Radio Exposure Evaluation Report

FCC ID	:	**QXO-AP4020FX**
Equipment	:	**Access Point**
Brand Name	:	**Extreme Networks**
Model Name	:	**AP4020FX**
Applicant	:	**Extreme Networks, Inc. 2121 RDU Center Drive Morrisville North Carolina United States 27560**
Manufacturer	:	**Extreme Networks, Inc. 2121 RDU Center Drive Morrisville North Carolina United States 27560**
Standard	:	**47 CFR FCC Part 2 Subpart J, section 2.1091**

The product was received on Jan. 20, 2025, and testing was started from Mar. 04, 2025 and completed on May 09, 2025. 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 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

SPORTON INTERNATIONAL INC. Hsinhua Laboratory
No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FA462705-14	01	Initial issue of report	Aug. 22, 2025

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: Barry Hsiao

Report Producer: Michelle Tsai

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) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)
5GHz WLAN	5150-5250 5250-5350 5470-5725 5725-5850	5180-5240 5260-5320 5500-5720 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)
6GHz WLAN	5925-6425 6525-6875	5955-6415 6535-6855	802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)
Bluetooth	2400-2483.5	2402-2480	LE: DSSS (GFSK)

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	AWAN	AW158SM002	Dipole	Reverse SMA	2.4G+5G	Radio 1_2.4G
						Radio 2_5G
2	AWAN	AW158SM002	Dipole	Reverse SMA	2.4G+5G	Radio 1_2.4G
						Radio 2_5G
3	AWAN	AW158SM002	Dipole	Reverse SMA	5G	Radio 3_5G
4	AWAN	AW158SM002	Dipole	Reverse SMA	5G+BT	Radio 3_5G
						BLE_chain 0_E
5	AWAN	AW158SM002	Dipole	Reverse SMA	6G	Radio 3_6G
6	AWAN	AW158SM002	Dipole	Reverse SMA	6G	Radio 3_6G
7	Sercomm	6172005QWA03	PIFA	I-Pex	2.4G+5G+6G	Radio 1_Scan
8	Sercomm	6172005QWA08	PIFA	I-Pex	BT	BLE_chain 0_I
9	Sercomm	6172005QWA09	PIFA	I-Pex	BT	BLE_chain 1_H
10	Sercomm	6172005QWA10	PIFA	I-Pex	BT	BLE_chain 1_V
11	Sercomm	6172005QWA11	PIFA	I-Pex	GPS	N/A
12	Extreme	WX6PB6508R	Dual-Polarized MIMO Panel	Reverse SMA	2.4G+5G+6G+BT	Radio 1_2.4G
						Radio 2_5G
						Radio 3_5G
						Radio 3_6G
						BLE_chain 0_E
13	Signal Plus	61723018SG	Panel	Reverse SMA	2.4G+5G+6G+BT	Radio 1_2.4G
						Radio 2_5G
						Radio 3_5G
						Radio 3_6G
						BLE_chain 0_E

Ant.	Port	Gain (dBi)													
		2.4G	5G				6G				BT0-E	BT0-I	BT1-H	BT1-V	GPS
			UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8					
1	1	2.28	5.59	5.59	5.61	5.53	-	-	-	-	-	-	-	-	-
2	2	2.28	5.59	5.59	5.61	5.53	-	-	-	-	-	-	-	-	-
3	1	-	5.59	5.59	-	-	-	-	-	-	-	-	-	-	-
4	2	-	5.59	5.59	-	-	-	-	-	-	2.28	-	-	-	-
5	1	-	-	-	-	-	5.56	5.24	5.32	5.21	-	-	-	-	-
6	2	-	-	-	-	-	5.56	5.24	5.32	5.21	-	-	-	-	-
7	1	4.5	5	5	5	5	5	5	5	5	-	-	-	-	-
8	1	-	-	-	-	-	-	-	-	-	-	4.9	-	-	-
9	1	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-
10	2	-	-	-	-	-	-	-	-	-	-	-	-	3.7	-
11	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8
12-1	1	8	8	8	8	8	-	-	-	-	-	-	-	-	-
12-2	2	8	8	8	8	8	-	-	-	-	-	-	-	-	-
12-3	1	-	8	8	-	-	-	-	-	-	-	-	-	-	-
12-4	2	-	8	8	-	-	-	-	-	-	8	-	-	-	-
12-5	1	-	-	-	-	-	8	8	8	8	-	-	-	-	-
12-6	2	-	-	-	-	-	8	8	8	8	-	-	-	-	-
13-1	1	12.52	12.19	12.18	12.42	12.36	-	-	-	-	-	-	-	-	-
13-2	2	12.52	12.19	12.18	12.42	12.36	-	-	-	-	-	-	-	-	-
13-3	1	-	12.19	12.18	-	-	-	-	-	-	-	-	-	-	-
13-4	2	-	12.19	12.18	-	-	-	-	-	-	12.52	-	-	-	-
13-5	1	-	-	-	-	-	12.46	11.8	12.45	12.41	-	-	-	-	-
13-6	2	-	-	-	-	-	12.46	11.8	12.45	12.41	-	-	-	-	-

Note 1: The EUT has thirteen antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax/be mode (1TX/2RX) (Radio 1)

Ant. 1 (port 1) could transmit/receive.

Ant. 12-1 (port 1) could transmit/receive.

Ant. 13-1 (port 1) could transmit/receive

For IEEE 802.11 b/g/n/VHT/ax/be mode (2TX/2RX) (Radio 1)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

Ant. 12-1 (port 1) and Ant. 12-2 (port 2) could transmit/receive simultaneously.

Ant. 13-1 (port 1) and Ant. 13-2 (port 2) could transmit/receive simultaneously.

For b20, g20 mode (1TX/1RX) (Radio 1_Scan)

Ant. 7 (port 1) could transmit/receive.

For 5GHz function:
For IEEE 802.11 a/n/ac/ax/be mode (1TX/2RX) (Radio 2)
Ant. 1 (port 1) could transmit/receive.
Ant. 12-1 (port 1) could transmit/receive.
Ant. 13-1 (port 1) could transmit/receive.
For IEEE 802.11 a/n/ac/ax/be mode (2TX/2RX) (Radio 2)
Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.
Ant. 12-1 (port 1) and Ant. 12-2 (port 2) could transmit/receive simultaneously.
Ant. 13-1 (port 1) and Ant. 13-2 (port 2) could transmit/receive simultaneously.
For IEEE 802.11 a/n/ac/ax/be mode (1TX/2RX) (Radio 3)
Ant. 3 (port 1) could transmit/receive.
Ant. 12-3 (port 1) could transmit/receive.
Ant. 13-3 (port 1) could transmit/receive.
For IEEE 802.11 a/n/ac/ax/be mode (2TX/2RX) (Radio 3)
Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.
Ant. 12-3 (port 1) and Ant. 12-4 (port 2) could transmit/receive simultaneously.
Ant. 13-3 (port 1) and Ant. 13-4 (port 2) could transmit/receive simultaneously.
For a20, a40, a80, a160 (1TX/1RX) (Radio 1_Scan)
Ant. 7 (port 1) could transmit/receive.
For 6GHz function:
For IEEE 802.11 a/ax/be mode (1TX/2RX) (Radio 3)
Ant. 5 (port 1) could transmit/receive.
Ant. 12-5 (port 1) could transmit/receive.
Ant. 13-5 (port 1) could transmit/receive.
For IEEE 802.11 a/ax/be mode (2TX/2RX) (Radio 3)
Ant. 5 (port 1) and Ant. 6 (port 2) could transmit/receive simultaneously.
Ant. 12-5 (port 1) and Ant. 12-6 (port 2) could transmit/receive simultaneously.
Ant. 13-5 (port 1) and Ant. 13-6 (port 2) could transmit/receive simultaneously.
For 11a20, 11a40, 11a80, 11a160 (1TX/1RX) (Radio 1_Scan)
Ant. 7 (port 1) could transmit/receive.
For BT function:
For IEEE 802.15.1 Bluetooth mode (1TX/1RX) (Chain 0)
Ant. 4 (port 2) could transmit/receive.
Ant. 8 (port 1) could transmit/receive.
Ant. 12-4 (port 2) could transmit/receive.
Ant. 13-4 (port 2) could transmit/receive.
For IEEE 802.15.1 Bluetooth mode (1TX/2RX) (Chain 1)
Ant. 9 (port 1) or Ant. 10 (port 2) could transmit/receive
Support diversity function and pre-tested on each single chain, the worst case was Ant. 9 (port 1) and it was recorded in this test report.

Note 2: Directional gain information

	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$
BF	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

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 **(TAF:** 3785**)**	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)	
		TEL: 886-3-327-3456	**FAX:** 886-3-327-0973
Test site Designation No. TW3785 with FCC.			
☐	Wen 33rd.St. **(TAF:** 3785**)**	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)	
		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 / f²)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	F/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population / Uncontrolled Exposure

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/f²)*	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.R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G+BT(chain 0) 2.R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT(chain 0) 3.R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G+BT(chain 1) 4.R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT(chain 1) 5.R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G+BT-E(chain 0) 6.R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT-E(chain 0)

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 $\begin{cases} ERP_{20cm}: 0.3GHz \le f < 1.5GHz \rightarrow 2040f(mW) \\ ERP_{20cm}: 1.5GHz \le f \le 6GHz \rightarrow 3060(mW) \end{cases}$
C	§1.1307(b)(3)(i)(C)	$\begin{cases} 0.3 \sim 1.34MHz \rightarrow ERP(\mathrm{W}) = 1920R^2 \\ 1.34 \sim 30MHz \rightarrow ERP(\mathrm{W}) = 3450R^2/f^2 \\ 30 \sim 300MHz \rightarrow ERP(\mathrm{W}) = 3.83R^2 \\ 300 \sim 1500MHz \rightarrow ERP(\mathrm{W}) = 0.0128R^2 f \\ 1500 \sim 100000MHz \rightarrow ERP(\mathrm{W}) = 19.2R^2 \end{cases}$ 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 58 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

Non-Beamforming

2.4GHz WLAN_Radio 1_Dipole Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	2.28	19.03	19.16	0.50	92.470	58	C	6458.9	0.0143
2.4G;D1D	2.28	18.40	18.53	0.50	79.983	58	C	6458.9	0.0124

2.4GHz WLAN_Radio 1_Dipole Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	2.28	22.36	22.49	0.50	199.067	58	C	6458.9	0.0308
2.4G;D1D	2.28	21.14	21.27	0.50	150.314	58	C	6458.9	0.0233

2.4GHz WLAN_Radio 1_Dipole Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	2.28	20.95	21.08	0.50	143.880	58	C	6458.9	0.0223

2.4GHz WLAN_Radio 1_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	8.00	19.03	24.88	0.50	345.144	58	C	6458.9	0.0535
2.4G;D1D	8.00	18.24	24.09	0.50	287.740	58	C	6458.9	0.0446

2.4GHz WLAN_Radio 1_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	8.00	22.36	28.21	0.50	743.019	58	C	6458.9	0.1151
2.4G;D1D	8.00	21.14	26.99	0.50	561.048	58	C	6458.9	0.0869

2.4GHz WLAN_Radio 1_Dual-Polarized MIMO Panel Antenna_2T2S

Mode	DG	Power	ERP	Tolerance	Tune-up ERP	Distance	Option	TL ERP	TL Ratio
2.4G;D1D	8.00	20.95	26.80	0.50	537.032	58	C	6458.9	0.0832

Non-Beamforming

2.4GHz WLAN_Radio 1_Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	12.52	17.29	27.66	0.50	654.636	58	C	6458.9	0.1014
2.4G;D1D	12.52	16.43	26.80	0.50	537.032	58	C	6458.9	0.0832

2.4GHz WLAN_Radio 1_Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	12.52	19.66	30.03	0.50	1129.796	58	C	6458.9	0.1750
2.4G;D1D	12.52	19.50	29.87	0.50	1088.930	58	C	6458.9	0.1687

2.4GHz WLAN_Radio 1_Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	12.52	18.94	29.31	0.50	957.194	58	C	6458.9	0.1483

2.4GHz WLAN_Radio 1_Scan

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
2.4G;D1D	4.50	18.79	21.14	0.50	145.881	58	C	6458.9	0.0226

5GHz WLAN_Radio 2_Dipole Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.59	17.73	21.17	0.50	146.893	58	C	6458.9	0.0228
5.3G;D1D	5.59	18.20	21.64	0.50	163.682	58	C	6458.9	0.0254
5.6G;D1D	5.61	18.18	21.64	0.50	163.682	58	C	6458.9	0.0254
5.8G;D1D	5.53	18.37	21.75	0.50	167.880	58	C	6458.9	0.0260

5GHz WLAN_Radio 2_Dipole Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.59	20.93	24.37	0.50	306.902	58	C	6458.9	0.0475
5.3G;D1D	5.59	21.09	24.53	0.50	318.420	58	C	6458.9	0.0493
5.6G;D1D	5.61	21.09	24.55	0.50	319.890	58	C	6458.9	0.0495
5.8G;D1D	5.53	21.56	24.94	0.50	349.945	58	C	6458.9	0.0542

Non-Beamforming

5GHz WLAN_Radio 2_Dipole Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.59	21.33	24.77	0.50	336.512	58	C	6458.9	0.0521
5.3G;D1D	5.59	21.52	24.96	0.50	351.560	58	C	6458.9	0.0545
5.6G;D1D	5.61	21.20	24.66	0.50	328.095	58	C	6458.9	0.0508
5.8G;D1D	5.53	21.85	25.23	0.50	374.111	58	C	6458.9	0.0579

5GHz WLAN_Radio 2_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	17.93	23.78	0.50	267.917	58	C	6458.9	0.0415
5.3G;D1D	8.00	18.20	24.05	0.50	285.102	58	C	6458.9	0.0442
5.6G;D1D	8.00	18.52	24.37	0.50	306.902	58	C	6458.9	0.0475
5.8G;D1D	8.00	18.37	24.22	0.50	296.483	58	C	6458.9	0.0459

5GHz WLAN_Radio 2_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	20.93	26.78	0.50	534.564	58	C	6458.9	0.0828
5.3G;D1D	8.00	21.09	26.94	0.50	554.626	58	C	6458.9	0.0859
5.6G;D1D	8.00	20.98	26.83	0.50	540.754	58	C	6458.9	0.0838
5.8G;D1D	8.00	21.56	27.41	0.50	618.016	58	C	6458.9	0.0957

5GHz WLAN_Radio 2_Dual-Polarized MIMO Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	21.33	27.18	0.50	586.138	58	C	6458.9	0.0908
5.3G;D1D	8.00	21.52	27.37	0.50	612.350	58	C	6458.9	0.0948
5.6G;D1D	8.00	21.20	27.05	0.50	568.853	58	C	6458.9	0.0881
5.8G;D1D	8.00	21.85	27.70	0.50	660.693	58	C	6458.9	0.1023

5GHz WLAN_Radio 2_Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	12.19	17.73	27.77	0.50	671.429	58	C	6458.9	0.1040
5.3G;D1D	12.18	17.16	27.19	0.50	587.489	58	C	6458.9	0.0910
5.6G;D1D	12.42	17.02	27.29	0.50	601.174	58	C	6458.9	0.0931
5.8G;D1D	12.36	17.77	27.98	0.50	704.693	58	C	6458.9	0.1091

Non-Beamforming

5GHz WLAN_Radio 2_Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	12.19	20.29	30.33	0.50	1210.598	58	C	6458.9	0.1875
5.3G;D1D	12.18	17.29	27.32	0.50	605.341	58	C	6458.9	0.0938
5.6G;D1D	12.42	17.05	27.32	0.50	605.341	58	C	6458.9	0.0938
5.8G;D1D	12.36	21	31.21	0.50	1482.518	58	C	6458.9	0.2296

5GHz WLAN_Radio 2_Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	12.19	20.26	30.30	0.50	1202.264	58	C	6458.9	0.1862
5.3G;D1D	12.18	17.29	27.32	0.50	605.341	58	C	6458.9	0.0938
5.6G;D1D	12.42	16.99	27.26	0.50	597.035	58	C	6458.9	0.0925
5.8G;D1D	12.36	20.82	31.03	0.50	1422.329	58	C	6458.9	0.2203

5GHz WLAN_Radio 3_Dipole Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.59	19.36	22.80	0.50	213.796	58	C	6458.9	0.0331
5.3G;D1D	5.59	20.34	23.78	0.50	267.917	58	C	6458.9	0.0415

5GHz WLAN_Radio 3_Dipole Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.59	21.91	25.35	0.50	384.592	58	C	6458.9	0.0596
5.3G;D1D	5.59	21.91	25.35	0.50	384.592	58	C	6458.9	0.0596

5GHz WLAN_Radio 3_Dipole Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.59	21.61	25.05	0.50	358.922	58	C	6458.9	0.0556
5.3G;D1D	5.59	22.09	25.53	0.50	400.867	58	C	6458.9	0.0621

5GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	19.36	25.21	0.50	372.392	58	C	6458.9	0.0577
5.3G;D1D	8.00	20.51	26.36	0.50	485.289	58	C	6458.9	0.0752

Non-Beamforming

5GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	21.91	27.76	0.50	669.885	58	C	6458.9	0.1038
5.3G;D1D	8.00	21.39	27.24	0.50	594.292	58	C	6458.9	0.0920

5GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.00	21.61	27.46	0.50	625.173	58	C	6458.9	0.0968
5.3G;D1D	8.00	21.43	27.28	0.50	599.791	58	C	6458.9	0.0929

5GHz WLAN_Radio 3_Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	12.19	17.99	28.03	0.50	712.853	58	C	6458.9	0.1104
5.3G;D1D	12.18	17.29	27.32	0.50	605.341	58	C	6458.9	0.0938

5GHz WLAN_Radio 3_Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	12.19	20.69	30.73	0.50	1327.394	58	C	6458.9	0.2056
5.3G;D1D	12.18	17.25	27.28	0.50	599.791	58	C	6458.9	0.0929

5GHz WLAN_Radio 3_Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	12.19	20.21	30.25	0.50	1188.502	58	C	6458.9	0.1841
5.3G;D1D	12.18	17.26	27.29	0.50	601.174	58	C	6458.9	0.0931

5GHz WLAN_Radio 1_Scan

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	5.00	19.06	21.91	0.50	174.181	58	C	6458.9	0.0270
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
5.6G;D1D	5.00	19.16	22.01	0.50	178.238	58	C	6458.9	0.0276
5.8G;D1D	5.00	18.91	21.76	0.50	168.267	58	C	6458.9	0.0261

Non-Beamforming

6GHz WLAN_Radio 3_Dipole Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	21.58	0.50	161.436	58	C	6458.9	0.0250
6.7G;D1D	-	-	23.57	0.50	255.270	58	C	6458.9	0.0395

6GHz WLAN_Radio 3_Dipole Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	24.44	0.50	311.889	58	C	6458.9	0.0483
6.7G;D1D	-	-	25.53	0.50	400.867	58	C	6458.9	0.0621

6GHz WLAN_Radio 3_Dipole Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	24.12	0.50	289.734	58	C	6458.9	0.0449
6.7G;D1D	-	-	26.47	0.50	497.737	58	C	6458.9	0.0771

6GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	19.34	0.50	96.383	58	C	6458.9	0.0149
6.7G;D1D	-	-	21.56	0.50	160.694	58	C	6458.9	0.0249

6GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	20.20	0.50	117.490	58	C	6458.9	0.0182
6.7G;D1D	-	-	23.35	0.50	242.661	58	C	6458.9	0.0376

6GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	20.87	0.50	137.088	58	C	6458.9	0.0212
6.7G;D1D	-	-	23.29	0.50	239.332	58	C	6458.9	0.0371

6GHz WLAN_Radio 3_Panel Antenna_1T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	27.48	0.50	628.058	58	C	6458.9	0.0973
6.7G;D1D	-	-	28.34	0.50	765.597	58	C	6458.9	0.1186

Non-Beamforming

6GHz WLAN_Radio 3_Panel Antenna_2T1S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	27.59	0.50	644.169	58	C	6458.9	0.0998
6.7G;D1D	-	-	28.81	0.50	853.100	58	C	6458.9	0.1321

6GHz WLAN_Radio 3_Panel Antenna_2T2S

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	27.72	0.50	663.743	58	C	6458.9	0.1028
6.7G;D1D	-	-	28.89	0.50	868.960	58	C	6458.9	0.1346

Bluetooth_chain 0_Dipole Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	2.28	11.03	11.16	0.50	14.655	58	C	6458.9	0.0023

Bluetooth_chain 0_Dual-Polarized MIMO Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	8.00	11.03	16.88	0.50	54.702	58	C	6458.9	0.0085

Bluetooth_chain 0_Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	12.52	10.40	20.77	0.50	133.968	58	C	6458.9	0.0207

Bluetooth_chain 0_PIFA Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	4.90	11.95	14.70	0.50	33.113	58	C	6458.9	0.0051

Bluetooth_chain 1_PIFA Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	4.10	11.40	13.35	0.50	24.266	58	C	6458.9	0.0038

Beamforming

2.4GHz WLAN_Radio 1_Dipole Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	5.29	20.92	24.06	0.50	285.759	58	C	6458.9	0.0443

2.4GHz WLAN_Radio 1_Dual-Polarized MIMO Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652

2.4GHz WLAN_Radio 1_Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	15.53	19.47	32.85	0.50	2162.719	58	C	6458.9	0.3350

5GHz WLAN_Radio 2_Dipole Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.60	20.93	27.38	0.50	613.762	58	C	6458.9	0.0951
5.3G;D1D	8.60	20.86	27.31	0.50	603.949	58	C	6458.9	0.0935
5.6G;D1D	8.62	20.68	27.15	0.50	582.103	58	C	6458.9	0.0902
5.8G;D1D	8.54	21.56	27.95	0.50	699.842	58	C	6458.9	0.1084

5GHz WLAN_Radio 2_Dual-Polarized MIMO Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	11.01	20.93	29.79	0.50	1069.055	58	C	6458.9	0.1656
5.3G;D1D	11.01	18.34	27.20	0.50	588.844	58	C	6458.9	0.0912
5.6G;D1D	11.01	18.40	27.26	0.50	597.035	58	C	6458.9	0.0925
5.8G;D1D	11.01	21.56	30.42	0.50	1235.947	58	C	6458.9	0.1914

5GHz WLAN_Radio 2_Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	15.20	20.29	33.34	0.50	2421.029	58	C	6458.9	0.3750
5.3G;D1D	15.19	14.28	27.32	0.50	605.341	58	C	6458.9	0.0938
5.6G;D1D	15.43	14.02	27.30	0.50	602.560	58	C	6458.9	0.0933
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540

Beamforming

5GHz WLAN_Radio 3_Dipole Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	8.60	21.91	28.36	0.50	769.130	58	C	6458.9	0.1191
5.3G;D1D	8.60	20.78	27.23	0.50	592.925	58	C	6458.9	0.0918

5GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	11.01	21.91	30.77	0.50	1339.677	58	C	6458.9	0.2075
5.3G;D1D	11.01	18.40	27.26	0.50	597.035	58	C	6458.9	0.0925

5GHz WLAN_Radio 3_Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	15.20	20.25	33.30	0.50	2398.833	58	C	6458.9	0.3715
5.3G;D1D	15.19	14.25	27.29	0.50	601.174	58	C	6458.9	0.0931

6GHz WLAN_Radio 3_Dipole Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	25.76	0.50	422.669	58	C	6458.9	0.0655
6.7G;D1D	-	-	28.09	0.50	722.770	58	C	6458.9	0.1119

6GHz WLAN_Radio 3_Dual-Polarized MIMO Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	21.13	0.50	145.546	58	C	6458.9	0.0225
6.7G;D1D	-	-	24.45	0.50	312.608	58	C	6458.9	0.0484

6GHz WLAN_Radio 3_Panel Antenna

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
6.2G;D1D	-	-	28.04	0.50	714.496	58	C	6458.9	0.1107
6.7G;D1D	-	-	29.24	0.50	941.890	58	C	6458.9	0.1459

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:
R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G+BT(chain 0)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540
6.7G;D1D	-	-	29.24	0.50	941.890	58	C	6458.9	0.1459
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
2.4G;BT-LE	4.90	11.95	14.70	0.50	33.113	58	C	6458.9	0.0051
Sum TL Ratio_C	0.7252								
Ratio Limit	1								

R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT(chain 0)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540
5.2G;D1D	15.20	20.25	33.30	0.50	2398.833	58	C	6458.9	0.3715
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
2.4G;BT-LE	4.90	11.95	14.70	0.50	33.113	58	C	6458.9	0.0051
Sum TL Ratio_C	0.9508								
Ratio Limit	1								

R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G+BT(chain 1)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540
6.7G;D1D	-	-	29.24	0.50	941.890	58	C	6458.9	0.1459
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
2.4G;BT-LE	4.10	11.40	13.35	0.50	24.266	58	C	6458.9	0.0038
Sum TL Ratio_C	0.7239								
Ratio Limit	1								

R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT(chain 1)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540
5.2G;D1D	15.20	20.25	33.30	0.50	2398.833	58	C	6458.9	0.3715
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
2.4G;BT-LE	4.10	11.40	13.35	0.50	24.266	58	C	6458.9	0.0038
Sum TL Ratio_C	0.9495								
Ratio Limit	1								

R1:2.4G+R2:5G Full+R3:6G Full+R1:Scan 2.4G+R1:Scan 5G+BT-E(chain 0)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540
6.7G;D1D	-	-	29.24	0.50	941.890	58	C	6458.9	0.1459
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
2.4G;BT-LE	12.52	10.40	20.77	0.50	133.968	58	C	6458.9	0.0207
Sum TL Ratio_C	0.7408								
Ratio Limit	1								

R1:2.4G+R2:5G High(Band3/4)+R3:5G Low(Band1/2)+R1:Scan 2.4G+R1:Scan 5G+BT-E(chain 0)

Mode	DG (dBi)	Power (dBm)	ERP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	Option	TL ERP (mW)	TL Ratio
2.4G;D1D	11.01	20.92	29.78	0.50	1066.596	58	C	6458.9	0.1652
5.8G;D1D	15.37	19.87	33.09	0.50	2285.599	58	C	6458.9	0.3540
5.2G;D1D	15.20	20.25	33.30	0.50	2398.833	58	C	6458.9	0.3715
2.4G;G1D	4.50	19.38	21.73	0.50	167.109	58	C	6458.9	0.0259
5.3G;D1D	5.00	19.39	22.24	0.50	187.932	58	C	6458.9	0.0291
2.4G;BT-LE	12.52	10.40	20.77	0.50	133.968	58	C	6458.9	0.0207
Sum TL Ratio_C	0.9664								
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———