Radio Exposure Evaluation Report

FCC ID	:	**QXO-AP460**
Equipment	:	**Wireless Access Point**
Brand Name	:	**Extreme Networks, Inc.** or Extreme Networks
Model Name	:	**AP460e**
Applicant	:	**Extreme Networks, Inc.** **2121 RDU Center Drive, Morrisville, NC 27560, United States**
Manufacturer	:	**Extreme Networks, Inc.** **2121 RDU Center Drive, Morrisville, NC 27560, United States**
Standard	:	**47 CFR FCC Part 2 Subpart J, section 2.1091**

The product was received on Oct. 19, 2022, and testing was started from Feb. 23, 2023 and completed on Mar. 06, 2023. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR FCC Part 2 Subpart J, section 2.1091 and shown compliance with the applicable technical standards.

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

Approved by: Jackson Tsai

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History of this test report

Report No.	Version	Description	Issued Date
FA970235-08	01	Initial issue of report	Jan. 04, 2023
FA970235-08	02	Power was updated. (This report is the latest version replacing for the report issued on Jan. 04, 2023)	Mar. 08, 2023
FA970235-08	03	Ant.16 information was updated. (This report is the latest version replacing for the report issued on Mar. 08, 2023)	Mar. 13, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
None

Reviewed by: Ryan Hsiao

Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 EUT General Information

RF General Information			
Evaluation Mode	**Frequency Range (MHz)**	**Operating Frequency (MHz)**	**Modulation Type**
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) VHT: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
5GHz WLAN	5150-5250 5250-5350 5470-5725 5725-5850	5180-5240 5260-5320 5500-5700 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Bluetooth	2400-2483.5	2402-2480	LE: DSSS (GFSK)
Thread	2400-2483.5	2405-2480	DSSS (O-QPSK)

1.1.2 Antenna Information

(AP460e) External Antenna

Group	Brand	Model Number (P/N)	Antenna Type	Connector	Antenna Gain (dBi)		
					2.4GHz	5GHz	BLE/Thread
1	Extreme	ML-2452-APA2-01	Omni	RP SMA male	3.17	4.85	-
2	Extreme	ML-2452-APA2-02	Omni	RP SMA male	3.17	4.85	-
3	Extreme	ML-2452-HPA5-036	Omni	RP SMA male	3.9	5.7	-
4	Extreme	ML-2452-HPAG4A6-01	Omni	N male	4	7.3	-
5	Extreme	ML-2452-PNA5-01R	Panel	Type N-Male	4.5	5	-
6	Extreme	ML-2452-PTA4M4-036	Omni	Rev-Polarity SMA Male 4x	5	6.6	-
7	Extreme	ML-2452-HPAG5A8-01	Omni	N male	5	8	-
8	Extreme	WS-AO-DQ04360N	Omni	N male	5.5	6	-
9	Extreme	AI-DQ04360S	Omni	RP SMA male	5.5	6	-
10	Extreme	ML-2452-SEC6M4-036 / WS-AI-DQ05120	Panel	RP SMA male	6.92	7.23	-
11	Extreme	WS-AI-DE07025	Panel	RP SMA male	7.5	6.5	-
12	Extreme	ML-2452-PNA7-01R	Panel 1	Type N-Male	7.8	10.7	7.8
13	Extreme	WS-AI-DE10055	Panel 2	RP SMA male	10.5	7.5	-
14	Extreme	ML-2499-HPA8-01	Dipole	N male	-	-	8
15	Extreme	AO-DD19017N	Panel	N male	-	20	-
16	Extreme	AIO-DQ15021-N	Panel	N male	-	15	-

Note 1: Group 16 were measured during the test for WLAN 5G Mode.

Note 2: Group 16 only for radio 2 (5G) use.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (1TX/1RX)

Only port 1 can be used as transmitting/receiving antenna.

For IEEE 802.11 a/n/ac/ax mode (2TX/2RX)

Port 1 and port 2 could transmit/receive simultaneously.

For IEEE 802.11 a/n/ac/ax mode (4TX/4RX)

Port 1, port 2, port 3 and port 4 could transmit/receive simultaneously.

1.1.3 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FA970235-04
Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
According to the applicant's declaration on the product application. The model name "AP460e" add the below function: Antenna(Group 16) was added. The antenna(Group 16) only can be used when the EUT operates using Radio 2 with the Fixed P2P AP mode.	Exposure evaluation

1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 2 Subpart J, section 2.1091
- KDB 447498 D04 Interim General RF Exposure Guidance v01

The following reference test guidance is not within the scope of accreditation of TAF.

- 47 CFR Part 1.1307
- 47 CFR Part 1.1310

1.3 Testing Location

Test Lab.：Sporton International Inc. Hsinhua Laboratory			
☒	Hsinhua	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)	
	(TAF: 3785**)**	**TEL:** 886-3-327-3456	**FAX:** 886-3-327-0973
		Test site Designation No. TW3785 with FCC.	
☐	Wen 33rd.St.	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)	
	(TAF: 3785**)**	**TEL:** 886-3-318-0787	**FAX:** 886-3-318-0287
		Test site Designation No. TW0008 with FCC.	

2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes)
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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes)
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

Note: f = frequency in MHz ; *Plane-wave equivalent power density

Multiple Transmitters Condition
Co-location as simultaneously transmitting (co-transmitting) and the evaluation shall be consider that simultaneous transmissions from co-located devices the individual transmitters are evaluated separately. After sum of the individual value (basic restriction / reference level) are measured/calculated also have to under basic restriction / reference level.
Co-transmitting mode: 1. Radio1 WLAN 2.4GHz + Radio2 WLAN 5GHz + Radio3 WLAN 2.4GHz + Bluetooth 2. Radio1 WLAN 2.4GHz + Radio2 WLAN 5GHz + Radio3 WLAN 2.4GHz +Thread 3. Radio1 WLAN 2.4GHz + Radio2 WLAN 5GHz + Radio3 WLAN 5GHz + Bluetooth 4. Radio1 WLAN 2.4GHz + Radio2 WLAN 5GHz + Radio3 WLAN 5GHz +Thread

2.2 RF Exposure Exempt Measurement

Option	Refer Std.	Exemption Exposure Thresholds (TL)
A	§1.1307(b)(3)(i)(A)	Available maximum time-averaged power is no more than 1 mW
B	§1.1307(b)(3)(i)(B)	$\mathrm{P}th(mW) = \begin{cases} ERP_{20cm}(d/20cm)^x \rightarrow d \le 20cm \\ ERP_{20cm} \rightarrow 20cm < d \le 40cm \end{cases}$ $x = -\log_{10}\left(\frac{60}{ERP_{20cm}\sqrt{f}}\right)$ and f is in GHz $\begin{cases} ERP_{20cm} : 0.3GHz \le f < 1.5GHz \rightarrow 2040\ f(mW) \\ ERP_{20cm} : 1.5GHz \le f \le 6GHz \rightarrow 3060\,(mW) \end{cases}$
C	§1.1307(b)(3)(i)(C)	$\begin{cases} 0.3 \sim 1.34MHz \rightarrow ERP(\mathrm{W}) = 1920\,R^2 \\ 1.34 \sim 30MHz \rightarrow ERP(\mathrm{W}) = 3450\,R^2 / f^2 \\ 30 \sim 300MHz \rightarrow ERP(\mathrm{W}) = 3.83R^2 \\ 300 \sim 1500MHz \rightarrow ERP(\mathrm{W}) = 0.0128\,R^2 f \\ 1500 \sim 100000\,MHz \rightarrow ERP(\mathrm{W}) = 19.2R^2 \end{cases}$ f is in MHz; R is in m; $\mathrm{R} > \lambda / 2\pi$

2.3 Multiple RF Sources Exposure

Refer Std.	Exemption Exposure Thresholds (TL)
§1.1307(b)(3)(ii)(A)	The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required)
§1.1307(b)(3)(ii)(B)	$\sum_{i=1}^{a}\frac{P_i}{P_{th,i}}+\sum_{j=1}^{b}\frac{ERP_j}{ERP_{th,j}}+\sum_{k=1}^{c}\frac{Evaluated_k}{ExposureLimit_k}\le 1$ a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph §1.1307(b)(3)(i)(B) of this section for P , including existing exempt transmitters and those being added. b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph §1.1307(b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added. c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters. P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive). $P_{th,i}$ = the exemption threshold power (P_{th}) according to paragraph §1.1307(b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i. ERP_j = the ERP of fixed, mobile, or portable RF source j. $ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least λ/2π according to the applicable formula of paragraph §1.1307 (b)(3)(i)(C) of this section. $Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure. $Evaluated\ Limit_k$ = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from § 1.1310 of this chapter.

2.4 MPE Calculation Method

The MPE was calculated at 102 cm to show compliance with the power density limit.
The following formula was used to calculate the Power Density:

E (V/m) = $\frac{\sqrt{30 \times P \times G}}{d}$ Power Density: *Pd* (W/m²) = $\frac{E^2}{377}$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

Pd = $\frac{30 \times P \times G}{377 \times d^2}$

2.5 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

WLAN 2.4G internal Radio1 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	4.82	26.90	31.72	0.00	905.9620	102	0.01137	1.00000	C	19975.68	0.04535
2.4G;D1D	4.82	24.54	29.36	0.00	526.1505	102	0.00660	1.00000	C	19975.68	0.02634

WLAN 2.4G internal Radio1 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	4.82	27.2	32.02	0.00	970.7558	102	0.01218	1.00000	C	19975.68	0.04860
2.4G;D1D	4.82	26.2	31.02	0.00	771.0988	102	0.00967	1.00000	C	19975.68	0.03860

WLAN 2.4G omni Radio1 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.00	27.98	32.98	0.00	1210.9048	102	0.01519	1.00000	C	19975.68	0.06062
2.4G;D1D	5.00	25.37	30.37	0.00	663.9112	102	0.00833	1.00000	C	19975.68	0.03324

WLAN 2.4G omni Radio1 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.00	27.22	32.22	0.00	1016.5061	102	0.01275	1.00000	C	19975.68	0.05089
2.4G;D1D	5.00	26.49	31.49	0.00	859.2311	102	0.01078	1.00000	C	19975.68	0.04301

WLAN 2.4G Panel1 Radio1 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	7.80	25.11	32.91	0.00	1191.5438	102	0.01495	1.00000	C	19975.68	0.05965
2.4G;D1D	7.80	23.34	31.14	0.00	792.7021	102	0.00994	1.00000	C	19975.68	0.03968

WLAN 2.4G Panel1 Radio1 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	7.80	26.09	33.89	0.00	1493.1726	102	0.01873	1.00000	C	19975.68	0.07475
2.4G;D1D	7.80	25.40	33.20	0.00	1273.8257	102	0.01598	1.00000	C	19975.68	0.06377

WLAN 2.4G Panel2 Radio1 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	10.50	25.47	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.68	0.12067
2.4G;D1D	10.50	25.37	35.87	0.00	2355.6459	102	0.02955	1.00000	C	19975.68	0.11793

WLAN 2.4G Panel2 Radio1 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	10.50	24.99	35.49	0.00	2158.2910	102	0.02708	1.00000	C	19975.68	0.10805
2.4G;D1D	10.50	24.89	35.39	0.00	2109.1623	102	0.02646	1.00000	C	19975.68	0.10559

WLAN 2.4G internal Radio 1_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	7.83	26.97	34.80	0.00	1841.2383	102	0.02310	1.00000	C	19975.68	0.09217

WLAN 2.4G omni Radio1_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.01	24.16	32.17	0.00	1004.8703	102	0.01261	1.00000	C	19975.68	0.05030

WLAN 2.4G Panel1 Radio1_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	10.81	19.74	30.55	0.00	692.0062	102	0.00868	1.00000	C	19975.68	0.03464

WLAN 2.4G Panel2 Radio1_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	13.51	22.46	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.68	0.12067

WLAN 2.4G internal Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	4.87	22.3	27.17	0.00	317.7679	102	0.00399	1.00000	C	19975.68	0.01591
2.4G;D1D	4.87	19.53	24.40	0.00	167.9229	102	0.00211	1.00000	C	19975.68	0.00841

WLAN 2.4G internal Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	4.87	23.53	28.40	0.00	421.8033	102	0.00529	1.00000	C	19975.68	0.02112
2.4G;D1D	4.87	22.24	27.11	0.00	313.4079	102	0.00393	1.00000	C	19975.68	0.01569

WLAN 2.4G Omni Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.00	23.83	28.83	0.00	465.7040	102	0.00584	1.00000	C	19975.68	0.02331
2.4G;D1D	5.00	20.27	25.27	0.00	205.1682	102	0.00257	1.00000	C	19975.68	0.01027

WLAN 2.4G Omni Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.00	23.05	28.05	0.00	389.1437	102	0.00488	1.00000	C	19975.68	0.01948
2.4G;D1D	5.00	22.28	27.28	0.00	325.9192	102	0.00409	1.00000	C	19975.68	0.01632

WLAN 2.4G Panel1 Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	7.80	22.07	29.87	0.00	591.7115	102	0.00742	1.00000	C	19975.68	0.02962
2.4G;D1D	7.80	20.60	28.40	0.00	421.8033	102	0.00529	1.00000	C	19975.68	0.02112

WLAN 2.4G Panel1 Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	7.80	26.39	34.19	0.00	1599.9632	102	0.02007	1.00000	C	19975.68	0.08010
2.4G;D1D	7.80	23.56	31.36	0.00	833.8924	102	0.01046	1.00000	C	19975.68	0.04175

WLAN 2.4G Panel2 Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	10.50	23.13	33.63	0.00	1406.4037	102	0.01764	1.00000	C	19975.68	0.07041
2.4G;D1D	10.50	20.80	31.30	0.00	822.4509	102	0.01032	1.00000	C	19975.68	0.04117

WLAN 2.4G Panel2 Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	10.50	24.04	34.54	0.00	1734.2432	102	0.02176	1.00000	C	19975.68	0.08682
2.4G;D1D	10.50	22.02	32.52	0.00	1089.2059	102	0.01366	1.00000	C	19975.68	0.05453

WLAN 2.4G internal Radio3_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	7.88	21.81	29.69	0.00	567.6884	102	0.00712	1.00000	C	19975.68	0.02842

WLAN 2.4G Omni Radio3_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.01	20.96	28.97	0.00	480.9612	102	0.00603	1.00000	C	19975.68	0.02408

WLAN 2.4G Panel1 Radio3 BF

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	10.81	20.21	31.02	0.00	771.0988	102	0.00967	1.00000	C	19975.68	0.03860

WLAN 2.4G Panel2 Radio3_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	13.51	22.34	35.85	0.00	2344.8226	102	0.02942	1.00000	C	19975.68	0.11738

WLAN 5G internal Radio2 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.58	15.39	20.97	0.00	76.2272	102	0.00096	1.00000	C	19975.68	0.00382
5.3G;D1D	5.58	23.91	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.6G;D1D	5.58	23.66	29.24	0.00	511.8115	102	0.00642	1.00000	C	19975.68	0.02562
5.8G;D1D	5.58	24.72	30.30	0.00	653.2960	102	0.00820	1.00000	C	19975.68	0.03270

WLAN 5G internal Radio2 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.58	16.62	22.20	0.00	101.1836	102	0.00127	1.00000	C	19975.68	0.00507
5.3G;D1D	5.58	23.95	29.53	0.00	547.1545	102	0.00686	1.00000	C	19975.68	0.02739
5.6G;D1D	5.58	23.97	29.55	0.00	549.6801	102	0.00690	1.00000	C	19975.68	0.02752
5.8G;D1D	5.58	28.12	33.70	0.00	1429.2559	102	0.01793	1.00000	C	19975.68	0.07155

WLAN 5G internal Radio2 4T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.58	15.23	20.81	0.00	73.4700	102	0.00092	1.00000	C	19975.68	0.00368
5.3G;D1D	5.58	23.53	29.11	0.00	496.7181	102	0.00623	1.00000	C	19975.68	0.02487
5.6G;D1D	5.58	23.85	29.43	0.00	534.6998	102	0.00671	1.00000	C	19975.68	0.02677
5.8G;D1D	5.58	29.91	35.49	0.00	2158.2910	102	0.02708	1.00000	C	19975.68	0.10805

WLAN 5G internal Radio2 4T4S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.58	15.36	20.94	0.00	75.7025	102	0.00095	1.00000	C	19975.68	0.00379
5.3G;D1D	5.58	23.91	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.6G;D1D	5.58	23.91	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.8G;D1D	5.58	29.89	35.47	0.00	2148.3746	102	0.02695	1.00000	C	19975.68	0.10755

WLAN 5G Omni Radio2 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	23.68	31.68	0.00	897.6561	102	0.01126	1.00000	C	19975.68	0.04494
5.3G;D1D	8.00	21.47	29.47	0.00	539.6473	102	0.00677	1.00000	C	19975.68	0.02702
5.6G;D1D	8.00	21.45	29.45	0.00	537.1678	102	0.00674	1.00000	C	19975.68	0.02689
5.8G;D1D	8.00	22.76	30.76	0.00	726.2899	102	0.00911	1.00000	C	19975.68	0.03636

WLAN 5G Omni Radio2 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	26.86	34.86	0.00	1866.8525	102	0.02342	1.00000	C	19975.68	0.09346
5.3G;D1D	8.00	21.38	29.38	0.00	528.5791	102	0.00663	1.00000	C	19975.68	0.02646
5.6G;D1D	8.00	21.49	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.8G;D1D	8.00	27.47	35.47	0.00	2148.3746	102	0.02695	1.00000	C	19975.68	0.10755

WLAN 5G Omni Radio2 4T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	25.67	33.67	0.00	1419.4170	102	0.01781	1.00000	C	19975.68	0.07106
5.3G;D1D	8.00	19.02	27.02	0.00	306.9799	102	0.00385	1.00000	C	19975.68	0.01537
5.6G;D1D	8.00	21.34	29.34	0.00	523.7331	102	0.00657	1.00000	C	19975.68	0.02622
5.8G;D1D	8.00	27.49	35.49	0.00	2158.2910	102	0.02708	1.00000	C	19975.68	0.10805

WLAN 5G Omni Radio2 4T4S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	26.93	34.93	0.00	1897.1864	102	0.02380	1.00000	C	19975.68	0.09497
5.3G;D1D	8.00	21.41	29.41	0.00	532.2431	102	0.00668	1.00000	C	19975.68	0.02664
5.6G;D1D	8.00	21.44	29.44	0.00	535.9324	102	0.00672	1.00000	C	19975.68	0.02683
5.8G;D1D	8.00	27.48	35.48	0.00	2153.3271	102	0.02701	1.00000	C	19975.68	0.10780

WLAN 5G Panel1 Radio2 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.70	13.07	23.77	0.00	145.2479	102	0.00182	1.00000	C	19975.68	0.00727
5.3G;D1D	10.70	18.73	29.43	0.00	534.6998	102	0.00671	1.00000	C	19975.68	0.02677
5.6G;D1D	10.70	18.77	29.47	0.00	539.6473	102	0.00677	1.00000	C	19975.68	0.02702
5.8G;D1D	10.70	24.78	35.48	0.00	2153.3271	102	0.02701	1.00000	C	19975.68	0.10780

WLAN 5G Panel1 Radio2 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.70	12.99	23.69	0.00	142.5969	102	0.00179	1.00000	C	19975.68	0.00714
5.3G;D1D	10.70	18.76	29.46	0.00	538.4061	102	0.00675	1.00000	C	19975.68	0.02695
5.6G;D1D	10.70	18.78	29.48	0.00	540.8913	102	0.00679	1.00000	C	19975.68	0.02708
5.8G;D1D	10.70	24.67	35.37	0.00	2099.4716	102	0.02634	1.00000	C	19975.68	0.10510

WLAN 5G Panel1 Radio2 4T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.70	12.96	23.66	0.00	141.6152	102	0.00178	1.00000	C	19975.68	0.00709
5.2G;D1D	10.70	11.18	21.88	0.00	93.9961	102	0.00118	1.00000	C	19975.68	0.00471
5.3G;D1D	10.70	18.79	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.8G;D1D	10.70	24.69	35.39	0.00	2109.1623	102	0.02646	1.00000	C	19975.68	0.10559

WLAN 5G Panel1 Radio2 4T4S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.70	12.96	23.66	0.00	141.6152	102	0.00178	1.00000	C	19975.68	0.00709
5.3G;D1D	10.70	18.74	29.44	0.00	535.9324	102	0.00672	1.00000	C	19975.68	0.02683
5.6G;D1D	10.70	18.78	29.48	0.00	540.8913	102	0.00679	1.00000	C	19975.68	0.02708
5.8G;D1D	10.70	24.76	35.46	0.00	2143.4334	102	0.02689	1.00000	C	19975.68	0.10730

WLAN 5G internal Radio2_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	11.60	15.31	26.91	0.00	299.3023	102	0.00375	1.00000	C	19975.68	0.01498
5.3G;D1D	11.60	17.86	29.46	0.00	538.4061	102	0.00675	1.00000	C	19975.68	0.02695
5.6G;D1D	11.60	17.84	29.44	0.00	535.9324	102	0.00672	1.00000	C	19975.68	0.02683
5.8G;D1D	11.60	24.37	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.68	0.12067

WLAN 5G omni Radio2_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	14.02	21.43	35.45	0.00	2138.5037	102	0.02683	1.00000	C	19975.68	0.10706
5.3G;D1D	14.02	15.95	29.97	0.00	605.4942	102	0.00760	1.00000	C	19975.68	0.03031
5.6G;D1D	14.02	15.95	29.97	0.00	605.4942	102	0.00760	1.00000	C	19975.68	0.03031
5.8G;D1D	14.02	21.47	35.49	0.00	2158.2910	102	0.02708	1.00000	C	19975.68	0.10805

WLAN 5G Panel1 Radio2_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	16.72	13.02	29.74	0.00	574.2619	102	0.00720	1.00000	C	19975.68	0.02875
5.3G;D1D	16.72	13.16	29.88	0.00	593.0755	102	0.00744	1.00000	C	19975.68	0.02969
5.6G;D1D	16.72	13.23	29.95	0.00	602.7122	102	0.00756	1.00000	C	19975.68	0.03017
5.8G;D1D	16.72	18.66	35.38	0.00	2104.3114	102	0.02640	1.00000	C	19975.68	0.10534

WLAN 5G internal Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.02	15.81	20.83	0.00	73.8091	102	0.00093	1.00000	C	19975.68	0.00369
5.3G;D1D	5.02	23.95	28.97	0.00	480.9612	102	0.00603	1.00000	C	19975.68	0.02408
5.6G;D1D	5.02	23.94	28.96	0.00	479.8550	102	0.00602	1.00000	C	19975.68	0.02402
5.8G;D1D	5.02	24.2	29.22	0.00	509.4599	102	0.00639	1.00000	C	19975.68	0.02550

WLAN 5G internal Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.02	15.92	20.94	0.00	75.7025	102	0.00095	1.00000	C	19975.68	0.00379
5.3G;D1D	5.02	23.83	28.85	0.00	467.8536	102	0.00587	1.00000	C	19975.68	0.02342
5.6G;D1D	5.02	23.95	28.97	0.00	480.9612	102	0.00603	1.00000	C	19975.68	0.02408
5.8G;D1D	5.02	25.77	30.79	0.00	731.3243	102	0.00917	1.00000	C	19975.68	0.03661

WLAN 5G Omni Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	24.35	32.35	0.00	1047.3938	102	0.01314	1.00000	C	19975.68	0.05243
5.3G;D1D	8.00	21.48	29.48	0.00	540.8913	102	0.00679	1.00000	C	19975.68	0.02708
5.6G;D1D	8.00	21.49	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.8G;D1D	8.00	26.79	34.79	0.00	1837.0036	102	0.02305	1.00000	C	19975.68	0.09196

WLAN 5G Omni Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	25.32	33.32	0.00	1309.5136	102	0.01643	1.00000	C	19975.68	0.06556
5.3G;D1D	8.00	21.46	29.46	0.00	538.4061	102	0.00675	1.00000	C	19975.68	0.02695
5.6G;D1D	8.00	21.48	29.48	0.00	540.8913	102	0.00679	1.00000	C	19975.68	0.02708
5.8G;D1D	8.00	27.47	35.47	0.00	2148.3746	102	0.02695	1.00000	C	19975.68	0.10755

WLAN 5G Panel1 Radio3 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.70	12.97	23.67	0.00	141.9417	102	0.00178	1.00000	C	19975.68	0.00711
5.3G;D1D	10.70	19.25	29.95	0.00	602.7122	102	0.00756	1.00000	C	19975.68	0.03017
5.6G;D1D	10.70	19.24	29.94	0.00	601.3260	102	0.00754	1.00000	C	19975.68	0.03010
5.8G;D1D	10.70	24.68	35.38	0.00	2104.3114	102	0.02640	1.00000	C	19975.68	0.10534

WLAN 5G Panel1 Radio3 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	10.70	13.09	23.79	0.00	145.9184	102	0.00183	1.00000	C	19975.68	0.00730
5.3G;D1D	10.70	18.79	29.49	0.00	542.1382	102	0.00680	1.00000	C	19975.68	0.02714
5.6G;D1D	10.70	18.77	29.47	0.00	539.6473	102	0.00677	1.00000	C	19975.68	0.02702
5.8G;D1D	10.70	24.69	35.39	0.00	2109.1623	102	0.02646	1.00000	C	19975.68	0.10559

WLAN 5G internal Radio3_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.03	15.96	23.99	0.00	152.7953	102	0.00192	1.00000	C	19975.68	0.00765
5.3G;D1D	8.03	21.95	29.98	0.00	606.8900	102	0.00761	1.00000	C	19975.68	0.03038
5.6G;D1D	8.03	21.86	29.89	0.00	594.4427	102	0.00746	1.00000	C	19975.68	0.02976
5.8G;D1D	8.03	24.62	32.65	0.00	1122.3027	102	0.01408	1.00000	C	19975.68	0.05618

WLAN 5G Omni Radio3_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	11.01	20.13	31.14	0.00	792.7021	102	0.00994	1.00000	C	19975.68	0.03968
5.3G;D1D	11.01	18.95	29.96	0.00	604.1016	102	0.00758	1.00000	C	19975.68	0.03024
5.6G;D1D	11.01	18.87	29.88	0.00	593.0755	102	0.00744	1.00000	C	19975.68	0.02969
5.8G;D1D	11.01	24.45	35.46	0.00	2143.4334	102	0.02689	1.00000	C	19975.68	0.10730

WLAN 5G Panel1 Radio3_Beamforming

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	13.71	13.02	26.73	0.00	287.1508	102	0.00360	1.00000	C	19975.68	0.01438
5.3G;D1D	13.71	16.24	29.95	0.00	602.7122	102	0.00756	1.00000	C	19975.68	0.03017
5.6G;D1D	13.71	16.21	29.92	0.00	598.5632	102	0.00751	1.00000	C	19975.68	0.02996
5.8G;D1D	13.71	21.67	35.38	0.00	2104.3114	102	0.02640	1.00000	C	19975.68	0.10534

Bluetooth internal

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	4.65	1.87	6.52	0.00	2.7360	102	0.00003	1.00000	C	19975.68	0.00014

Bluetooth Panel 1

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	7.80	-0.76	7.04	0.00	3.0840	102	0.00004	1.00000	C	19975.68	0.00015

Bluetooth Dipole

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	8.00	-0.76	7.24	0.00	3.2293	102	0.00004	1.00000	C	19975.68	0.00016

Thread internal

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	4.65	1.41	6.06	0.00	2.4610	102	0.00003	1.00000	C	19975.68	0.00012

Thread Panel1

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	7.80	1.09	8.89	0.00	4.7218	102	0.00006	1.00000	C	19975.68	0.00024

Thread Dipole

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	8.00	1.09	9.09	0.00	4.9444	102	0.00006	1.00000	C	19975.68	0.00025

WLAN 5G Dual Polarized Directional Radio2 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	15.00	23.89	38.89	0.00	4721.8262	102	0.05924	1.00000	C	19975.68	0.23638
5.3G;D1D	15.00	14.42	29.42	0.00	533.4700	102	0.00669	1.00000	C	19975.68	0.02671
5.6G;D1D	15.00	14.47	29.47	0.00	539.6473	102	0.00677	1.00000	C	19975.68	0.02702
5.8G;D1D	15.00	23.75	38.75	0.00	4572.0398	102	0.05736	1.00000	C	19975.68	0.22888

WLAN 5G Dual Polarized Directional Radio2 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	15.00	26.80	41.80	0.00	9228.0513	102	0.11577	1.00000	C	19975.68	0.46196
5.3G;D1D	15.00	14.45	29.45	0.00	537.1678	102	0.00674	1.00000	C	19975.68	0.02689
5.6G;D1D	15.00	14.47	29.47	0.00	539.6473	102	0.00677	1.00000	C	19975.68	0.02702
5.8G;D1D	15.00	27.15	42.15	0.00	10002.5332	102	0.12548	1.00000	C	19975.68	0.50074

WLAN 5G Dual Polarized Directional Radio2 4T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	15.00	19.76	34.76	0.00	1824.3577	102	0.02289	1.00000	C	19975.68	0.09133
5.3G;D1D	15.00	14.45	29.45	0.00	537.1678	102	0.00674	1.00000	C	19975.68	0.02689
5.6G;D1D	15.00	14.34	29.34	0.00	523.7331	102	0.00657	1.00000	C	19975.68	0.02622
5.8G;D1D	15.00	28.86	43.86	0.00	14828.9363	102	0.18603	1.00000	C	19975.68	0.74235

WLAN 5G Dual Polarized Directional Radio2 4T4S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	15.00	18.55	33.55	0.00	1380.7339	102	0.01732	1.00000	C	19975.68	0.06912
5.3G;D1D	15.00	14.43	29.43	0.00	534.6998	102	0.00671	1.00000	C	19975.68	0.02677
5.6G;D1D	15.00	14.70	29.70	0.00	568.9970	102	0.00714	1.00000	C	19975.68	0.02848
5.8G;D1D	15.00	28.93	43.93	0.00	15069.8871	102	0.18906	1.00000	C	19975.68	0.75441

WLAN 5G Dual Polarized Directional Radio 2 BF 4T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	18.01	16.68	34.69	0.00	1795.1883	102	0.02252	1.00000	C	19975.68	0.08987
5.3G;D1D	18.01	11.40	29.41	0.00	532.2431	102	0.00668	1.00000	C	19975.68	0.02664
5.6G;D1D	18.01	11.22	29.23	0.00	510.6343	102	0.00641	1.00000	C	19975.68	0.02556
5.8G;D1D	18.01	25.74	43.75	0.00	14458.0592	102	0.18138	1.00000	C	19975.68	0.72378

WLAN 5G Panel2 Radio2 1T1S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	20.00	11.30	31.30	0.00	822.4509	102	0.01032	1.00000	C	19975.68	0.04117
5.3G;D1D	20.00	9.38	29.38	0.00	528.5791	102	0.00663	1.00000	C	19975.68	0.02646
5.6G;D1D	20.00	9.42	29.42	0.00	533.4700	102	0.00669	1.00000	C	19975.68	0.02671
5.8G;D1D	20.00	11.36	31.36	0.00	833.8924	102	0.01046	1.00000	C	19975.68	0.04175

WLAN 5G Panel2 Radio2 2T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	20.00	13.54	33.54	0.00	1377.5583	102	0.01728	1.00000	C	19975.68	0.06896
5.3G;D1D	20.00	9.42	29.42	0.00	533.4700	102	0.00669	1.00000	C	19975.68	0.02671
5.6G;D1D	20.00	9.47	29.47	0.00	539.6473	102	0.00677	1.00000	C	19975.68	0.02702
5.8G;D1D	20.00	13.54	33.54	0.00	1377.5583	102	0.01728	1.00000	C	19975.68	0.06896

WLAN 5G Panel2 Radio2 4T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	20.00	16.43	36.43	0.00	2679.8470	102	0.03362	1.00000	C	19975.68	0.13416
5.3G;D1D	20.00	9.35	29.35	0.00	524.9404	102	0.00659	1.00000	C	19975.68	0.02628
5.6G;D1D	20.00	9.43	29.43	0.00	534.6998	102	0.00671	1.00000	C	19975.68	0.02677
5.8G;D1D	20.00	16.45	36.45	0.00	2692.2166	102	0.03377	1.00000	C	19975.68	0.13477

WLAN 5G Panel2 Radio2 4T4S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	20.00	16.39	36.39	0.00	2655.2780	102	0.03331	1.00000	C	19975.68	0.13293
5.3G;D1D	20.00	9.46	29.46	0.00	538.4061	102	0.00675	1.00000	C	19975.68	0.02695
5.6G;D1D	20.00	9.43	29.43	0.00	534.6998	102	0.00671	1.00000	C	19975.68	0.02677
5.8G;D1D	20.00	16.26	36.26	0.00	2576.9738	102	0.03233	1.00000	C	19975.68	0.12901

WLAN 5G Panel2 Radio 2 BF 4T2S

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	23.01	13.42	36.43	0.00	2679.8470	102	0.03362	1.00000	C	19975.68	0.13416
5.3G;D1D	23.01	6.34	29.35	0.00	524.9404	102	0.00659	1.00000	C	19975.68	0.02628
5.6G;D1D	23.01	6.42	29.43	0.00	534.6998	102	0.00671	1.00000	C	19975.68	0.02677
5.8G;D1D	23.01	13.44	36.45	0.00	2692.2166	102	0.03377	1.00000	C	19975.68	0.13477

Note 1: Option A, B and C refer as clause 2.2
Note 2: For option B, Pth(mW) convert to TL ERP(mW); For option C, ERP(W) convert to TL ERP(mW)
Note 3: TL Ratio=Tune-up ERP(mW)/TL ERP(mW)

Simultaneous Transmission Analysis Mode:

Radio1 WLAN 2.4GHz+Radio2 WLAN 5GHz+Radio3 WLAN 2.4GHz+Bluetooth

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	10.50	25.47	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.680	0.12067
5.8G;D1D	15.00	28.93	43.93	0.00	15069.8871	102	0.18906	1.00000	C	19975.680	0.75441
2.4G;D1D	13.51	22.34	35.85	0.00	2344.8226	102	0.02942	1.00000	C	19975.680	0.11738
2.4G;BT-LE	8.00	-0.76	7.24	0.00	3.2293	102	0.00004	1.00000	C	19975.680	0.00016
										Sum Ratio	0.99262
										Ratio Limit	1

Radio1 WLAN 2.4GHz+Radio2 WLAN 5GHz+Radio3 WLAN 2.4GHz+Thread

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	10.50	25.47	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.680	0.12067
5.8G;D1D	15.00	28.93	43.93	0.00	15069.8871	102	0.18906	1.00000	C	19975.680	0.75441
2.4G;D1D	13.51	22.34	35.85	0.00	2344.8226	102	0.02942	1.00000	C	19975.680	0.11738
2.4G;D1D	8.00	1.09	9.09	0.00	4.9444	102	0.00006	1.00000	C	19975.680	0.00025
										Sum Ratio	0.99271
										Ratio Limit	1

Radio1 WLAN 2.4GHz+Radio2 WLAN 5GHz+Radio3 WLAN 5GHz+Bluetooth

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	13.51	22.46	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.680	0.12067
5.8G;D1D	15.00	28.93	43.93	0.00	15069.8871	102	0.18906	1.00000	C	19975.680	0.75441
5.8G;D1D	8.00	27.47	35.47	0.00	2148.3746	102	0.02695	1.00000	C	19975.680	0.10755
2.4G;BT-LE	8.00	-0.76	7.24	0.00	3.2293	102	0.00004	1.00000	C	19975.680	0.00016
										Sum Ratio	0.98279
										Ratio Limit	1

Radio1 WLAN 2.4GHz+Radio2 WLAN 5GHz+Radio3 WLAN 5GHz+Thread

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	13.51	22.46	35.97	0.00	2410.5159	102	0.03024	1.00000	C	19975.680	0.12067
5.8G;D1D	15.00	28.93	43.93	0.00	15069.8871	102	0.18906	1.00000	C	19975.680	0.75441
5.8G;D1D	8.00	27.47	35.47	0.00	2148.3746	102	0.02695	1.00000	C	19975.680	0.10755
2.4G;D1D	8.00	1.09	9.09	0.00	4.9444	102	0.00006	1.00000	C	19975.680	0.00025
										Sum Ratio	0.9619
										Ratio Limit	1

Note 1: Option A, B and C refer as clause 2.2
Note 2: For option B, Pth(mW) convert to TL ERP(mW); For option C, ERP(W) convert to TL ERP(mW)
Note 3: TL Ratio=Tune-up ERP(mW)/TL ERP(mW)
Note 4: Refer as clause 2.3 Multiple RF Sources Exposure. Please follow below option and sum TL ration table.

Option	Sum TL Ratio_B	Option	Sum TL Ratio_C	Option	Sum TL Ratio_E
B	$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}}$	C	$\sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}}$	E	$\sum_{k=1}^{c} \frac{Evaluated_k}{ExposureLimit_k}$

Note: The above antenna gain was declared by manufacturer.

———THE END———