QPSK	1	0	1	24	23.2	24



Index 9								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.59	20.1
132322	132229	QPSK	1	0	1	24	19.65	20.1
132597	132504	QPSK	1	0	1	24	19.79	20.1

Index 10								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.59	20.9
132322	132229	QPSK	1	0	1	24	19.65	20.9
132597	132504	QPSK	1	0	1	24	19.79	20.9

Index 11								
CA_66B_Ant 0								
Combination 15MHz+5MHz (75RB+25RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132047	132140	QPSK	1	0	0	0	19.59	20.1
132322	132229	QPSK	1	0	1	24	19.65	20.1
132597	132504	QPSK	1	0	1	24	19.79	20.1

Index 2/3								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	22.97	24
132322	132124	QPSK	1	0	1	99	23.21	24
132572	132374	QPSK	1	0	1	99	23.36	24

Index 4								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.91	20.4
132322	132124	QPSK	1	0	1	99	20.19	20.4
132572	132374	QPSK	1	0	1	99	20.28	20.4

Index 5								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.91	21.2
132322	132124	QPSK	1	0	1	99	20.19	21.2
132572	132374	QPSK	1	0	1	99	20.28	21.2



Index 6								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.91	20.4
132322	132124	QPSK	1	0	1	99	20.19	20.4
132572	132374	QPSK	1	0	1	99	20.28	20.4

Index 7								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	22.97	24
132322	132124	QPSK	1	0	1	99	23.21	24
132572	132374	QPSK	1	0	1	99	23.36	24

Index 8								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	22.97	24
132322	132124	QPSK	1	0	1	99	23.21	24
132572	132374	QPSK	1	0	1	99	23.36	24

Index 9								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.43	20.1
132322	132124	QPSK	1	0	1	99	19.81	20.1
132572	132374	QPSK	1	0	1	99	19.85	20.1

Index 10								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.43	20.9
132322	132124	QPSK	1	0	1	99	19.81	20.9
132572	132374	QPSK	1	0	1	99	19.85	20.9

Index 11								
CA_66C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
132072	132270	QPSK	1	0	0	0	19.43	20.1
132322	132124	QPSK	1	0	1	99	19.81	20.1
132572	132374	QPSK	1	0	1	99	19.85	20.1



Index 2/3								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 4								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 5								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 6								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 7								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 8								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22



Index 9								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 10								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 11								
CA_38C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	0	0	0	20.68	22
37901	38099	QPSK	1	0	0	0	20.32	22
38150	37952	QPSK	1	0	0	0	20.35	22

Index 2/3								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22

Index 4								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22



Index 5								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22

Index 6								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22

Index 7								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22
41490	41292	QPSK	1	0	0	0	20.54	22

Index 8								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22
41490	41292	QPSK	1	0	0	0	20.54	22



Index 9								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22

Index 10								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22

Index 11								
CA_41C_Ant 0								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	1	0	0	0	20.6	22
40185	39987	QPSK	1	0	0	0	20.41	22
40620	40422	QPSK	1	0	0	0	20.48	22
41055	40857	QPSK	1	0	0	0	20.41	22
41490	41292	QPSK	1	0	0	0	20.54	22

14. RF Exposure position consideration

<Closed mode>

Distance of the Antenna to the EUT surface/edge						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	> 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	> 25mm
WWAN Ant 2	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 5	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	> 25mm
WWAN Ant 6	≤ 25mm	≤ 25mm	> 25mm	> 25mm	≤ 25mm	> 25mm
2.4GHz WLAN/BT Ant 3 / 4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm
WLAN/BT Ant 3+4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm

Positions for SAR and PD tests						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	Yes	Yes	No	Yes	Yes	No
WWAN Ant 1	Yes	Yes	Yes	No	Yes	No
WWAN Ant 2	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 5	Yes	Yes	No	Yes	Yes	No
WWAN Ant 6	Yes	Yes	No	No	Yes	No
2.4GHz WLAN/BT Ant 3 / 4	Yes	Yes	Yes	No	Yes	Yes
WLAN/BT Ant 3+4	Yes	Yes	Yes	No	Yes	Yes

<Open mode>

Distance of the Antenna to the EUT surface/edge						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	> 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	> 25mm
WWAN Ant 2	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	> 25mm
WWAN Ant 5	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	> 25mm
WWAN Ant 6	≤ 25mm	≤ 25mm	> 25mm	> 25mm	≤ 25mm	> 25mm
2.4GHz WLAN/BT Ant 3 / 4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	> 25mm
WLAN/BT Ant 3+4	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	> 25mm

Positions for SAR and PD tests						
Antennas	Front	Back	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	Yes	Yes	No	Yes	Yes	No
WWAN Ant 1	Yes	Yes	Yes	No	Yes	No
WWAN Ant 2	Yes	Yes	No	Yes	Yes	No
WWAN Ant 5	Yes	Yes	No	Yes	Yes	No
WWAN Ant 6	Yes	Yes	No	No	Yes	No
2.4GHz WLAN/BT Ant 3 / 4	Yes	Yes	Yes	No	Yes	No
WLAN/BT Ant 3+4	Yes	Yes	Yes	No	Yes	No

General Note:

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



15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the headset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB648474 D04v01r03, when the device is in close configuration, for smart phones with a display diagonal dimension < 15.0 cm or an overall diagonal dimension < 16.0 cm, 10-g product specific SAR is not required.
6. When the device is in open configuration, the 1g SAR test are required at a test separation of 10mm on all surfaces and edges ≤ 25 mm from a transmitting antenna. Therefore, to address hand exposure, Extramity 10g SAR tests are required at a test separation of 0mm, for all measure 1g SAR configuration.
7. For each exposure condition test requirement when the device is in open or close configuration was confirm with FCC via a KDB inquiry.
8. 0.001 represents SAR is very low and can't base on area scan measurement to find out SAR peak location to determine zoom scan measurement of 1g or 10g SAR.

**GSM Note:**

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

UMTS Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17 SAR test was covered by Band 25/66/26/12; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. The maximum output power, including tolerance, for the smaller band is \leq the larger band to qualify for the SAR test exclusion.
 - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device is not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n12/n41/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission.
 - g. NR n2 SAR test was covered by NR n25; SAR test for overlapping bands can be reduced if the maximum output power, including tolerance, for the smaller band is \leq the larger band and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band to qualify for the SAR test exclusion.

WLAN Note:

1. The SISO mode support only when the Antenna 3 and 4 is transmitting on 802.11b mode, other support MIMO mode.
2. Per KDB 248227 D01v02r02, For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test position when 802.11 DSS mode is active at transmit antenna 3 and 4
3. Per KDB 248227 D01v02r02, for 2.4GHz WLAN MIMO operation for 802.11g/n, when the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured, so 802.11g mode is selected to be tested.
4. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required when the WLAN5.3GHz band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for WLAN5.2GHz band.
5. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
6. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
7. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain
8. 4+3(3) represents the test in 2TX operation, while the SAR or power data is associated with antenna 3
9. 4+3(4) represents the test in 2TX operation, while the SAR or power data is associated with antenna 4
10. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

WLAN PD Note:

1. The WiFi 6E PD was performed according 2020 TCB workshop RF Exposure 5G RFX Policies Interim Procedures.
2. First, evaluate SAR using 6-7 GHz parameters per IEC/IEEE 62209-1528:2020 and using highest SAR test configurations evaluate incident PD using the mmw near-field probe and total-field/power-density reconstruction method (2 mm closest meas. plane).
3. Per Interim Procedures. The power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor
4. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. The WiFi 6E RF Exposure results are used for simultaneous transmission analysis with the other transmitters and total exposure ratio, the analysis can be found in this report section 16 and part1 PD report section12
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 PD_{inc} at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPD_n fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1 dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

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

NFC Note:

1. NFC mainly operate in hand-held extremity exposure conditions and NFC sensing distance with other device or reading tag is about 20cm, therefore Standalone 10-g extremity SAR testing for NFC will be performed with active mode and max power mode, with 100% duty cycle at 0mm separation distance.
2. NFC SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.
3. NFC 13.56MHz antenna port is not available on the device to support conducted power measurement, therefore the measured results are as reported SAR.
4. NFC SAR test tissue-simulating liquid parameter: refer to IEC/IEEE 62209-1528 2020.
5. NFC SAR testing is by test software with 100% duty cycle.



15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	128	824.2	29.29	30.00	1.178	-0.05	0.401	0.472
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	189	836.4	29.14	30.00	1.219	-0.12	0.341	0.416
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	251	848.8	29.24	30.00	1.191	-0.15	0.305	0.363
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	Close	128	824.2	29.29	30.00	1.178	-0.09	0.251	0.296
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	128	824.2	29.29	30.00	1.178	-0.12	0.217	0.256
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	Close	128	824.2	29.29	30.00	1.178	-0.03	0.148	0.174
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	7/8	Open	128	824.2	29.29	30.00	1.178	-0.01	0.343	0.404
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	7/8	Open	128	824.2	29.29	30.00	1.178	0.05	0.242	0.285
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	128	824.2	29.29	30.00	1.178	0.18	0.483	0.569
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	189	836.4	29.14	30.00	1.219	-0.15	0.441	0.538
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	251	848.8	29.24	30.00	1.191	0.03	0.509	0.606
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	7/8	Open	128	824.2	29.29	30.00	1.178	0.1	0.173	0.204
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	189	836.4	28.74	30.00	1.337	0.07	0.214	0.286
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	Close	189	836.4	28.74	30.00	1.337	0.13	0.178	0.238
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	189	836.4	28.74	30.00	1.337	0.08	0.355	0.474
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	128	824.2	28.62	30.00	1.374	-0.01	0.414	0.569
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	251	848.8	28.58	30.00	1.387	0.02	0.316	0.438
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	Close	189	836.4	28.74	30.00	1.337	0.05	0.225	0.301
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	7	Open	189	836.4	26.87	28.30	1.390	-0.09	0.820	1.140
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	7	Open	128	824.2	26.72	28.30	1.439	0.02	0.806	1.160
01	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	7	Open	251	848.8	26.77	28.30	1.422	0.03	0.834	1.186
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	7	Open	189	836.4	26.87	28.30	1.390	-0.02	0.350	0.486
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	7	Open	189	836.4	26.87	28.30	1.390	0.01	0.443	0.616
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	7	Open	189	836.4	26.87	28.30	1.390	0.04	0.211	0.293
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	8	Open	189	836.4	26.87	27.50	1.156	-0.09	0.820	0.948
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	8	Open	128	824.2	26.72	27.50	1.197	0.02	0.806	0.965
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	8	Open	251	848.8	26.77	27.50	1.183	0.03	0.834	0.987
	GSM850_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	8	Open	189	836.4	26.87	27.50	1.156	-0.02	0.350	0.405
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	8	Open	189	836.4	26.87	27.50	1.156	0.01	0.443	0.512
	GSM850_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	8	Open	189	836.4	26.87	27.50	1.156	0.04	0.211	0.244



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	512	1850.2	27.08	27.50	1.102	-0.18	0.158	0.174
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	Close	512	1850.2	27.08	27.50	1.102	-0.15	0.098	0.108
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	512	1850.2	27.08	27.50	1.102	0.05	0.186	0.205
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	661	1880	26.85	27.50	1.161	-0.17	0.142	0.165
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	810	1909.8	26.46	27.50	1.271	0.06	0.151	0.192
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	Close	512	1850.2	27.08	27.50	1.102	0.01	0.094	0.104
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Cheek	0mm	7/8	Open	512	1850.2	27.08	27.50	1.102	-0.02	0.060	0.066
	GSM1900_Ant 2	GPRS (4 Tx slots)	Right Tilted	0mm	7/8	Open	512	1850.2	27.08	27.50	1.102	0.17	0.001	0.001
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	512	1850.2	27.08	27.50	1.102	-0.09	0.234	0.258
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	661	1880	26.85	27.50	1.161	-0.17	0.131	0.152
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	810	1909.8	26.46	27.50	1.271	0.15	0.138	0.175
	GSM1900_Ant 2	GPRS (4 Tx slots)	Left Tilted	0mm	7/8	Open	512	1850.2	27.08	27.50	1.102	0	0.072	0.079
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	512	1850.2	26.73	27.50	1.194	0	0.077	0.092
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	661	1880	26.59	27.50	1.233	-0.06	0.124	0.153
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	2/3	Close	810	1909.8	26.43	27.50	1.279	-0.1	0.053	0.068
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	2/3	Close	512	1850.2	26.73	27.50	1.194	-0.15	0.026	0.031
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	2/3	Close	512	1850.2	26.73	27.50	1.194	0.08	0.042	0.050
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	2/3	Close	512	1850.2	26.73	27.50	1.194	-0.06	0.022	0.026
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	7/8	Open	512	1850.2	26.73	27.50	1.194	0.1	0.208	0.248
	GSM1900_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	7/8	Open	512	1850.2	26.73	27.50	1.194	-0.05	0.001	0.001
02	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	512	1850.2	26.73	27.50	1.194	-0.04	0.446	0.533
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	661	1880	26.59	27.50	1.233	0.04	0.424	0.523
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	7/8	Open	810	1909.8	26.43	27.50	1.279	0.18	0.329	0.421
	GSM1900_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	7/8	Open	512	1850.2	26.73	27.50	1.194	0.07	0.091	0.109



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	9262	1852.4	24.61	25.20	1.146	-0.08	0.201	0.230
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	9400	1880	24.29	25.20	1.233	-0.12	0.206	0.254
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	9538	1907.6	24.37	25.20	1.211	0.02	0.197	0.238
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	2/3	Close	9262	1852.4	24.61	25.20	1.146	-0.05	0.093	0.107
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	9262	1852.4	24.61	25.20	1.146	-0.12	0.191	0.219
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	2/3	Close	9262	1852.4	24.61	25.20	1.146	-0.16	0.072	0.082
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	7/8	Open	9262	1852.4	24.61	25.20	1.146	-0.15	0.151	0.173
	WCDMA II_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	7/8	Open	9262	1852.4	24.61	25.20	1.146	-0.16	0.138	0.158
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	9262	1852.4	24.61	25.20	1.146	0.15	0.253	0.290
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	9400	1880	24.29	25.20	1.233	-0.01	0.291	0.359
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	9538	1907.6	24.37	25.20	1.211	0.01	0.315	0.381
	WCDMA II_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	7/8	Open	9262	1852.4	24.61	25.20	1.146	0.12	0.085	0.097
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	9400	1880	23.90	25.20	1.349	-0.17	0.187	0.252
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	9262	1852.4	23.73	25.20	1.403	-0.13	0.201	0.282
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	9538	1907.6	23.71	25.20	1.409	-0.01	0.202	0.285
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	Close	9400	1880	23.90	25.20	1.349	-0.15	0.069	0.093
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	9400	1880	23.90	25.20	1.349	-0.17	0.114	0.154
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	Close	9400	1880	23.90	25.20	1.349	0.08	0.060	0.081
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	7/8	Open	9400	1880	23.90	25.20	1.349	-0.06	0.143	0.193
	WCDMA II_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	7/8	Open	9400	1880	23.90	25.20	1.349	0.1	0.060	0.081
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	9400	1880	23.90	25.20	1.349	0.02	0.408	0.550
03	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	9262	1852.4	23.73	25.20	1.403	0.02	0.578	0.811
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	9538	1907.6	23.71	25.20	1.409	-0.03	0.237	0.334
	WCDMA II_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	7/8	Open	9400	1880	23.90	25.20	1.349	0.05	0.081	0.109



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	1413	1732.6	24.67	25.70	1.268	0.08	0.160	0.203
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	1312	1712.4	24.61	25.70	1.285	-0.14	0.127	0.163
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	1513	1752.6	24.61	25.70	1.285	0.18	0.139	0.179
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	2/3	Close	1413	1732.6	24.67	25.70	1.268	-0.08	0.109	0.138
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	1413	1732.6	24.67	25.70	1.268	0.02	0.139	0.176
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	2/3	Close	1413	1732.6	24.67	25.70	1.268	-0.19	0.048	0.061
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Cheek	0mm	7/8	Open	1413	1732.6	24.67	25.70	1.268	0.05	0.228	0.289
	WCDMA IV_Ant 2	RMC 12.2Kbps	Right Tilted	0mm	7/8	Open	1413	1732.6	24.67	25.70	1.268	-0.11	0.222	0.281
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	1413	1732.6	24.67	25.70	1.268	0.04	0.416	0.527
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	1312	1712.4	24.61	25.70	1.285	-0.11	0.325	0.418
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	1513	1752.6	24.61	25.70	1.285	0.17	0.283	0.364
	WCDMA IV_Ant 2	RMC 12.2Kbps	Left Tilted	0mm	7/8	Open	1413	1732.6	24.67	25.70	1.268	0.08	0.197	0.250
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	1413	1732.6	24.57	25.70	1.297	0.18	0.131	0.170
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	1312	1712.4	24.47	25.70	1.327	0.15	0.154	0.204
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	1513	1752.6	24.47	25.70	1.327	-0.15	0.231	0.307
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	Close	1413	1732.6	24.57	25.70	1.297	-0.19	0.085	0.110
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	1413	1732.6	24.57	25.70	1.297	0.07	0.071	0.092
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	Close	1413	1732.6	24.57	25.70	1.297	0.18	0.054	0.070
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	7/8	Open	1413	1732.6	24.57	25.70	1.297	-0.06	0.230	0.298
	WCDMA IV_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	7/8	Open	1413	1732.6	24.57	25.70	1.297	-0.06	0.149	0.193
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	1413	1732.6	24.57	25.70	1.297	-0.08	0.498	0.646
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	1312	1712.4	24.47	25.70	1.327	0.06	0.433	0.575
04	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	1513	1752.6	24.47	25.70	1.327	0.05	0.536	0.711
	WCDMA IV_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	7/8	Open	1413	1732.6	24.57	25.70	1.297	-0.02	0.182	0.236



Plot No.	Band	Mode	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	4182	836.4	23.54	25.00	1.400	-0.12	0.211	0.295
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	4132	826.4	23.47	25.00	1.422	-0.14	0.239	0.340
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	4233	846.6	23.51	25.00	1.409	-0.17	0.221	0.311
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	2/3	Close	4182	836.4	23.54	25.00	1.400	0.01	0.123	0.172
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	4182	836.4	23.54	25.00	1.400	0.17	0.122	0.171
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	2/3	Close	4182	836.4	23.54	25.00	1.400	-0.13	0.091	0.127
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	7/8	Open	4182	836.4	23.54	25.00	1.400	0.01	0.184	0.258
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	7/8	Open	4182	836.4	23.54	25.00	1.400	0.03	0.064	0.090
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	4182	836.4	23.54	25.00	1.400	0.11	0.323	0.452
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	4132	826.4	23.47	25.00	1.422	-0.03	0.325	0.462
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	7/8	Open	4233	846.6	23.51	25.00	1.409	0.09	0.330	0.465
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	7/8	Open	4182	836.4	23.54	25.00	1.400	0.11	0.158	0.221
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	2/3	Close	4132	826.4	23.91	25.00	1.285	-0.05	0.184	0.236
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	2/3	Close	4132	826.4	23.91	25.00	1.285	-0.02	0.165	0.212
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	4132	826.4	23.91	25.00	1.285	0.11	0.330	0.424
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	4182	836.4	23.89	25.00	1.291	0.08	0.340	0.439
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	2/3	Close	4233	846.6	23.78	25.00	1.324	0.12	0.318	0.421
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	2/3	Close	4132	826.4	23.91	25.00	1.285	0.08	0.215	0.276
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	7	Open	4132	826.4	21.72	23.00	1.343	0.09	0.807	1.084
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	7	Open	4182	836.4	21.66	23.00	1.361	-0.11	0.762	1.037
05	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	7	Open	4233	846.6	21.58	23.00	1.387	-0.09	0.859	1.191
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	7	Open	4132	826.4	21.72	23.00	1.343	0.15	0.236	0.317
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	7	Open	4132	826.4	21.72	23.00	1.343	0.05	0.343	0.461
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	7	Open	4132	826.4	21.72	23.00	1.343	0.09	0.141	0.189
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	8	Open	4132	826.4	21.72	22.20	1.117	0.09	0.807	0.901
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	8	Open	4182	836.4	21.66	22.20	1.132	-0.11	0.762	0.863
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	8	Open	4233	846.6	21.58	22.20	1.153	-0.09	0.859	0.991
	WCDMA V_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	8	Open	4132	826.4	21.72	22.20	1.117	0.15	0.236	0.264
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	8	Open	4132	826.4	21.72	22.20	1.117	0.05	0.343	0.383
	WCDMA V_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	8	Open	4132	826.4	21.72	22.20	1.117	0.09	0.141	0.157



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	2	Close	19100	1900	15.16	16.50	1.361	-0.03	0.138	0.188
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	2	Close	19100	1900	15.13	16.50	1.371	0.1	0.126	0.173
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	2	Close	19100	1900	15.16	16.50	1.361	0.05	0.278	0.378
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	2	Close	19100	1900	15.13	16.50	1.371	-0.14	0.268	0.367
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2	Close	19100	1900	15.16	16.50	1.361	-0.04	0.819	1.115
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2	Close	18700	1860	15.10	16.50	1.380	0.08	0.753	1.039
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	2	Close	18900	1880	15.00	16.50	1.413	0.05	0.619	0.874
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2	Close	19100	1900	15.13	16.50	1.371	0.05	0.785	1.076
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2	Close	18700	1860	15.10	16.50	1.380	0.04	0.731	1.009
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	2	Close	18900	1880	15.03	16.50	1.403	0.18	0.598	0.839
	LTE Band 2_Ant 1	20M	QPSK	100	0	Left Cheek	0mm	2	Close	19100	1900	15.15	16.50	1.365	0	0.776	1.059
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	2	Close	19100	1900	15.16	16.50	1.361	0.16	0.422	0.575
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	2	Close	19100	1900	15.13	16.50	1.371	0.12	0.395	0.541
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	3	Close	19100	1900	15.16	15.70	1.132	-0.03	0.138	0.156
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	3	Close	19100	1900	15.13	15.70	1.140	0.1	0.126	0.144
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	3	Close	19100	1900	15.16	15.70	1.132	0.05	0.278	0.315
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	3	Close	19100	1900	15.13	15.70	1.140	-0.14	0.268	0.306
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	3	Close	19100	1900	15.16	15.70	1.132	-0.04	0.819	0.927
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	3	Close	18700	1860	15.10	15.70	1.148	0.08	0.753	0.865
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	3	Close	18900	1880	15.00	15.70	1.175	0.05	0.619	0.727
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	3	Close	19100	1900	15.13	15.70	1.140	0.05	0.785	0.895
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	3	Close	18700	1860	15.10	15.70	1.148	0.04	0.731	0.839
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	3	Close	18900	1880	15.03	15.70	1.167	0.18	0.598	0.698
	LTE Band 2_Ant 1	20M	QPSK	100	0	Left Cheek	0mm	3	Close	19100	1900	15.15	15.70	1.135	0	0.776	0.881
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	3	Close	19100	1900	15.16	15.70	1.132	0.16	0.422	0.478
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	3	Close	19100	1900	15.13	15.70	1.140	0.12	0.395	0.450
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	7	Open	18900	1880	13.29	14.90	1.449	0.17	0.810	1.174
06	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	7	Open	18700	1860	13.22	14.90	1.472	0.16	0.807	1.188
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	7	Open	19100	1900	13.28	14.90	1.452	-0.02	0.795	1.154
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	7	Open	18900	1880	13.20	14.90	1.479	0.19	0.785	1.161
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	7	Open	18700	1860	13.07	14.90	1.524	-0.05	0.769	1.172
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	7	Open	19100	1900	13.19	14.90	1.483	0.03	0.755	1.119
	LTE Band 2_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	7	Open	18900	1880	13.04	14.90	1.535	0.15	0.748	1.148
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	7	Open	18900	1880	13.29	14.90	1.449	0.12	0.322	0.467
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	7	Open	18900	1880	13.20	14.90	1.479	0.19	0.306	0.453
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	7	Open	18900	1880	13.29	14.90	1.449	0.03	0.541	0.784
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	7	Open	18900	1880	13.20	14.90	1.479	0.03	0.524	0.775
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	7	Open	18900	1880	13.29	14.90	1.449	-0.1	0.427	0.619
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	7	Open	18900	1880	13.20	14.90	1.479	-0.18	0.406	0.601
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	8	Open	18900	1880	13.29	14.10	1.205	0.17	0.810	0.976
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	8	Open	18700	1860	13.22	14.10	1.225	0.16	0.807	0.988
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	8	Open	19100	1900	13.28	14.10	1.208	-0.02	0.795	0.960
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	8	Open	18900	1880	13.20	14.10	1.230	0.19	0.785	0.966
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	8	Open	18700	1860	13.07	14.10	1.268	-0.05	0.769	0.975
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Cheek	0mm	8	Open	19100	1900	13.19	14.10	1.233	0.03	0.755	0.931
	LTE Band 2_Ant 1	20M	QPSK	100	0	Right Cheek	0mm	8	Open	18900	1880	13.04	14.10	1.276	0.15	0.748	0.955
	LTE Band 2_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	8	Open	18900	1880	13.29	14.10	1.205	0.12	0.322	0.388
	LTE Band 2_Ant 1	20M	QPSK	50	0	Right Tilted	0mm	8	Open	18900	1880	13.20	14.10	1.230	0.19	0.306	0.376
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	8	Open	18900	1880	13.29	14.10	1.205	0.03	0.541	0.652
	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Cheek	0mm	8	Open	18900	1880	13.20	14.10	1.230	0.03	0.524	0.645
	LTE Band 2_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	8	Open	18900	1880	13.29	14.10	1.205	-0.1	0.427	0.515



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	LTE Band 2_Ant 1	20M	QPSK	50	0	Left Tilted	0mm	8	Open	18900	1880	13.20	14.10	1.230	-0.18	0.406	0.499
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	19100	1900	25.00	25.70	1.175	0.12	0.018	0.021
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	18700	1860	24.78	25.70	1.236	0.06	0.012	0.015
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	18900	1880	24.67	25.70	1.268	0.16	0.013	0.016
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	2/3	Close	19100	1900	24.04	24.70	1.164	0.04	0.010	0.012
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	2/3	Close	19100	1900	25.00	25.70	1.175	0.17	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	2/3	Close	19100	1900	24.04	24.70	1.164	0.17	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	19100	1900	25.00	25.70	1.175	-0.16	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	2/3	Close	19100	1900	24.04	24.70	1.164	-0.14	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	2/3	Close	19100	1900	25.00	25.70	1.175	-0.09	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	2/3	Close	19100	1900	24.04	24.70	1.164	0.19	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Cheek	0mm	7/8	Open	19100	1900	25.00	25.70	1.175	0.19	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Cheek	0mm	7/8	Open	19100	1900	24.04	24.70	1.164	0.07	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	1	0	Right Tilted	0mm	7/8	Open	19100	1900	25.00	25.70	1.175	-0.18	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Right Tilted	0mm	7/8	Open	19100	1900	24.04	24.70	1.164	-0.01	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	19100	1900	25.00	25.70	1.175	0.08	0.013	0.015
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	18700	1860	24.78	25.70	1.236	-0.17	0.008	0.010
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	18900	1880	24.67	25.70	1.268	0	0.010	0.013
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Cheek	0mm	7/8	Open	19100	1900	24.04	24.70	1.164	0.1	0.009	0.010
	LTE Band 2_Ant 5	20M	QPSK	1	0	Left Tilted	0mm	7/8	Open	19100	1900	25.00	25.70	1.175	0.06	0.001	0.001
	LTE Band 2_Ant 5	20M	QPSK	50	0	Left Tilted	0mm	7/8	Open	19100	1900	24.04	24.70	1.164	-0.09	0.001	0.001



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	21350	2560	24.82	25.70	1.225	-0.1	0.091	0.111
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	0.06	0.070	0.086
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	2/3	Close	21350	2560	24.82	25.70	1.225	-0.03	0.057	0.070
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	0.13	0.044	0.054
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	21350	2560	24.82	25.70	1.225	-0.07	0.132	0.162
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	20850	2510	24.74	25.70	1.247	-0.01	0.084	0.105
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	21100	2535	24.60	25.70	1.288	0	0.144	0.186
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	-0.15	0.112	0.138
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	2/3	Close	21350	2560	24.82	25.70	1.225	0.04	0.128	0.157
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	0.06	0.096	0.118
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	20850	2510	23.05	24.00	1.245	0.04	0.071	0.088
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Cheek	0mm	7/8	Open	21350	2560	24.82	25.70	1.225	-0.05	0.162	0.198
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Cheek	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	0.13	0.130	0.160
	LTE Band 7_Ant 2	20M	QPSK	1	0	Right Tilted	0mm	7/8	Open	21350	2560	24.82	25.70	1.225	-0.09	0.144	0.176
	LTE Band 7_Ant 2	20M	QPSK	50	0	Right Tilted	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	0.05	0.115	0.142
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	21350	2560	24.82	25.70	1.225	-0.08	0.191	0.234
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	20850	2510	24.74	25.70	1.247	-0.14	0.157	0.196
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	21100	2535	24.60	25.70	1.288	-0.06	0.167	0.215
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Cheek	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	-0.15	0.151	0.186
	LTE Band 7_Ant 2	20M	QPSK	1	0	Left Tilted	0mm	7/8	Open	21350	2560	24.82	25.70	1.225	0.04	0.047	0.058
	LTE Band 7_Ant 2	20M	QPSK	50	0	Left Tilted	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	0.06	0.035	0.043
	LTE Band 7C_Ant 2	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	20850	2510	23.05	24.00	1.245	0.12	0.106	0.132
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	21350	2560	24.91	25.70	1.199	0.08	0.117	0.140
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	20850	2510	24.58	25.70	1.294	-0.02	0.065	0.084
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	2/3	Close	21100	2535	24.63	25.70	1.279	0.01	0.088	0.113
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	-0.15	0.066	0.081
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	2/3	Close	21350	2560	24.91	25.70	1.199	-0.07	0.001	0.001
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	0.04	0.001	0.001
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	21350	2560	24.91	25.70	1.199	-0.13	0.100	0.120
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	0.19	0.078	0.096
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	2/3	Close	21350	2560	24.91	25.70	1.199	-0.12	0.053	0.064
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	2/3	Close	21350	2560	23.79	24.70	1.233	0.09	0.034	0.042
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	2/3	Close	21350	2560	23.94	24.00	1.014	-0.12	0.088	0.089
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Cheek	0mm	7/8	Open	21350	2560	24.91	25.70	1.199	-0.02	0.118	0.142
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Cheek	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	-0.19	0.086	0.106
	LTE Band 7_Ant 0	20M	QPSK	1	0	Right Tilted	0mm	7/8	Open	21350	2560	24.91	25.70	1.199	0	0.069	0.083
	LTE Band 7_Ant 0	20M	QPSK	50	0	Right Tilted	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	-0.11	0.052	0.064
07	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	21350	2560	24.91	25.70	1.199	0.07	0.303	0.363
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	20850	2510	24.58	25.70	1.294	0.12	0.167	0.216
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	21100	2535	24.63	25.70	1.279	0.02	0.220	0.281
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Cheek	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	-0.05	0.231	0.285
	LTE Band 7_Ant 0	20M	QPSK	1	0	Left Tilted	0mm	7/8	Open	21350	2560	24.91	25.70	1.199	-0.15	0.094	0.113
	LTE Band 7_Ant 0	20M	QPSK	50	0	Left Tilted	0mm	7/8	Open	21350	2560	23.79	24.70	1.233	0.01	0.070	0.086
	LTE Band 7C_Ant 0	20M	QPSK	1	0	Left Cheek	0mm	7/8	Open	21350	2560	23.94	24.00	1.014	-0.01	0.242	0.245



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Power Index	Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	2/3	Close	23095	707.5	24.56	25.70	1.300	0.19	0.173	0.225
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	2/3	Close	23095	707.5	23.61	24.70	1.285	0.03	0.140	0.180
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	2/3	Close	23095	707.5	24.56	25.70	1.300	0.05	0.096	0.125
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	2/3	Close	23095	707.5	23.61	24.70	1.285	0.02	0.077	0.099
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	2/3	Close	23095	707.5	24.56	25.70	1.300	-0.15	0.098	0.127
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	2/3	Close	23095	707.5	23.61	24.70	1.285	0.14	0.078	0.100
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	2/3	Close	23095	707.5	24.56	25.70	1.300	0.17	0.045	0.059
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	2/3	Close	23095	707.5	23.61	24.70	1.285	-0.17	0.033	0.042
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	7/8	Open	23095	707.5	24.56	25.70	1.300	-0.11	0.078	0.101
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Cheek	0mm	7/8	Open	23095	707.5	23.61	24.70	1.285	-0.04	0.062	0.080
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	7/8	Open	23095	707.5	24.56	25.70	1.300	0.07	0.033	0.043
	LTE Band 12_Ant 0	10M	QPSK	25	0	Right Tilted	0mm	7/8	Open	23095	707.5	23.61	24.70	1.285	0.11	0.024	0.031
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	7/8	Open	23095	707.5	24.56	25.70	1.300	0.05	0.145	0.189
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Cheek	0mm	7/8	Open	23095	707.5	23.61	24.70	1.285	0.1	0.111	0.143
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	7/8	Open	23095	707.5	24.56	25.70	1.300	-0.01	0.080	0.104
	LTE Band 12_Ant 0	10M	QPSK	25	0	Left Tilted	0mm	7/8	Open	23095	707.5	23.61	24.70	1.285	0.18	0.062	0.080
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	2/3	Close	23095	707.5	24.53	25.70	1.309	0.11	0.222	0.291
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	2/3	Close	23095	707.5	23.52	24.70	1.312	0.08	0.174	0.228
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	2/3	Close	23095	707.5	24.53	25.70	1.309	0.15	0.184	0.241
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	2/3	Close	23095	707.5	23.52	24.70	1.312	-0.18	0.146	0.192
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	2/3	Close	23095	707.5	24.53	25.70	1.309	0.04	0.463	0.606
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	2/3	Close	23095	707.5	23.52	24.70	1.312	-0.13	0.365	0.479
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	2/3	Close	23095	707.5	24.53	25.70	1.309	-0.15	0.249	0.326
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	2/3	Close	23095	707.5	23.52	24.70	1.312	-0.06	0.200	0.262
08	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	7	Open	23095	707.5	24.53	25.50	1.250	-0.01	0.943	1.179
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	7	Open	23095	707.5	23.52	24.70	1.312	0.1	0.726	0.953
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	7	Open	23095	707.5	23.52	24.70	1.312	0.15	0.715	0.938
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	7	Open	23095	707.5	24.53	25.50	1.250	0.07	0.370	0.463
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	7	Open	23095	707.5	23.52	24.70	1.312	0.08	0.284	0.373
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	7	Open	23095	707.5	24.53	25.50	1.250	0.16	0.577	0.721
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	7	Open	23095	707.5	23.52	24.70	1.312	0.03	0.447	0.587
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	7	Open	23095	707.5	24.53	25.50	1.250	0.12	0.416	0.520
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	7	Open	23095	707.5	23.52	24.70	1.312	-0.07	0.316	0.415
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	8	Open	23095	707.5	24.53	24.70	1.040	-0.01	0.943	0.981
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	8	Open	23095	707.5	23.52	24.70	1.312	0.1	0.726	0.953
	LTE Band 12_Ant 1	10M	QPSK	50	0	Right Cheek	0mm	8	Open	23095	707.5	23.52	24.70	1.312	0.15	0.715	0.938
	LTE Band 12_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	8	Open	23095	707.5	24.53	24.70	1.040	0.07	0.370	0.385
	LTE Band 12_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	8	Open	23095	707.5	23.52	24.70	1.312	0.08	0.284	0.373
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	8	Open	23095	707.5	24.53	24.70	1.040	0.16	0.577	0.600
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	8	Open	23095	707.5	23.52	24.70	1.312	0.03	0.447	0.587
	LTE Band 12_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	8	Open	23095	707.5	24.53	24.70	1.040	0.12	0.416	0.433
	LTE Band 12_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	8	Open	23095	707.5	23.52	24.70	1.312	-0.07	0.316	0.415